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**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 by Hilton Hotel Downtown Wilmington, 700 King Street, Wilmington, Delaware on Wednesday, August 26, 2015 at 10 a.m.

The following members were present:

Actuarial Committee

Ms. M. Gaillard	American Home Assurance Company
Ms. R. Reich	Donegal Mutual Insurance Company
Ms. M. Sperduto	Harleysville Mutual Insurance Company
Mr. S. Walsh	Liberty Mutual Insurance Company
Mr. S. Curlee	PMA Insurance Company
Mr. R. Willsey	Travelers Property & Casualty Company

Classification and Rating Committee

Not Represented	Accident Fund Ins. Co. of America
Ms. M. Gaillard	American Home Assurance Company
Not Represented	Home Builders Association of Delaware
Not Represented	Insurance Company of North America
Mr. S. Walsh	Liberty Mutual Insurance Company
Mr. R. Edmunds	PMA Insurance Company
Not Represented	XL Insurance Company

Mr. T. Wisecarver	Chair - Ex Officio
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Also present were:

Mr. A. Schwartz	AIS Risk Consultants (Actuary for Ratepayer Advocate)
Mr. O. Cleary	Delaware Department of Justice
Ms. K. Makowski	Delaware Insurance Department
*Mr. P. Reynolds	Delaware Insurance Department
Mr. H. Drane	Delaware Insurance Department
Mr. F. Townsend	Delaware Ratepayer Advocate
Mr. A. Frabizzio	Delaware Workers Compensation Oversight Panel
*Mr. J. Rhoades	Delaware Workers Compensation Oversight Panel
*Mr. L. Dotson	Delaware Workers Compensation Oversight Panel
Mr. S. Cooley	Duane Morris LLP
Mr. R. Gardner	INS Consultants, Inc.
Mr. M. Morro	INS Consultants, Inc.
Mr. C. Tait	Milliman, Inc.
Mr. R. Moss	National Council on Compensation Insurance, Inc.

Ms. D. Belfus	DCRB Staff
Mr. K. Creighton	DCRB Staff
Mr. B. Decker	DCRB Staff
Mr. W. Taylor	DCRB Staff
Mr. C. Whipple	DCRB Staff
Mr. P. Yoon	DCRB Staff

\* Present for part of meeting

The Antitrust Preamble applicable to this meeting and private conversations occurring in the course of the meeting was read for all attendees. Participants gave brief self-introductions.

**ITEM (1) REVIEW OF THE PROPOSED DECEMBER 1, 2014 RESIDUAL MARKET RATE AND VOLUNTARY MARKET LOSS COST FILING**

Statutory requirements and administrative procedures expected to be applied to the DCRB's filing were described to attendees.

A draft December 1, 2015 Residual Market Rate and Voluntary Market Loss Cost Filing was presented for discussion. The discussion focused on a series of analytical steps supporting the derivation of the indicated overall changes in rating values. Each analytical step was supported by cited exhibits provided in the agenda materials for the filing. Key concepts derived from that supporting analysis were presented in the form of Discussion Exhibits provided in hard copy at the meeting and projected on a screen display to facilitate review of those points.

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.

Discussion Package Page 1 presented indicated overall changes in residual market rates (an increase of 14.92 percent) and voluntary market loss costs (an increase of 15.03 percent). Key analytical steps applied in the development of the draft filing indication being offered for review at the meeting were noted as follow:

- Estimating ultimate on-level limited losses for prior policy years,
- Trending prior policy year results to the prospective period to which the proposed residual market rates and voluntary market loss costs would apply,
- Recognizing the estimated impacts of specified legislative changes on expected system costs,
- Adjusting results for the effect of limitations applied in the earlier analysis,
- Using a permissible loss and loss adjustment expense ratio to derive indicated changes in residual market rates,
- Applying estimated effects of the July 1, 2016 change in indemnity benefits, and
- Deriving the indicated change in voluntary market loss costs by removing the effects of expense needs from the residual market rate change indication.

Staff provided some background and highlights of the analysis done for the December 1, 2015 Residual Market Rate and Voluntary Market Loss Cost Filing. Points addressed and emphasized included the following:

- The effects of a series of legislative changes had been accounted for in the derivation of the indicated changes in rating values. It was noted that, absent the combined benefits of 2007, 2013 and 2014 legislation, the December 1, 2015 residual market rate change indication would have been an increase of approximately 72 percent.
- Savings from Senate Bill 1 of 2007 (SB1) were estimated to be approximately 17.40 percent of medical loss costs and 12.02 percent of overall loss costs. Accordingly, SB1 produced an indicated decrease in residual market rates of approximately 12.02 percent.
- Savings from Senate Bill 238 of 2012 (SB238) were estimated to be approximately 0.42 percent of medical loss costs and 0.27 percent of total loss costs. Accordingly, SB238 produced a decrease in residual market rates of approximately 0.27 percent.
- Savings from House Bill 175 of 2013 (HB175) were estimated to be approximately 6.03 percent of medical loss costs and 3.90 percent of total loss cost. Accordingly, HB175 produced a decrease in residual market rates of approximately 3.90 percent. These estimates reflected changes in applicable CPI index values and in weights assigned to various partitions of medical payments from those applied in the development of the December 1, 2014 DCRB filing.
- House Bill 373 of 2014 (HB373) required revisions to Delaware fee schedules such that prescribed levels of reductions in medical expenses were attained in 2015, 2016 and 2017. The DCRB had conducted extensive analyses of the January 31, 2015 medical fee schedules, deriving indications that suggested the savings in medical expenditures attributable to those new fee schedules would be somewhat less than the 20 percent specified in the statute. The DCRB was not able to accurately quantify the extent of that anticipated shortfall, as Medical Data Call information specific to services provided subsequent to the adoption of the new fee schedules was still very limited. The January 31, 2016 and January 31, 2017 fee schedule changes remained to be delineated, and could either exceed or fall short of the incremental changes required under HB373. Legislation passed in 2015 (House Bill No. 166) had expanded the source of the savings to be accomplished in 2015, 2016 and 2017 under HB373 to include effects of changes in the health care payment system other than revisions to the fee schedules. Accordingly, for purposes of this filing, the DCRB had again elected to price HB373 based solely on its interpretation of the legislative intent. On that basis, savings from HB373 of 2014 were estimated to be approximately 32.93 percent of medical loss costs and 20.85 percent of total loss costs. As a result, HB373 produced a decrease in residual market rates of approximately 20.85 percent.

It was expected that Medical Data Call information would be obtained from the second and third quarters of 2015 that would support a credible evaluation of the change in medical expenditures after the implementation of the January 31, 2015 medical fee schedules, and that subsequent DCRB filings would take the results of such evaluations into account.

- Medical experience (limited medical losses, limited medical trend and medical excess losses in combination) produced an indicated increase in residual market rates of approximately 50.04 percent.
- Indemnity loss experience (limited indemnity losses, limited indemnity trend and indemnity excess losses) accounted for an indicated increase in residual market rates of approximately 5.59 percent.
- Loss adjustment expenses contributed approximately an increase of approximately 8.99 percent to the filing indication for residual market rates.

- Expense needs in the residual market resulted in a decrease of approximately 0.91 percent in residual market rates.
- The anticipated July 1, 2016 benefit change resulted in an increase of approximately 0.64 percent to the overall residual market rate change.

EVALUATION OF IMPACTS OF PRIOR LEGISLATION ON THE DECEMBER 1, 2015 RATING VALUE INDICATIONS

The DCRB's filing analysis had explicitly and individually accounted for the impact of statutory changes contained in or authorized by the referenced pieces of Delaware legislation. The impacts so identified which had changed from estimates used for purposes of the December 1, 2014 filing were summarized as follows:

HB373

HB373 was the most significant of the legislative changes applicable to the DCRB's analysis for this filing. HB373 included the following provisions:

- §2322B set forth procedures and requirements applicable to the health care payment system for workers compensation claims. Among those procedures and requirements were the following notable elements:
- §2322B (3)(a): The Workers' Compensation Oversight Panel (WCOP) was required, by October 1, 2014, to establish a fee schedule for all Delaware workers compensation funded procedures, treatments and services based on the Resource Based Relative Value Scale ("RBRVS"), Medical Severity Diagnosis Related Group (MS-DRG), Ambulatory Payment Classification (APC), or equivalent scale used by the Centers for Medicare and Medicaid Services.

The fee schedule was required to result in a reduction of 20% in aggregate workers compensation medical expenses by the year beginning January 31, 2015, an additional reduction of 5% of 2014 expenses by the year beginning January 31, 2016 and an additional reduction of 8% of 2014 expenses by the year beginning January 31, 2017.

- §2322B (3)(b):

By January 31, 2017, no individual procedure in Delaware paid for through the workers compensation system is to be reimbursed at a rate greater than 200% of that reimbursed by the federal Medicare system, provided that radiology services may be reimbursed at up to 250% of the federal Medicare reimbursement and surgery services may be reimbursed at up to 300% of the federal Medicare reimbursement.

The DCRB had recently estimated the impact of the January 31, 2015 medical fee schedules on reimbursements to Ambulatory Surgical Centers, Hospital Outpatient Services, Hospital Inpatient Services and Professional Services. Four communications directed to the Secretary of the Delaware Department of Labor for use by the Workers Compensation Oversight Panel were included in the meeting agenda materials with some redaction of detailed analysis made for the sake of brevity. A letter and attachments dated June 8, 2015 pertained to Ambulatory Surgical Centers, a letter and attachments dated June 19, 2015 pertained to Hospital Outpatient Services, a letter and attachments dated June 26, 2015 pertained to Hospital Inpatient Services and a letter and attachments dated June 30, 2015 pertained to Professional Services. A letter and attachment dated July 27, 2015 summarized the results of the four separate analyses. The attachment to the July 27, 2015 letter was shown as Discussion Package Page 2 for this meeting.

Data limitations had allowed only partial recognition of the effects of distributions of charges above and below fee schedule amounts in the DCRB's analysis, the DCRB had not been able to estimate the effect of medical payment contracts or other similar arrangements on medical expenditures under the newest fee schedules and no provision for changes in patterns of medical treatment or billing practices had been made in the DCRB's evaluations to date.

