



NOT YET REVIEWED BY PARTICIPANTS AND ACCEPTED BY THE GOVERNING BOARD.

ACTUARIAL & CLASSIFICATION AND RATING COMMITTEES
RECORD OF JOINT MEETING

A meeting of the Actuarial and Classification & Rating Committees of the Delaware Compensation Rating Bureau, Inc. (DCRB) was held in Salon C of the DoubleTree Hotel Wilmington Delaware, 700 King Street, Wilmington, Delaware on Monday, August 8, 2011 at 10 a.m.

The following members were present:

Actuarial Committee

Ms. M. Gaillard
Mr. W. Vidzicki
Ms. M. Sperduto*
Ms. E. Bellott
Mr. S. Curlee
Mr. J. Schmidt

American Home Assurance Company
Amguard Insurance Company
Harleysville Mutual Insurance Company
Liberty Mutual Insurance Company
PMA Insurance Company
Travelers Property & Casualty Company

Classification and Rating Committee

Mr. E. Capodanno**
Ms. M. Innocenti
Ms. M. Sperduto*
Mr. K. Van Elswyk
Ms. S. Knight
Mr. R. Prybutok**
Mr. W. Carney
Mr. J. Gice**

Associated Builders & Contractors of Delaware
Crum & Forster Insurance Company
Harleysville Mutual Insurance Company
Insurance Company of North America
Liberty Mutual Insurance Company
National Federation of Independent Business
PMA Insurance Company
Travelers Property & Casualty Company

Mr. T. Wisecarver

Chair - Ex Officio

Also present were:

Mr. G. Reed**
Hon. K. Stewart**
Mr. S. Cooley
Mr. R. Gardner
Ms. F. Barton
Ms. D. Belfus
Mr. B. Decker
Mr. M. Doyle
Mr. P. Yoon

Delaware Insurance Department
Delaware Insurance Department
Duane Morris LLP
INS Consultants, Inc.
DCRB Staff
DCRB Staff
DCRB Staff
DCRB Staff
DCRB 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. Participants gave brief self-introductions.

Staff provided some background and highlights of the analysis done for the December 1, 2011 Residual Market Rate and Voluntary Market Loss Cost Filing. Points addressed and emphasized included the following:

- The preliminary indicated overall average changes in rating values were for an increase of 16.81 percent in voluntary market loss costs and an increase of 22.30 percent in residual market rates.
- The most significant factor contributing to the preliminary indicated changes in rating values was that the most recent available data for claim frequency showed an increase of approximately 1.5 percent, markedly different from the previously prevailing trend of an annual decrease of approximately 8.6 percent.
- Analysis of the preliminary indications showed that, in addition to claim frequency experience, a variety of factors pertaining to both limited and excess loss levels, severity trends and carrier expenses were almost all causing further incremental increases in rating values.
- Consistent with numerous recent Delaware filings, attendees were reminded that loss development and trend analysis had been performed on a limited basis in order to mitigate potential effects of individual large claims or clustering of such claims within individual policy years. In recognition of this approach, a separate provision for excess loss was included in the derivation of rate and loss cost change indications.
- Attendees were reminded of Senate Bill 1 enacted in 2007 in Delaware, which provided for processes related to the development of a medical fee schedule and treatment guidelines. In a prior filing (Bureau Filing No. 0806) the DCRB had evaluated the effects of the medical fee schedule that had subsequently been implemented in Delaware, and rating values effective on or after October 1, 2008 had reflected that estimated impact. For the December 1, 2011 filing, experience had been adjusted to a pre-Senate Bill 1 basis for purposes of such analyses as loss development and trend, and then a Senate Bill 1 Law Amendment Factor had been applied to the resulting indications to derive a December 1, 2011 indication.
- Staff reminded attendees of litigation that had taken place in 2009 concerning the effects of Senate Bill 1 on claims incurred prior to the effective date of the Delaware medical fee schedule and noted that the DCRB's underlying analysis for the December 1, 2011 filing had been performed without recognizing the reductions in rates and loss costs that had ultimately been ordered in that litigation. Consistent with past practices, such mandated reductions would be applied after the technical analysis supporting the filing had been concluded.

Question: Staff was asked whether the 2011 filing was the last DCRB filing which will be subject to the adjustments mandated by the 2009 Chancery Court decision.

Answer: Staff responded in the affirmative, explaining that the Chancery Court had imposed a series of four annual reductions in rate levels. For the first three of those years (filings effective December 1, 2008, December 1, 2009 and December 1, 2010) the required reductions had been six percent of December 1, 2008 rating values. For the December 1, 2011 filing the required reduction was five percent of December 1, 2008 rating values. For filings effective on or after December 1, 2012 the Court of Chancery's decision would no longer apply.

The Committee discussion then moved to a review of staff work supporting the December 1, 2011 Residual Market Rate and Voluntary Market Loss Cost Filing. Staff encouraged interactive questions and comments as the meeting progressed. The more substantive elements of dialogue precipitated during the meeting in that regard are set forth as inserted Question, Comment and/or Answer exchanges in the description of the meeting proceedings following below.

ITEM (1) REVIEW OF THE PROPOSED DECEMBER 1, 2011 RESIDUAL MARKET RATE AND VOLUNTARY MARKET LOSS COST FILING

Participants had been provided with electronic agenda materials in advance of the meeting. Those materials provided supporting information, analysis and results of the DCRB's preparation of a residual market rate and voluntary market loss cost filing effective December 1, 2011.

The Committee heard summary descriptions of those materials organized in topical groups as shown following. Questions posed during the meeting, with staff responses given and participant discussion ensuing, are set forth in the chronology of the presentation below.

Overall Indicated Changes in Collectible and Manual Rating Values

Exhibit 12

Staff briefly reviewed the approach used in this exhibit to derive indicated overall changes in residual market rates and voluntary market loss costs. Exhibit 12 had been included in both the first and second mailings to attendees, with the second version adding some values obtained through rate tests and final balancing not completed at the time the first mailing was issued. The second mailing version was used as the basis for the meeting discussion.

On-level loss and loss adjustment expense ratios in Lines 1(a) through 1(e) were noted as being higher than the counterpart values from the December 1, 2010 filing. The effect of trend on the filing indication was noted, but, in comparison to the trend adjustments included in the December 1, 2010 filing, the current indications were described as being significantly less favorable due to differences in claim frequency and claim severity indications for the current submission.

The Line 3(a) adjustment to medical loss ratios based on previous DCRB analysis of the effects of the medical fee schedule was noted. The adjustment for the effect of limiting losses in the underlying loss development and trend work was pointed out on Lines 4(a) and 4(b). Based on a permissible loss and loss adjustment ratio shown on Line 6, an indicated change in rates was derived on Line 7. Application of an estimated effect of the July 1, 2012 benefit change on Line 8 gave a final residual market rate change on Line 9. Removing the provisions for expenses other than loss adjustment expense from the residual market rate change gave the indicated voluntary market loss cost indication on Line 10.

Staff pointed out the proposed overall changes in residual market rates (22.30 percent increase) and voluntary market loss costs (16.81 percent increase).

Indicated changes in manual rates and loss costs were derived in Lines 11 through 18 by applying considerations of changes in collectible premium ratios arising from the ongoing application of the Experience Rating Plan and the effects of the approved residual market surcharge program on residual market premiums, which offset was applied to voluntary market loss costs to maintain revenue neutrality of that surcharge program.

Question: An attendee inquired whether the mandated Court of Chancery reductions were reflected in the experience presentation under discussion and, if so, whether those reductions were contributing to the indicated changes in rating values.

Answer: Staff explained that the experience analysis supporting the discussion proposal had been constructed excluding any consideration of the Court of Chancery decision. Under this approach, the existing rate and loss cost levels did not reflect prior Court of Chancery reductions, and the proposed changes did not include provision for the next step in that series of reductions. Staff added, however, that the actual schedules of rating values that would be constructed for

filing effective December 1, 2011 based on the described experience analysis would again include recognition of the specific reductions required according to the Court of Chancery decision.

Comment: The inquiring party asked if the DCRB's approach thus excluded the Court of Chancery reductions.

Answer: Staff clarified the earlier response to be that the DCRB's filing analyses were done on a basis prior to recognition of the Court of Chancery reductions and that those reductions were imposed on final rating values after conclusion of the experience analysis. The Court of Chancery reductions were and were required to be, permanent reductions that would not be made up in whole or in part through processes incorporated in the DCRB's filings.

Question: A question was posed about adjustments in the filing for the effects of experience rating.

Answer: Staff observed that the anticipated change in collectible premiums by virtue of the effects of experience rating was shown on Line 13 of Exhibit 12 and noted that the average experience modification was expected to increase somewhat compared to the level included in current rating values.

Staff distributed a handout page presenting component contributions to the indicated residual market rate change. It was noted that of 11 component factors presented, nine were increasing and only one (change in limited medical trend) was decreasing as much as one percent.

Question: Staff was asked whether the adverse frequency experience noted was being driven by small employers.

Answer: The response indicated that the analysis done to date had not included partitioning risks by size. Staff commented that the recent adverse claim frequency experience was not a phenomenon unique to Delaware. The National Council on Compensation Insurance, Inc. (NCCI) had recently reported a countrywide increase in claim frequencies, with a significant majority of their states showing increases in their own claim frequencies. California, a state not subscribing to NCCI services, had also reported recent claim frequency increases.

Staff noted that in Delaware the number of claims had continued to decline in the most recent period but that payrolls and/or expected losses had declined faster than claim counts, resulting in the observed increase in claim frequency.

Comment: An attendee observed that, while other aspects of loss experience were also generally deteriorating, claim frequency trend appeared to be the dominant element of the proposed filing.

Answer: Staff agreed, emphasizing that the nominal increase in claim frequency occurring in Policy Year 2009 represented a swing of over ten percent from the previously prevailing level of annual reductions, causing claim frequency to be responsible for approximately half of the residual market rate change indication and a larger portion of the voluntary market loss cost change indication.

Comment: Deterioration in claim frequency was characterized as a broad-based phenomenon, with the opening attendee attributing the changes to effects of economic conditions.

Answer: Staff observed that, prior to the disclosure of the most recent claim frequency, statistics industry expectations had been that poor economic conditions would precipitate faster than usual improvement in claim frequency, with the experience perhaps reverting toward the long-term

trend somewhat during periods of strong recovery. While competing theories were popularly held about the potential effect of economic conditions on claim frequency and severity, some of those were anecdotally based and none had foreseen the significant increases in claim frequency reported in many jurisdictions.

Comment: *Being mindful of discussion about recent changes in claim frequencies in NCCI states, an attendee recalled reference to the effects of premium audits on those statistics.*

Answer: *Staff explained that recent NCCI reports were based on calendar-accident year data and concurred that a significant part of the claim frequency changes reported by NCCI had been attributed to the effects of premium audits changing from historically common additional premiums to return premiums during the recent economic downturn. However, premium audit adjustments were fully reflected in each of the policy years for which the DCRB was providing claim frequency data, and those adjustments, unlike the calendar year data used by NCCI, were assigned to the policy periods to which they were applied*

Staff concluded by noting that NCCI had seen increases in claim frequency even after taking audit adjustments into account. Of an increase of approximately nine percent, NCCI attributed about six percent to audit adjustments with a remainder of three percent arising from other causes.

Claim Frequencies

Exhibit 23 was raised for discussion, and a brief review focused on Page 1 of that exhibit. The observed increase in claim frequency (+1.5 percent) for Policy Year 2009 was pointed out in contrast to the prevailing pattern of annual decreases in claim frequency. Measures of claim frequency trend derived including and excluding Policy Year 2009, respectively, were noted. Expectations regarding claim frequency incorporated in the DCRB's December 1, 2010 filing were outlined (a claim frequency trend of 8.8 percent annual decreases to January 1, 2009 and then projected subsequent improvement at 6.37 percent due to smaller increases in wage levels expected after January 1, 2009).