Pending availability of Medical Data Call information directly applicable to the new fee schedules the DCRB had continued to apply a savings estimate for HB373 consistent with the legislative intent. The DCRB reserved its right to submit, at any time following the completion of that review, a filing of prospective loss costs and residual market rates consistent with the DCRB's evaluation of the effects of HB373.

The DCRB's evaluation of the potential effects of HB373 was illustrated on Discussion Package Page 3. Using a medical payout pattern based on the DCRB's analysis of ultimate medical losses for prior policy years, the savings that would arise from accomplishment of the serial reductions in medical expenses required under HB373 had been estimated. That procedure had produced an overall savings of 32.93 percent. It was noted that the savings factor approached the required savings in the third and final year of the fee schedule reductions, and staff explained that during the second and third years of that process, the mandated reductions would be taking place instead of increases in fees based on changes in specified CPI indices, thereby increasing the effect of the new fee schedules on otherwise expected costs.

### **HB175**

HB175 included a broad spectrum of changes directed at various components and/or features of the medical benefit system for workers compensation in Delaware. Staff's estimation of specified elements of that law change were summarized on Discussion Package Page 4. Components of that analysis for which savings factors had changed from those applied for the December 1, 2014 filing were noted as follow:

- §2322B (8) changed the index applicable to revision of hospital reimbursement rates from CPI-Medical to CPI-U, provided that no increases to hospital reimbursement rates would be permitted between July 1, 2013 and January 1, 2016 and required that subsequent adjustments to hospital reimbursement rates not recoup the adjustments thus foregone.

The estimated effects of this change were reflected in the sixth line of Discussion Package Page 4. The DCRB had determined that hospital and ambulatory surgical centers services represented approximately 25 percent of medical expenditures reported in the Medical Data Call for the period July 1, 2011 through June 30, 2013. These changes were estimated to reduce expenditures for those subject services by approximately 5.4 percent, resulting in an estimated reduction to medical expenditures of almost 1.4 percent. The difference from the DCRB's 2014 estimate of this savings was attributable to revised estimates of applicable CPI measures.

- §2322B (3) (v) provided that the health care payment system in Delaware not be adjusted for inflation between July 1, 2013 and January 1, 2016, and required that subsequent adjustments to the health care payment system not recoup the adjustments thus foregone.

The DCRB estimated the effects of this provision separately for four partitions of the medical expenditures reported through the Medical Data Call for the period July 1, 2011 through June 30, 2013. Those partitions and the evaluation of the effects of this provision were set forth as follows:

Professional services subject to specified fee amounts under the health care payment system implemented in 2008:

The effect of this change was reflected in the first line in the bottom section of Discussion Package Page 4. The DCRB had determined that the services addressed by the above statutory and administrative code provisions represented approximately 32 percent of medical expenditures reported in the Medical Data Call for the period July 1, 2011 through June 30, 2013. Based on historical changes in the CPI-U index used to adjust the fee amounts for such services the changes made in this section were estimated to reduce expenditures for those subject services by approximately 1.6 percent. The difference from the DCRB's 2014 estimate of this savings was attributable to revised estimates of applicable CPI measures.

Professional services reimbursable at 85 percent of charge under the health care payment system as revised in 2013:

The effect of this change was reflected in the second line in the bottom section of Discussion Package Page 4. The DCRB had determined that the services addressed by the above statutory and administrative code provisions represented approximately 7 percent of medical expenditures reported in the Medical Data Call for the period July 1, 2011 through June 30, 2013. Based on historical adjustments made to fee amounts for such services and available information about pertinent CPI indices the changes made in this section were estimated to reduce expenditures for those subject services by approximately 1.3 percent. The difference from the DCRB's 2014 estimate of this savings was attributable to revised estimates of applicable CPI measures and procedures understood by the DCRB to be applied by the Delaware Department of Labor in updating the applicable fee schedule.

Other professional services:

The effect of this change was reflected in the third line in the bottom section of Discussion Package Page 4. The DCRB had determined that the services addressed by the above statutory and administrative code provisions represented approximately 18 percent of medical expenditures reported in the Medical Data Call for the period July 1, 2011 through June 30, 2013. Based on historical adjustments made to fee amounts for such services and available information about pertinent CPI indices the changes recently accomplished were estimated to reduce expenditures for those subject services by approximately 1.2 percent. The difference from the DCRB's 2014 estimate of this savings was attributable to revised estimates of applicable CPI measures and procedures understood by the DCRB to be applied by the Delaware Department of Labor in updating the applicable fee schedule.

Hospital and ambulatory surgical centers:

Hospital reimbursements are regulated under procedures adopted under SB 238 of 2012, which compare changes in overall hospital charges to the prescribed statutory change (generally a change in a specified consumer price index value) and adjust the percentage factor applied against hospital charges to compute allowable reimbursements.

Ambulatory Surgical Center reimbursements are regulated under procedures adopted under SB 238 of 2012, which compare changes in each ambulatory surgical center's overall charges to the prescribed statutory change (generally a change in a specified consumer price index value) and adjust the percentage factor applied against that ambulatory surgical center's charges to compute allowable reimbursements

The effect of this change was reflected in the fourth line in the bottom section of Discussion Package Page 4. The DCRB had determined that hospital and ambulatory surgical centers services represented approximately 31 percent of medical expenditures reported in the Medical Data Call for the period July 1, 2011 through June 30, 2013.

Using methodologies applied by the Department of Labor in prior revisions to hospital and ambulatory surgical center reimbursement levels, the DCRB estimated that the changes recently accomplished would reduce expenditures for those subject services by approximately 2.5 percent. The difference from the DCRB's 2014 estimate of this savings was attributable to revised estimates of applicable CPI measures and procedures understood by the DCRB to be applied by the Delaware Department of Labor in updating the applicable fee schedule. In addition, the DCRB had revised some parts of this analysis to apply the effect of the freeze from a starting point at CPI-M instead of hospital inflation. The reduction to hospital reimbursements from the level of hospital inflation to CPI-M has been separately evaluated for SB238.

Overall, the DCRB estimated that the respective savings to medical cost described above for each partition of the medical expenditures reported in the Medical Data Call for the period July 1, 2011 through June 30, 2013 would result in savings of approximately 1.6 percent of total 2011 medical expenditures.

### **SB238 and SB1**

SB 238 of 2012 and SB1 of 2007 were reflected in the December 1, 2015 filing at the same savings factors applied for purposes of the December 1, 2014 filing.

### **LOSS DEVELOPMENT**

The topic of loss development was described as being presented in the work contained in the following meeting Exhibits:

Exhibit 1: Table I – Summary of Financial Call Data  
Exhibit 1a: Excess Loss Factor and Policy Year Loss Limitations  
Exhibit 1b: Reported Losses in Excess of Loss Limitations

Exhibit 2: Paid and Incurred Loss Development and Trend  
Exhibit 2a: Graphs of Selected Loss Development Projections

Staff noted that consistent with numerous recent Delaware filings, 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, 2015 filing, experience had again been adjusted to a pre-Senate Bill 1 basis for purposes of such analyses as loss development and trend, and then Law Amendment Factors specific to SB1, SB238, HB175 and HB373 had been applied to derive a December 1, 2015 indication.

The data adjustments for SB1, SB238 and HB175 had been made to paid and case incurred losses reported after the respective effective dates of each piece of legislation or administrative action by assuming that the estimated effect of the changes would be reflected immediately in paid medical losses and would become incorporated into case reserve values gradually over a three-year period of time.

Discussion Exhibit, Page 6 - Reported Incurred Losses Above Selected Loss Limits

This exhibit was offered with the following specific observations:

- With selected loss limits ranging from approximately \$1,047,000 for Policy Year 1999 to slightly more than \$2,787,000 for Policy Year 2014, every complete policy year except for Policy Year 2013 included at least some losses in excess of the applicable limits,.
- The effects of the selected loss limitations were significant for many policy years.
- A substantial majority of the impact of selected loss limitations on reported losses occurred with respect to medical losses.

A set of eight Discussion Exhibits were next presented serially, illustrating comparisons between cumulative loss development factors derived for the current filing and counterpart cumulative loss development factors for the December 1, 2014 filing. These factors were thought to be indicative of changes in loss experience for prior policy years, with increases in the loss development factors associated with deterioration in prior estimates and decreases in loss development factors associated with improvement in prior estimates.

Key findings gleaned from the Discussion Exhibits as presented were as follow:

Discussion Exhibit, Page 7 – Indemnity Cumulative Paid Loss Development Factors

At early maturities (first through fifth reports), cumulative indemnity paid loss development factors appeared to be very similar for the December 1, 2015 and December 1, 2014 filings. Staff noted that the actual values underlying the graphs tended to be nominally higher for the 2015 filing, but the scale of the graph tended to mask those differences.

Discussion Exhibit, Page 8 – Indemnity Cumulative Paid Loss Development Factors

At extended maturities (after fifth report), cumulative indemnity paid loss development factors for the December 1, 2015 filing were nominally higher than those of the December 1, 2014 filing.

Together, Discussion Exhibits Pages 7 and 8 suggested that cumulative paid indemnity loss development had increased slightly between the December 1, 2014 and December 1, 2015 filings.

***Question:*** *It was noted that the curves for the cumulative loss development factors shown for the current and previous filing (Page 8) were essentially parallel. The question was asked whether this relationship was data driven or if the DCRB had applied some methodology which would have been intended to produce such a result. In either case, the inquirer wondered what the answer implied about the differences being illustrated.*

***Answer:*** *DCRB staff indicated that the results described were essentially data driven. The procedure used to derive loss development patterns including tail factors in the DCRB analysis was relatively straightforward and had been consistent between recent filings, including the current and most recent prior filings. The DCRB did not have specific insights into circumstances under which payments had been rendered over the course of the development experience that had been analyzed. The DCRB used 4-year averages of age-to-age loss development link ratios, and then smoothed the observed series of factors by making selections through a curve-fitting procedure. In this process, one year of development experience would be dropped each year and a new year would be added, so that three of the four years being used in any given filing were also included in the previous filing.*

Discussion Exhibit, Page 9 – Indemnity Cumulative Incurred Loss Development Factors

The two earliest maturities' cumulative loss development factors for the 2015 filing were lower than the comparable values for the 2014 filing. Comparisons for maturities three through five were mixed.