A handout was provided displaying a history of First Reports of Injury as compiled by the Delaware Department of Labor. An increase in frequency of first reports per unit of payroll in Fiscal Year 2009 was noted, attributable to a decline in payrolls disproportionate to the change in number of first reports and slightly earlier than the increase in claim frequencies reflected in DCRB data for the commercial insurance market. First reports of injury had been generally decreasing over time, with 2010 and 2011 showing increasing declines greater than that of 2009.

Page 4 of Exhibit 12 was identified as presenting the derivation of claim frequency trend for use in the December 1, 2011 filing. It was noted that the claim frequency change selected for Policy Year 2009 was the observed change of +1.5 percent, while the claim frequency trend used for all periods except Policy Year 2009 (an annual rate of decline of 8.6 percent) was based on a seven-point exponential trend ending with Policy Year 2008.

Staff observed that wage changes seemed to have recently begun to accelerate in Delaware (Page 3 of Exhibit 23) and that, in concert with the observed changes in numbers of first reports of injury in Fiscal Years 2010 and 2011, this indicated that the Policy Year 2009 change in claim frequency might not be a recurring phenomenon.

Loss Development

Exhibits 1 (Limited Loss), 1a, 1b, 2 (Limited Loss), 2a (Limited Loss) and 7

Staff described the analysis presented in these exhibits and key considerations applicable to the use of those components of the filing analysis in deriving the proposed indications. Highlights from those descriptions are set forth below.

Exhibit 1 (Limited Loss) (Table I) provided summaries of financial data reported by DCRB members for the calendar years ending December 31, 2006 through 2010, inclusive. An error in the labeling of loss evaluation dates on Pages 2 through 6 of Exhibit 1 was noted.

Successive calendar year evaluations of premiums, indemnity incurred losses, medical incurred losses, indemnity paid losses and medical paid losses were compared to derive age-to-age development factors or “link ratios” to be used in the DCRB’s estimation of ultimate premiums and losses for prior policy years. In making the comparisons producing specific link ratios, data for all carriers with available and credible data was used, with the result that each calendar year-end evaluation could show two different amounts; one for purposes of comparison to the prior calendar year-end and the other for purposes of comparison to the subsequent calendar year-end.

Staff noted that the data in Table I, consistent with previous DCRB filings, excluded data for large deductible coverages. That exclusion was noted as being responsive to the lack of independent sources for loss data gross of large deductible reimbursements and the potential for significant differences in underlying hazard and loss potential inherent in large deductible business, as compared to business insured on a first-dollar basis.

Attendees were reminded that the medical data in Table I had been adjusted to a pre-SB1 basis, with such adjustments affecting limited amounts of payments made in late 2008 and all payments made in Calendar Years 2009 and 2010 and also impacting case reserves as of December 31, 2008, December 31, 2009 and December 31, 2010, with the effects on case reserves estimated to be more significant with each successive evaluation.

Claims exceeding selected limit values in paid and/or incurred values had been identified using large claim data separately reported by carriers, and the effect of capping such losses at the selected limitations was reflected in the combined paid and/or incurred amounts in Table I. By reference to Exhibit 1b, this adjustment process was described as having affected every complete policy year except 1996, 2001, 2006 and 2009 on a paid basis, and every complete policy year except 2006 and 2009 on an incurred basis, for at least one evaluation.

Exhibit 1a provided background analysis of trend in loss limitations consistent with an excess ratio of 0.0757 (the excess factor applicable for a selected loss limitation of \$1,500,000 in the December 1, 2004 filing, when limited loss analysis was first applied to a DCRB filing) and the series of loss limits applied by policy year in producing Exhibit 1 on a limited basis. Staff emphasized that the loss limit analysis for this filing had been done first on a pre-SB1 basis and that the final loss limitation pertinent to Exhibit 12 had then been computed on a post-SB1 basis. For policy years prior to December 1, 2004, loss limits had been computed using historical trends in excess loss factors from previously-approved loss limit tables. For subsequent policy years, trend indications for excess loss factors, including experience since December 1, 2004, had been applied to project appropriate loss limitation levels consistent with those observed trends. Staff noted that this procedure had been initiated for purposes of the December 1, 2008 filing as a means of stabilizing historical loss limitations. The reductions in loss displayed on Exhibit 1b were based upon application of the series of loss limitations shown in Exhibit 1a to reported paid and incurred losses.

Exhibit 2 (Limited Loss) presented premium and loss development experience from Table I (including the application of the adjustments described above), supplemented by age-to-age factors taken from calendar evaluations of financial data predating those included in Table I.

Premiums had been developed to an ultimate basis using an average of the most recent four available development factors for each maturity through 8th report, with development after 8th report assumed to be flat. Ultimate premiums at the designated statistical reporting level were then adjusted to be on-level with the current residual market rates, reduced to remove the effects of expense constant income, loadings for the Delaware Construction Classification Premium Adjustment Program off-balances, and increased to correct for the temporary reductions mandated by the 2009 Court of Chancery decision to derive appropriate ultimate premiums for the derivation of loss and severity ratios used further in the filing.

Indemnity and medical losses had been developed to ultimate using two methods, one being a case-incurred loss development approach and the other being a paid loss development method applied through 20th report, with a tail provision derived by adjusting cumulative paid losses at 20th report to a case incurred basis at 21st report and then applying the tail development after 21st report from the case-incurred loss development method.

Loss development had been estimated using the average of the most recent available four calendar years' age-to-age factors. In application of each loss development method, the DCRB had sought to further smooth the observed average age-to-age link ratios by fitting mathematical curves through the observed average actual ratios. A broad variety of curve forms had been tested for this purpose. Better results were obtained by subtracting unity (1.000) from the observed indemnity paid loss development factors before using the various curve forms under consideration. The estimated or smoothed "y" values were then added to unity to derive smoothed loss development factors. Curves that had given among the best and generally consistent results in this fitting process had been selected for use in support of the proposed filing. The selected curve forms used to smooth observed loss development age-to-age factors in the proposed filing were provided as a handout to attendees and were as shown below. In each of these expressions, "y" represents the variable to be estimated, and "x" is an index of the maturity of the observed and/or projected stages of policy year development for which the variable values were observed. The terms "a," "b," "c," "d," "e" and "f" are constants derived using the curve-fitting procedures and were established to obtain the best possible fit of the selected curve to the observed actual data.

Indemnity Incurred Development Factors:

$$y = a + b/x + c/(x^2) + d/(x^3) + e/(x^4) + f/(x^5) \text{ (fifth order inverse polynomial)}$$

Indemnity Paid Development Factor:

$$y = a + b*\log(x)/x + c*\exp(-x)$$

Indemnity Paid-to-Incurred Development Factors:

The most recent actual four-year average paid-to-incurred age-to-age factor was selected for this transition.

Medical Incurred Development Factors:

$$y = a + b*\log(x) + c*(\log(x))^2 + d*(\log(x))^3 + e*(\log(x))^4 + f*(\log(x))^5 \text{ (fifth order logarithm)}$$

Medical Paid Development Factors:

$$y = a + b/x + c/(x^2) + d/(x^3) + e/(x^4) + f/(x^5) \text{ (fifth order inverse polynomial)}$$

Medical Paid-to-Incurred Development Factors:

The most recent actual four-year average paid-to-incurred age-to-age factor was selected for this transition.

Exhibit 2a provided graphic comparisons of the results (loss ratios and severity ratios) of applying the case-incurred loss development method and the paid-loss development method to both indemnity and medical losses, together with the average of the two methods. These pages showed that the two alternative approaches produced very similar results for indemnity loss. More noticeable differences arose for medical loss, with the case-incurred method tending to give somewhat higher results than did the paid-loss development method.

Exhibit 7 provided various metrics of loss experience derived from unit statistical data. Claim closure rates, claim frequencies and average closed, open and total claim amounts (with the latter statistics being generally volatile due to limited amounts of data and potential impacts of large losses) were displayed. In addition, some analytics derived from financial data were provided (ratios of reported paid loss to reported incurred-loss and reported paid loss to estimated ultimate loss using the average of the case incurred and paid loss development methods).

Severity Trend

Exhibits 2 (Limited Loss), 3 (Limited Loss), 5 and 6 (Limited Loss), Exhibit 12, pages 2 and 3

Staff referred to the cited exhibits as they pertained to the trend provisions included in the proposed filing. Key observations made are summarized below.

Ultimate loss ratios derived from the DCRB's loss development analysis had been converted to severity ratios by adjusting loss ratios for known changes in claim frequency over the span of policy years provided in Exhibit 2. Key considerations pertaining to the severity trend analysis were noted as shown below:

Indemnity Severity – Through Policy Year 2009 (mid-point January 1, 2010) the DCRB had measured claim severity trend using a seven-point exponential trend model fitted through the severity ratios derived by adjusting estimated ultimate loss ratios for known changes in claim frequency. That analysis resulted in an annual change in indemnity severity of +2.6 percent per year.

Medical Severity – The DCRB was mindful that, in the adjudication of the December 1, 2009 filing, both actuarial consultants who had reviewed the filing had anticipated some improvement in medical trends associated with the implementation of the medical fee schedule in late 2008. Such an adjustment had subsequently been included in the DCRB's December 1, 2010 filing with the posited improvement in medical severity trend applied after September 1, 2008 (the effective date for full implementation of the medical fee schedule in prior DCRB filings).

For the December 1, 2011 filing the same adjustment (an improvement of 1.8 percentage points per year) had again been applied to otherwise-measured medical severity trends. The pre-Senate Bill 1 medical severity trend prior to this adjustment was +8.5 percent per year. Thus the medical severity trends used in the staff analysis were +8.5 percent per year through September 1, 2008 and +6.7 percent per year subsequent to September 1, 2008.

Pages 2 and 3 of Exhibit 12 presented the derivation of severity trends as described above. Exhibits 3 and 6, respectively, provided results of the DCRB's review of goodness-of-fit and past projections of severity ratios.

Exhibit 5 showed graphs of indemnity and medical loss ratio histories and projections, with claim severity and claim frequency components of the projections also displayed for comparison purposes.

Comment: *With respect to premium development factors, development between the first and second reports had declined while development between sixth and seventh reports seemed to have increased. Fluctuations such as these were seen as being consistent with the practice of using four-year averages when deriving age-to-age development factors.*

Answer: *Staff opined that economic conditions may have affected some segments of the pattern for premium development, with audits more likely to have found declining exposures when policy estimates had expected flat or increasing business activity. Staff expressed the view that over a longer period than the most recent four years the most recent factors were not particularly unusual.*

For loss development, the DCRB uses four year average age-to-age factors in concert with curve-fitting to further smooth the development patterns used in its filings.

Question: *An explanation was sought concerning the premium on-level factor of 1.1380 for the latest year.*

Answer: *Staff noted that the Table 1 data included business written in the residual and voluntary markets and that the filing analysis presented all premiums at the current residual market rate level. That adjustment included adding expense provisions to business written in the voluntary market and gave rise to the on-level factor in question.*

Comment: *The staff analysis was characterized as having concluded that the claim frequency experience in Policy Year 2009 frequency was unusual and would not be repeated.*

Answer: *Staff agreed with this assessment. Considerable thought had been given to the question of how to trend claim frequency in light of all available data. External information, such as wage level changes and Department of Labor counts of first Reports of Injury, had been reviewed and seemed to support the conclusion that the Policy Year 2009 experience would improve in at least the near term.*

Question: *Focusing on the reduction in medical severity trend by 1.8 percentage points, an attendee questioned whether the DCRB had made that adjustment in previous filings.*