Discussion Exhibit, Page 10 – Indemnity Cumulative Incurred Loss Development Factors

At extended maturities (after fifth report) cumulative incurred indemnity loss development factors for the 2015 filing were lower than those of the 2014 filing for the first part of the development shown (maturities six through 13) and were higher than those of the 2014 filing after the 14<sup>th</sup> maturity.

Together, Discussion Exhibits Pages 9 and 10 suggested that incurred indemnity loss development may have modestly improved for the 2015 filing.

Discussion Exhibit, Page 11 – Medical Cumulative Paid Loss Development Factors

At early maturities (first through sixth reports) cumulative medical paid loss development factors for the 2015 filing started slightly lower than those of the 2014 filing but were somewhat higher after second report.

***Question:*** Staff was asked how the analysis of loss development factors treated the previous legislative reforms.

***Answer:*** Financial data was adjusted to a pre-law level, allowing measurement of loss development across various time periods on a consistent basis without effect of law changes. Savings factors are then applied similarly to a benefit level factor adjustment. DCRB intended to revise this process at some future date, adjusting experience reported prior to the effective date of law changes to a post-law basis, and eliminating the need for law change savings factors.

***Question:*** An attendee asked whether each evaluation point was adjusted by the same law change factor.

***Answer:*** Payment data was assumed to respond immediately to the various law changes. DCRB expected that case reserves would not immediately transform to a post-law level, and applied a linear change over a three-year period after the effective date of each law change for case reserve amounts.

Discussion Exhibit, Page 12 – Medical Cumulative Paid Loss Development Factors

At extended maturities (after fifth report) cumulative medical paid loss development factors for the 2015 filing were higher than those of the 2014 filing.

Together, Discussion Exhibits Pages 11 and 12 suggested that paid medical loss development had deteriorated somewhat for the December 1, 2015 filing.

Discussion Exhibit, Page 13 – Medical Cumulative Incurred Loss Development Factors

All of the five earliest cumulative medical incurred loss development factors for the 2015 filing were lower than those from the 2014 filing.

Discussion Exhibit, Page 14 – Medical Cumulative Incurred Loss Development Factors

At extended maturities (sixth and later reports) cumulative incurred medical loss development factors from the 2015 filing continued to be lower than those of the 2014 filing.

Together, Discussion Exhibits Pages 13 and 14 suggested that incurred medical loss development had been favorable in the December 1, 2015 filing compared to the data underlying the December 1, 2014 filing.

The DCRB's filing analysis had applied various curve fits to observed average age-to-age link ratios less unity in order to smooth the loss development patterns.

Discussion Exhibit, Page 15 – Limited Loss Development Analysis – Curves Fitted to Age-to-Age Loss Development Factors less Unity presented the following curve forms that had been selected as best accomplishing the objective without changing the overall level of observed development or reflecting an unreasonable shape or other behavior when extrapolated into an extended period of future reporting:

Indemnity Incurred Development Factors:

$$y = a + b \cdot \log(x) / x^2 + c \cdot \exp(-x)$$

Indemnity 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 Incurred 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 Development Factors:

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

The need for factors converting from paid to case incurred losses in completing the paid loss development estimates for both indemnity and medical losses was noted. For those purposes, staff had applied the most recent actual four-year average paid-to-incurred age-to-age factors at the maturity at which this transition was made.

Discussion Exhibit, Page 16 – Indemnity Paid & Incurred Ultimate Limited Loss Ratios by Policy Year presented the results of applying paid loss and case incurred loss development methods to indemnity losses for the December 1, 2015 filing. This exhibit showed comparable results for the two methods with paid estimates tending to be higher than the case incurred method for most policy years since 2001 with the differences between the methods diverging noticeably for the most recent four years.

Discussion Exhibit, Page 17 - Medical Paid & Incurred Ultimate Limited Loss Ratios by Policy Year presented the results of applying paid loss and case incurred loss development methods to medical losses for the December 1, 2015 filing. This exhibit showed comparable results for the two methods with paid estimates tending to be slightly higher than the case incurred method for recent policy years.