Answer: *Staff replied that this would be the third year in which the adjustment in question would have been made. The first year, this reduction in medical trend had been suggested by the regulator in recognition of possible effects of Senate Bill 1 on medical price increases. For the 2010 filing the DCRB had elected to retain the prior adjustment with the expectation that the regulator would be very likely to insist on its inclusion in adjudicating that filing, and staff's thinking on the matter was the same for this filing.*

Question: *An attendee inquired what the impact of the Policy Year 2009 claim frequency changes had been on the filing indication.*

Answer: *In past filings, for which claim frequency data had been much more consistent year-over-year, the DCRB had not separately accounted for claim frequency in attributing contributions to the overall filing indications to various component parts of the experience. This year, with the exceptional nature of the Policy Year 2009 data, staff felt that the impact of this feature of the experience needed to be separately provided.*

Compared to a scenario in which claim frequency had continued to improve at a rate of 8.6 percent per year, Policy Year 2009 claim frequency added about 11 points to the residual market indication. Including Policy Year 2009 in the claim frequency trend line would have produced an annual claim frequency trend of -7.9 percent and would have resulted in rating value indications some five points lower than those provided in the agenda materials for the meeting.

Unlimited Loss Exhibits Presented for Purposes of Comparison

Exhibits 1 (Unlimited Loss), 2 (Unlimited Loss), 2a (Unlimited Loss), 3 (Unlimited Loss) and 6 (Unlimited Loss)

Staff noted that Table I and selected exhibits pertaining to loss development and trend on an unlimited basis, as well as on a limited basis, had been provided to the Committees.

Unlimited loss development had used an eight-year average tail provision and paid-to-incurred factors for medical loss and had performed a separate series of curve fitting analyses which had resulted in the following selected curves for purposes of smoothing age-to-age factors (with the fits applied to the results of subtracting unity from the age-to-age factors themselves).

Indemnity Incurred Development Factors:

$$y = a + b/x + c/(x^2) + d/(x^3) + e/(x^4) + f/(x^5) \text{ (fifth order inverse polynomial)}$$

Indemnity Paid Development Factor:

$$y = a + b/x + c/(x^2) + d/(x^3) + e/(x^4) + f/(x^5) \text{ (fifth order inverse polynomial)}$$

Indemnity Paid-to-Incurred Development Factors:

The most recent actual four-year average paid-to-incurred age-to-age factor was selected for this transition. In this year's analysis, as had been the case for several previous filings, loss development approaches converting to a case-incurred basis at varying points in development were not used.

Medical Incurred Development Factors:

$$y = a + b/x + c/(x^2) + d/(x^3) \text{ (third order inverse polynomial)}$$

Medical Paid Development Factors:

$$y = a + b/x + c/(x^2) + d/(x^3) + e/(x^4) + f/(x^5) \text{ (fifth order inverse polynomial)}$$

Medical Paid-to-Incurred Development Factors:

The most recent actual eight-year average paid-to-incurred age-to-age factor was selected for this transition. In this year's analysis, as had been the case for several previous filings, loss development approaches converting to a case-incurred basis at varying points in development were not used.

A handout was provided to all attendees replicating the above curve-fitting information.

Expenses and Benefit On-Level Factor

Exhibits 8, 9, 10 and 11

Staff reviewed these exhibits to summarize the measurement and estimation of expense provisions incorporated into the proposed filing.

Exhibit 8 showed historical experience used to measure the following expense components:

- Commission and Brokerage
- Other Acquisition
- General Expense
- Loss Adjustment Expense
- Premium Discount
- Uncollectible Premium

The first four items noted above were reviewed over the three calendar years - 2007, 2008 and 2009. The three-year average ratio of commission and brokerage expense to standard earned premium at DCRB rate level, including large deductible business on a net basis and excluding expense constant income, was used for that expense component of the proposed filing. Other acquisition and general expenses were determined based on the three-year average ratio of those respective expenses to standard earned premium at DCRB rate level, including large deductible business on a gross basis and excluding expense constant income. Other acquisition and general expense provisions had been adjusted for the effects of the Court of Chancery decision, which would reduce premium income without offsetting these expense components. The relationship between loss-adjustment expense and loss was derived based on the three-year average ratio of loss-adjustment expense to incurred losses, including large deductible on a gross basis. The premium discount provision in the proposed filing was based on size-of-risk distribution for Schedule Y carriers in Manual Year 2008, the most recent complete available year from unit statistical data. A provision for uncollectible premium had been selected after review of experience over the most recent available none years.

Exhibit 8 also showed the allocation of the provisions for residual market expense constant income attributed to various expense components. The residual market expense constant proposal of \$270 was noted in comparison to the currently-approved value of \$260.

Exhibit 10 derived a provision in the proposed rates and loss costs to offset the impact of expected adjustment in benefit minimums and maximums effective July 1, 2012. As comparable prior effects of revisions in benefit schedules had been removed from the policy year loss ratios derived in loss development analysis and used to select trend provisions for the proposed filing, a separate explicit provision for the prospective change was needed.

Exhibit 9 provided detail of the application of an internal rate-of-return analysis to the proposed filing. Expense provisions for commission and brokerage, other acquisition, general expense, premium and other taxes, premium-based assessments and premium discount were based on DCRB analysis as described above, budgetary provisions or the most recent available assessment levels. Premium collection and loss-payout patterns were also provided from DCRB analysis.

The DCRB inputs were combined with an economic consultant's analysis of the following inputs and parameters to construct a cash flow model appropriate for the business of underwriting workers compensation business in Delaware:

Pre-Tax Return on Assets
Investment Income Tax Rate
Post-Tax Return on Assets
Reserve-to-Surplus Ratio
Cost of Capital

The internal rate-of-return model thus constructed was provided in detail within Exhibit 9. Key outputs derived from Exhibit 9 for use in the proposed filing were:

Permissible loss ratio, including loss-adjustment expense and loss-based assessments – 73.43 percent

Profit and contingencies – minus 0.39 percent

Staff noted that the profit and contingencies provision proposed in the filing was less negative than the provision in currently-approved rates (minus 4.65 percent). This change was attributed in principal part to an increase in the cost of capital as determined through an internal rate of return model. Staff noted that the increase in the measured cost of capital for the 2011 filing, while significant, was less than or comparable to several prior year-over-year changes in this econometric parameter of the internal rate of return model.

Exhibit 11 provided side-by-side comparison of the expense structure underlying current approved residual market rates and proposed rates. Staff observed that overall expense costs reported by its members were higher than those incorporated in the last Delaware filing (28.99 percent, as compared to 25.60 percent last year). The most notable differences were the provisions for profit and contingency (-0.39 percent compared to -4.65 percent last year), commission (down to 4.80 percent compared to 5.76 percent last year), workers compensation fund (up to 3.50 percent compared to 3.00 percent last year), uncollectible premium (down to 2.00 percent compared to 2.50 percent last year), other acquisition expense (down to 2.38 percent compared to 2.85 percent last year) and general expense (up to 3.38 percent compared to 3.03 percent last year).

Question: *Staff was asked whether the residual market share was growing or shrinking in Delaware.*

Answer: *Staff indicated that the meeting review of Exhibit 19 would further discuss this subject. Recently in Delaware the residual market had held a small and declining share of the overall market, with recent changes in market share being more moderate. Staff noted that, owing to regulatory practices, the residual market in Delaware presented a very competitive price level in comparison to the voluntary market.*

Question: *An attendee asked for some elaboration on factors contributing to the change in the residual market profit provision.*

Answer: *Staff noted that the cost of capital had increased from 7.9 percent in the December 1, 2010 filing to 9.1 percent for the current proposal, while investment income returns had remained relatively flat. In combination this required a higher (less negative) profit provision.*

Question: *An explanation was requested concerning the 6.5 percent Interstate Adjustment Factor shown on Page 3 of Exhibit 8.*

Answer: *Staff described the factor in question as reflecting recognition of the allocation of expense constant income between states on multi-state policies, which included Delaware as one but not the only jurisdiction.*

Delaware Insurance Plan

Exhibit 19

Several features of the Delaware Insurance Plan (DIP), the residual market for workers compensation insurance in Delaware, were reviewed based on materials offered in this exhibit. These included the following:

- Comparative loss ratios in the DIP by policy size over a five-year period
- Comparative loss ratios in the DIP by policy year over a five-year period
- Market share in the DIP
- Effects of the approved surcharge program on risks insured in the DIP
- A residual market subsidy multiplier to be included in retrospective rating plan tax multipliers

Question: An attendee inquired whether residual market business in Delaware was exclusively pool business or if direct assignments were also made.

Answer: The response indicated that a direct assignment option was available for carriers in Delaware, in addition to participation in results of the pool. It was noted that Delaware does not have a State Fund as a means of servicing accounts unable to obtain coverage in the voluntary market.

Experience Rating

Exhibits 13, 20 and 21

The interpretation of Exhibit 13 was described for the participants in the contexts of determining whether credit or debit ratings were appropriate and the extent to which credibility was and should be assigned to individual risk experience.

Exhibit 20 was discussed as the means of deriving anticipated collectible premium ratios for use in Exhibit 12. It was noted that three-year average collectible premium ratios had been used for this purpose. Exhibit 20 also illustrated the computation of expected loss rate factors to adjust proposed residual market rates back to appropriate expected loss factors for use in the Experience Rating Plan and the determination of selected parameters for Experience Rating Plan credibility.

The downward trend in collectible premium ratios (consistent with increases in the average experience modification) in Exhibit 20 was noted. Staff advised attendees of analytical steps that had been taken to better understand this phenomenon.

An alternative approach to the calculation of expected loss rate factors had been tested. This approach had directly compared unit statistical report loss ratios at first, second and third report to on-level ultimate loss ratios. Indicated expected loss rate factors obtained from this method had been comparable to those derived from current DCRB methods, and the differences observed had consistently been toward lower expected loss rate factors in the alternative method as compared to the legacy DCRB procedure.

A handout was provided comparing distributions of risks by experience modification range for 2007 and 2008. Staff indicated that it had used those comparisons to identify selected shifts in experience modifications of potential interest in the recent upward migration of experience modifications and had then reviewed actual experience rating worksheets for samples of the employers involved in order to ascertain the reasons for changes in experience modifications. Staff had concluded that the reviewed experience modifications had been responding as expected to deteriorating loss experience and had not discovered troublesome changes in the context of plan design and/or maintenance of plan parameters.

Accordingly, procedures used in prior filings to derive expected loss rate factors had been applied without special adjustment or intervention in computing proposed December 1, 2011 expected loss rate factors.

Staff referred briefly to Exhibit 21, which set forth the credibility table proposed for use in the Experience Rating Plan over the proposed rate period.

Comment: *An initial observation was made that the plan seemed to be functioning as intended.*

Answer: *Staff agreed that the review of various samples of experience-rated risks had not disclosed anything problematic but reiterated that in the aggregate the ongoing increases in experience modifications were unexpected and unintended.*

Comment: *A second attendee agreed that the shifts in collectible premium ratios seen on Exhibit 20 were of concern and wondered about the recognition of those changes in the development of proposed rates and loss costs.*

Answer: *Staff pointed to the differences between collectible and manual voluntary market loss cost changes (+16.8 percent compared to +11.7 percent) and noted that the difference was attributable to the change in impact of the Experience Rating Plan on collectible premium. The experience modifications were seen to have been getting higher throughout the experience presented on Exhibit 20.*

Comment: *It was stated that the average experience modification should be 1.0.*

Answer: *Staff opined that it would be very difficult to actually obtain an average experience modification of 1.0 and that to accomplish such an objective would probably require a willingness to impose very large penalties for poor experience and/or to restrict credits for good experience to very small amounts.*

Question: *Staff was asked whether the DCRB had a Test Audit Program, and, if so, what the results of that program had been of late.*