**Question: A committee member wondered about the impact of the adjustments made for the changes adopted under SB1, and referred to the graph on Discussion Exhibit Page 17. Loss ratios were relatively stable for the policy years 2003-2008, but then increased significantly for subsequent policy years. This committee member expressed concern that the actual effect of SB1 may have been different from the estimates applied by DCRB in its adjustment of financial data, and questioned whether any discrepancy of that sort might require attention in the DCRB's analyses.**

**Answer: Staff acknowledged that loss ratios did begin to increase at the time of the implementation of SB1. Nonetheless, staff felt that the 17.4% savings estimated for that legislation was a reasonable reflection of price changes invoked under the initial medical fee schedules in Delaware. Other features of the system appeared to have undergone significant**

*change in the post-reform period, and even very material changes to the SB1 savings factor seemed unlikely to return the subsequent experience to the pattern seen before that change.*

**Question:** *An attendee sought confirmation that the loss ratios being displayed and discussed were all expressed on a pre-law level.*

**Answer:** *The answer was affirmative.*

**Comment:** *With regard to the estimated effect of SB1, it was noted that after the recessionary period, loss ratios had decreased for most states and, in this context, Delaware seemed to show an unusual situation.*

**Answer:** *Staff concurred that the recession had brought some negative effects to Delaware's workers compensation experience, including a notable levelling of claim frequency improvement. Across the time frame under discussion, Delaware had also continued to see claim closure rates continue to decline.*

**Question:** *Noting that loss ratios were the combined result of loss amounts and premiums, an attendee asked whether changes on the premium side, such as activity under large deductible policies, might be influencing these observations.*

**Answer:** *The filing analysis excluded large deductible premiums and losses. Staff had not recently noted the volume of large deductible business in Delaware to determine whether the guaranteed cost market might be fluctuating in response to greater or lesser take-up of large deductible policies.*

**Question:** *An attendee inquired whether the DCRB had done any sensitivity analysis for the impacts of selected law savings factors, and, in particular, whether the DCRB knew how different SB1 savings factors would affect the rate and loss cost change indications.*

**Answer:** *This kind of work had not been updated in preparing the December 1, 2015 filing but such analysis had been done a few years ago. At that time, staff recalled that applying lower savings factors actually gave more favorable rating value change indications. As had been previously mentioned, however, very large changes in the estimated savings factor would have been required to accomplish impact sufficient to remove the apparent deterioration in experience after SB1.*

**Question:** *A committee member asked if staff knew how the graph on Discussion Exhibit Page 17 would look without any adjustments to reported premium or loss data.*

**Answer:** *Staff believed that, for ratemaking purposes, premiums would need to be expressed at the current level. If losses incurred after 2008 were not adjusted to a pre-law level, then losses and loss ratios would be lower than those reflected in the Discussion Exhibit.*

**Question:** *Another committee member asked whether the DCRB expected to adjust the basis for its ratemaking work to a post-law basis.*

**Answer:** *Ultimately the answer to this question would be yes. However, there had been four law changes adopted between 2007 and 2013, and HB373 had 3 increments that would be applied over a period of years. The adjustments being considered might become both difficult and confusing if the experience was set pre-law for some changes and post-law for others. As a reference point, staff observed that in Pennsylvania it took four to five years after the substantial reforms of the early- and mid- 1990's before the PCRb could effectively adjust experience to a post-law basis for purposes of ratemaking.*

**Question:** *Staff was asked what considerations arose in making a change from adjusting data to pre-law and post-law bases, and why the time mentioned seemed to be needed for that purpose.*

**Answer:** *Early on in this process, staff felt it was important to make adjustments to the smaller part of the applicable data – that is, the more recent data, while retaining historical information on an as-reported basis. Once several years of experience post-law became available, a transition to adjusting the prior data could be accomplished when filing indications derived on both bases could be compared and balanced in the data adjustments ultimately adopted. Long-term it was preferable to have the most recent information affecting rating value indications used as actual reported data instead of adjusted data.*

**Question:** *A question was posed as to whether the DCRB used different assumptions in adjusting data to a post-law level in successive filings.*

**Answer:** *While some parameters used to measure effects of law changes had been updated in recent filings and the current DCRB filing, the underlying assumptions were kept consistent from year to year. DCRB had confirmed with the National Council on Compensation Insurance, Inc. that prior savings estimates were not serially revised in successive filings in jurisdictions served by that organization.*

**Question:** *Noting the amount of time that had now lapsed since the enactment of SB1, staff was asked whether it would be feasible to change that part of the analysis to a post-law basis at this time without adjusting the other laws.*

**Answer:** *Staff believed that such an approach was possible, but reiterated the view that a mixed approach would pose some complications in both execution and explanation.*

**Question:** *An attendee asked whether the DCRB's data included the experience of captives.*

**Answer:** *Since all carriers writing workers compensation insurance business in Delaware were required to be members of the DCRB, staff was confident that captive carriers' business was included in the supporting information for DCRB filings.*

**Question:** *Confirmation was sought that both losses and premiums were stated on pre-law level in the analysis.*

**Answer:** *Staff clarified that premiums were adjusted to the current level, and only that level, for the entire span presented in the Discussion Exhibit Page 17.*

#### CLAIM FREQUENCY TREND

The topic of claim frequency was presented in the work contained in the following meeting Exhibits:

Exhibit 23: Claim Frequencies

Exhibit 12: Indicated Change in Residual Market Rates and Voluntary Market Loss Costs (Page 4)

Policy Year 2013 had now been substantially reported, and indicated an increase of 5.8 percent in frequency. This increase was the first notable increase in claim frequency in Delaware since at least 1999. Policy years 2009 and 2010, a recessionary period within which notable disruptions of long-term claim frequency trends had been observed in many jurisdictions outside Delaware, showed essentially flat claim frequency.