Answer: *Staff confirmed the ongoing maintenance of a test audit function, which was operated on a combined basis for Pennsylvania and Delaware. Results of that program had been very good, with recent difference ratios coming in at all-time low (favorable) levels.*

Comment: *An attendee renewed their view that some factor(s) at work in producing the reported results of the Experience Rating Plan remained undiscovered.*

Answer: *Staff briefly discussed changes made to the Pennsylvania Experience Rating Plan several years ago, including problems encountered when attempting to test the performance of various plan options using Delaware data. Because the limited amount of available data seemed to preclude definitive demonstration of the superiority of selected plan features, the existing Delaware Experience Rating Plan had been retained until further work could be completed on design and testing thereof.*

Question: *An attendee questioned the possible implications of limited risk credibility in the plan on the observed average debit experience modification and noted that the distribution of experience modifications presented did not seem to follow an expected statistical distribution.*

Answer: *Staff referred to the structure of the derivation of expected loss rate factors and the intended relationship between rate levels and expected loss factors. In response to a further inquiry concerning classification-specific experience, staff noted that Exhibit 20 combined all classifications for analytical purposes.*

Comment: *Another attendee thought that, in the context of the classification ratemaking process, expected loss rates would be increasing with the proposed filing.*

Answer: *By comparing Exhibit 20 for the proposed filing to the counterpart from the December 1, 2010 filing, staff observed that the expected loss rate factors were smaller this time but that the residual market rates were proposed to be 20 points higher. In combination these changes would raise expected loss rates and presumably impact (lower) the average experience modification.*

Question: *Staff was asked whether the experience modification history could have been impacted by the Chancery Court decision and the associated mandated reductions in rate levels.*

Answer: *Staff expressed the opinion that the Court of Chancery reductions had not played any part in the promulgation of experience modifications. In particular, relationships between manual and standard premiums were not impacted by the Chancery Court decision. Also, the time frame of the Chancery Court decision was later than the experience rating results being reviewed in Exhibit 20.*

Comment: *An attendee asked about non-rated risks, suggesting that Page 1 of Exhibit 19 showed that non-rated risks were not paying their fair share of premium since smaller accounts paid manual rate level without adjustment by experience rating.*

Answer: *Staff acknowledged that, as overall rate level changes were balanced for results of the Experience Rating Plan, employers not eligible for debit modifications would arguably benefit in comparison to larger businesses eligible for experience rating.*

Question: *Staff was asked whether the Test Audit Program included an experience rating component.*

Answer: *Staff explained that the Test Audit Program does not include accounts falling below a \$2500 premium threshold. The intention is that the Test Audit Program will address a random cross-section of risks instead of seeking areas of potential difficulty in terms of data quality.*

Comment: *The suggestion was made that focusing some test audit resources on risks with unusual debit experience modifications could potentially discover contributions of misallocation and/or underreporting of exposures to results of the Experience Rating Plan.*

Answer: *Staff agreed that such a review could be undertaken and that incentives arising from such reporting procedures could be at least somewhat self-perpetuating.*

Delaware Construction Classification Premium Adjustment Program

Exhibit 14

The history and purpose of Delaware Construction Classification Premium Adjustment Program (DCCPAP) were briefly described using Exhibit 14. Staff reviewed the analytical exhibits reflecting the extent to which employers in the respective eligible classifications had participated in the program and the magnitude of premium credits granted to such employers. Proposed adjustments in offsets for DCCPAP credits by classification were noted.

The table of qualifying wages was reviewed for the participants. Staff noted that the qualifying wages proposed to be effective for the DCCPAP June 1, 2012 reflected expected future wage level changes, resulting in a proposed wage table with a nominally higher-qualifying wage than was in effect for the June 1, 2011 Table.

Question: *An attendee noted that the DCRB had been considering consolidating the effective dates of annual rating value filings and classification filings to better accommodate carrier system concerns and asked whether the effective date for the DCCPAP might warrant similar treatment.*

Answer: *Staff discussed the intended benefits of having fewer effective dates for rating value change, and the procedures applicable to the DCCPAP. Considerations of the period from which qualifying wages were taken and the fact that carrier systems need not be updated for changes in the DCCPAP tables themselves weighed in favor of retaining the customary effective date of June 1 for changes in this specific program.*

Workplace Safety Program and Merit Rating

Exhibit 29

The background of the Workplace Safety Program was reviewed, noting 1999 changes expanding the eligibility for the program, instituting an overall offset to manual rating values to fund operation of the program and implementation of a Merit Rating Program for small employers.

Page 29.1 showed recent historical experience for participation in the Workplace Safety Program and derived an indicated offset to manual rates based thereon. Page 29.2 showed anticipated distributions of merit-rated risks between credits, no adjustments and debits and combined the indicated offset for net merit rating credits with that for the Workplace Safety Program. The combined indication was for a 3.26 percent adjustment to manual rating values, as compared to the 2.78 percent adjustment currently in effect.

Rating Values Based on Size-of-Loss Analyses

Exhibits 16, 17a, 17b, 17c, 17d, 17e

Staff noted that DCRB loss cost filings typically include rating values pertinent to various rating plans affected by the size of loss for individual claims or occurrences. 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 Delaware business.

Many of the size-of-loss studies and rating values proposed in this filing vary by hazard group. Delaware's December 1, 2009 Residual Market Rate and Voluntary Market Loss Cost Filing modified and expanded the hazard groups to which classifications may be assigned. The filing expanded the number of hazard groups to seven (designated A, B, C, D, E, F and G). Those seven hazard groups 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.

Comment: *It was observed that switching from four to seven hazard groups at this point in time would presumably only be a problem for carriers which do not write in NCCI states, where the transition to seven hazard groups had been completed some time ago.*

Answer: *Staff agreed and indicated that elimination of support for four hazard groups in future filings would be preceded by notification(s) to all carriers to identify unintended problems that might be associated with such a change.*

Exhibit 16

Exhibit 16 presents the derivation of small deductible loss elimination ratios and premium credits for the expanded range of hazard groups. This is a mandatory offer to employers in Delaware but sees very limited use in the marketplace. The small deductible provisions are applicable to death and all medical losses.

Exhibits 17a, 17b, 17c, 17d and 17e

Staff briefly described changes to the processes and procedures used in the derivation of excess loss factors that was introduced as part of the December 1, 2009 filing. One result of those changes was a far greater emphasis on Delaware experience than had been used in the past. Exhibit 17a presented an empirical loss distribution based solely on Delaware data. The analysis indicated that actual loss experience could be used over a significant portion of the size-of-loss range for each type of injury (Death, PT, PP and Temporary Total). Various commonly-used distributions had been considered in fitting the empirical size-of-loss distributions, including Pareto, Lognormal, Gamma, Weibull and Exponential. Separate analyses of claim frequency and loss severity had been performed, and the lognormal distribution was used to estimate claim severity and claim frequency for each type of injury. In generating final loss distributions and excess loss factors, actual data (claim counts and dollars of loss) for limits below \$250,000 had been combined with fitted counts and dollars above \$250,000 and reaccumulated. The resulting excess loss factors were also presented in Exhibit 17a.

Exhibit 17b derived proposed excess loss (pure premium) factors computed using results from Exhibit 17a. Values as of December 1, 2010 were also shown. Consistent with the 2009 study, Pennsylvania relativities had been used as benchmarks for loss amounts in excess of \$1,000,000 owing to the limited amount of Delaware experience data available in those layers.

Exhibit 17d, showed the derivation of excess factors related to premiums (rather than pure premiums). Exhibits 17c and 17e are comparable to 17b and 17d, respectively, but adjusted to include a provision for ALAE. The underlying loss distributions for each variation were identical to those found in Exhibit 17b.

State & Hazard Group Relativities

The State and Hazard Group Relativities are generally updated on an annual basis with Delaware average costs compared to average costs for the combined experience of the NCCI's states. The NCCI has not updated their State & Hazard Group study for 2011, and staff has chosen to leave Delaware relativities unchanged.

Retrospective Rating

Exhibits 24 and 25

Exhibit 24 was described as providing indicated loss development factors proposed to be available for use on an optional basis. Specified factors were shown for no loss limitation and applicable to the expected loss portion of premium. In addition, a general procedure to derive loss development factors appropriate for use with various loss limitations was included in Exhibit 24.

Exhibit 25 presented the derivation of a retrospective rating plan tax multiplier, including the use of the DIP subsidy previously noted and shown on Exhibit 19.

Classification Relativities

Exhibits 15, 22a, 22b, 22c, 27, 28, Class Book, 30, 31a and 31b

Exhibit 15 described the formulae and procedures used for analysis of classification experience in the proposed filing. Staff commented on a secondary capping procedure intended to avoid large fluctuations about the average changes in rating values from year-to-year. This procedure, while applied in the proposed filing, did not result in the capping of any additional classifications.

Question: Staff was asked whether the DCRB was considering adoption of NCCI's recently-revised classification ratemaking procedures.

Answer: Delaware was not using the same classification procedures as NCCI had formerly employed, with some of the differences being significant. Nonetheless, DCRB staff expressed interest in the recent NCCI changes and the intention of reviewing the feasibility and benefits of incorporating selected aspects of the new procedures in the DCRB's classification ratemaking at some future date(s).

Exhibits 22a, 22b and 22c each provided unit statistical data by manual year and industry group over the most recent available five years. These tabulations were used in the derivation of certain factors applicable to determining classification-specific rating values. Exhibit 22a showed losses including loss-adjustment expenses, adjusted to current benefit levels, trended and developed to an ultimate basis. Exhibit 22b showed losses, including loss-adjustment expenses, developed to an ultimate basis but not trended or on-level, and Exhibit 22c showed reported losses without loss-adjustment expenses.

Exhibit 28 provided parameters derived for and applied in the execution of the prescribed procedures for derivation of classification rating values. The Class Book presented detailed five-year histories of experience by classification and showed calculation of indicated rating values based on Delaware experience alone. Staff noted that a separate procedure applied to those Delaware classifications where available experience warranted less than five percent credibility for non-serious losses and that the application of those special procedures was not reflected in the Class Book pages.

Four of the referenced exhibits were noted as providing various summaries of the results of the DCRB's derivation of proposed classification rating values. Exhibit 27 showed proposed residual market rates, voluntary market loss costs and expected loss rates by classification number. Exhibit 30 was a histogram showing the incidence of indicated and proposed changes in residual market rates by percentage range. Exhibits 31a and 31b showed current, indicated and proposed residual market rates before DCCPAP and applicable surcharges for the Workplace Safety Program and Merit Rating Plan. These exhibits also showed percentage changes in proposed rates before the DCCPAP, Workplace Safety Program and Merit Rating Plan surcharges and final proposed residual market rates (including surcharges). Exhibit 31a was shown sorted by classification code number. Exhibit 31b was shown sorted in ascending sequence by proposed percentage change.

Minimum and Maximum Corporate Officer Payrolls

Staff noted the maximum payroll amount for executive officers effective December 1, 2011 was proposed to be increased from \$2,300 to \$2,350 per week owing to changes in Statewide Average Weekly Wage data. Proposed changes to Manual language were provided as part of a staff memorandum dated June 14, 2011 and included in the meeting agenda materials.

Staff invited closing questions or comments.

Question: *Staff was asked to describe the procedural process from this point forward for the December 1, 2011 filing.*

Answer: *Staff would reflect on the meeting discussion. Subject to any revisions thus suggested, a filing would be assembled and submitted as quickly as possible.*

The DCRB anticipated two separate actuarial reviews by Insurance Department consultants and also anticipated that a hearing of some sort would be convened as part of the Insurance Department's review of the filing. Subsequent steps would depend in substantial part on the results of the consultants' reviews as compared to the filing submitted by the DCRB.

There being no further business for the Committee to conduct, the meeting was adjourned.

Respectfully submitted,

Timothy L. Wisecarver
Chair - Ex Officio

TLW/kg