Discussion Exhibit, Page 18 – Unit Statistical Plan Indemnity Claim Frequencies was reviewed, illustrating the nature of claim frequency experience in Delaware.

Including policy years 2009 and 2010 in a seven-point exponential regression to derive claim frequency trend produced an annual rate of change of -3.8 percent. Staff felt that including those extraordinary years at full value was unduly pessimistic, but was also disinclined to remove those two years from the determination of claim frequency trend altogether. Accordingly, a selection of claim frequency trend for the December 1, 2015 filing had been made by averaging the results of two seven-year exponential regressions, the first using all policy years 2007 through 2013 and the other using the years 2005 through 2013 excluding 2009 and 2010. The resulting claim frequency trend was -5.3 percent.

It was noted that the claim frequency trend for the December 1, 2014 filing had been -6.6 percent.

***Question:*** *With respect to Department of Labor data showing some increases in counts for the most recent years, an attendee asked if that data was available to the public.*

***Answer:*** *Staff indicated that the DCRB would confirm with the Department of Labor that it could share the materials provided by that agency to others. The report was entitled “First Report of Injury Statistics.” Staff observed that the Department of Labor information would include self-insureds, a body of experience not included in DCRB analyses.*

***Question:*** *A follow-up question asked if the DCRB knew if the Department of Labor data separated insured from self-insured injuries.*

***Answer:*** *DCRB staff was not aware that the Department of Labor made such a separation of the counts that they compiled.*

#### SEVERITY TREND

The topic of severity trend was presented in the work contained in the following meeting Exhibits:

- Exhibit 2: Paid and Incurred Loss Development and Trend
- Exhibit 3: Measures of Goodness of Fit in Trend Calculations Using Severity Ratios
- Exhibit 5: Graphs of Ultimate and Trended Experience Components
- Exhibit 6: Retrospective Test of Trend Projections for Severity Ratios
- Exhibit 12: Indicated Change in Residual Market Rates and Voluntary Market Loss Costs (pages 2 & 3)

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 2013 (mid-point January 1, 2014) 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 +7.7 percent per year, up from the 2014 filing's value of +5.8 percent per year.

Medical Severity – The DCRB remained 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 each of the most recent five DCRB filings with the posited improvement of 1.8 percent in annual medical severity trend applied after September 1, 2008 (the effective date for full implementation of the medical fee schedule in prior DCRB filings). The December 1,

2015 filing had been prepared consistent with that prior perspective, in the fashion next explained to attendees.

Subsequent to the implementation of Senate Bill 1 it had been discovered that the intended regulation of fees for hospitals and ambulatory surgical centers had not been accomplished as envisioned under that law for both legal and practical reasons. Senate Bill 238 of 2012 was enacted to establish a new mechanism to manage hospital and ambulatory surgical center reimbursements.

The DCRB estimated the contribution of hospital and ambulatory surgical center payments to the anticipated improvements in medical trend, deriving a result that instead of a -1.8 percent annual improvement the value excluding hospitals and ambulatory surgical centers would have been approximately -1.5 percent. For the time period after January 31, 2013, the prior assumption of an improvement of 1.8 percent per year was applied for the December 1, 2015 filing.

The pre-Senate Bill 1 medical severity trend (measured prior to the application of the above adjustments), derived using a seven-point exponential fit, was +10.8 percent per year. Based on the above considerations, the annual medical severity trends used in the staff analysis were +10.8 percent through September 1, 2008, +9.3 percent per year from September 1, 2008 to January 31, 2013 and +9.0 percent thereafter.

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.

Discussion Exhibit, Page 19 – Indemnity and Medical Actual and Trended Severity Ratios, Average of Incurred and Paid to 25<sup>th</sup> portrayed the results of the selected loss development methodologies for indemnity and medical losses, with the exponential fit trend indications also provided for illustrative purposes. It was noted that the medical severity trends applied respectively from September 1, 2008 to January 31, 2013 and after January 31, 2013 were both nominally lower than the curve presented in this Discussion Exhibit.

Discussion Exhibit, Page 20 – Indemnity Loss Experience Components, Indexed to 1.000 at Policy Year 2001, Annual Rates of Change was shown, noting that this material replicated the indemnity portion of the agenda package's Exhibit 5. The selected claim frequency and severity trends were illustrated, together with the resulting loss ratio trend (+2.0 percent).

***Question: An attendee observed that there seemed to be two different time periods for indemnity severity trend (Page 20). Up to 2010, the increases were roughly in keeping with wage and benefit inflation. There was a stark contrast starting in 2010. Staff was asked if any insight was available about the reasons for that result.***

***Answer: The change in severities described was acknowledged. Staff had not identified specific causes for this pattern but noted that it was a data driven phenomenon reflecting payments and case reserves for the respective policy years.***

***Question: With regard to the loss ratio, a question was posed as to whether claim frequency could be a significant factor in the results.***

***Answer: Contributing factors to loss ratio trends could include duration of claims, level of awards and increased payments and reserves as well as claim frequency.***

Discussion Exhibit, Page 21 – Medical Loss Experience Components, Indexed to 1.000 at Policy Year 2001, Annual Rates of Change was shown, noting that this material replicated the medical portion of the agenda package's Exhibit 5. The selected claim frequency and severity trends were illustrated, together

with the resulting loss ratio trend (+4.9 percent to September 1, 2008, +3.5 percent to January 31, 2013 and 3.2 percent thereafter).

Expenses and Benefit On-Level Factor

The topics of expenses and benefit on-level factor were presented in the work contained in the following meeting Exhibits:

- Exhibit 8: Expense Study
- Exhibit 9: Internal Rate of Return Model
- Exhibit 10: Effect of 7/1/16 Benefit Change
- Exhibit 11: Expense Loading

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

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 2012, 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 ten 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 \$290 was noted in comparison to the currently-approved value of \$290.

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, 2016. 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

Indicated Value: 71.02 percent

Profit and contingencies

Indicated Value: +1.82 percent

Staff noted that the indicated profit and contingencies provision for the December 1, 2015 filing was slightly higher than the counterpart value for the December 1, 2014 filing.

Discussion Exhibit, Page 22 – Historical Expense Ratios, 12/1/2008 through 12/1/2015 was reviewed. A slight overall decrease in the residual market expense need from 31.29 percent of premium for the December 1, 2014 filing to 31.20 percent of premium for the December 1, 2015 filing was noted, with the following components highlighted as contributing decreases toward that net change:

	December 1, 2014	December 1, 2015
Other Acquisition	2.85 percent	2.74 percent
General Expense	3.44 percent	3.20 percent
Premium Discount	9.15 percent	8.95 percent
State Premium Tax and Miscellaneous Tax	2.35 percent	2.33 percent
Administrative Assessment	2.24 percent	2.22 percent
Workers Comp Fund	3.50 percent	3.00 percent
Uncollectible Premium	1.00 percent	0.80 percent

Overall Indicated Changes in Collectible and Manual Rating Values

The topics of the overall changes in collectible and manual rating values were presented in the work contained in the following meeting Exhibits:

Exhibit 12: Indicated Change in Residual Market Rates and Voluntary Market Loss Costs

Exhibit 7: Open Claim Ratios, Payout Ratios and Average Claim Costs

Staff briefly reviewed the approach used in this exhibit to derive indicated overall changes in residual market rates and voluntary market loss costs.

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, 2014 filing for all years. These comparisons reflected the approved December 1, 2014 rate change (-9.70%) and losses reported, including loss development data, since that filing.

The effects of trend on the filing indication (increasing both indemnity and medical projections) were noted. In comparison to the trend adjustments included in the December 1, 2014 filing, the current indication for claim frequency was less favorable (-5.3 percent per year compared to -6.6 percent per year). Indemnity claim severity was again less favorable for the current submission (+7.7 percent vs. +5.8%) while medical claim severity was described as being more favorable for the current submission (+10.8 percent prior to adjustment for effects of legislation compared to +13.2 percent last year).

The adjustments to medical loss ratios based on DCRB analysis of the effects of 2007, 2012, 2013 and 2014 legislative and regulatory changes were noted. Line (3ai) pertained to Senate Bill 1 of 2007, line (3aii) reflected Senate Bill 238 of 2012, line (3aiii) included the collective components of House Bill 175 of 2013 and subsequent regulatory changes and line (3aiv) reflected House Bill 373 of 2014. 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, 2016 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 (14.92 percent increase) and voluntary market loss costs (15.03 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, with the impact of the surcharge program being applied to voluntary market loss costs to maintain revenue neutrality of that surcharge program.

Discussion Exhibit, Page 23 – Components of Proposed December 1, 2015 Residual Market Rate Change was reviewed with attendees, with the combinations of factors underlying the overview described at the beginning of the meeting identified.

***Comment:*** *One attendee thought that the graph on Page 23 would benefit from an explanation of what the changes were in relation to.*

***Answer:*** *One perspective, the one presented on the Discussion Exhibit, showed the full impact of prior legislative changes with the remaining components reflecting pre-law impacts. Another viable perspective would show changes in the impacts of all components from last year's filing to the current filing. Staff felt that the presentation based on the full impact of legislative adjustments was appropriate, and might be especially helpful to some audiences concerned about the effect of those legislative efforts.*

***Question:*** *A question was posed concerning the 8.99% increase attributed to loss adjustment expense (Page 23) despite the decrease in the loss adjustment expense factor seen this year (Page 22).*

***Answer:*** *The filing expresses loss adjustment expense as a function of loss. The +8.99% is attributable in part to the reflection of pre-law loss levels as the basis for the projected loss adjustment expense.*

Exhibit 7 provided various metrics of loss experience derived from unit statistical data. Open claim ratios, 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.

Discussion Exhibit, Pages 24 and 25 – Claim Settlement Rates, Ratio of Open to Reported Indemnity Claims by Policy Year showed ratios of open to reported claims for selected claim maturities. These ratios had been generally trending up over time and for most report levels had moved up to some extent with the most recent available report. Third and fourth reports had reached the highest levels seen on the historical exhibit with the most recent report.

***Question: An inquiry was made about financial data, and whether that could be used as a source for claim settlement rates. The financial data would be somewhat more current than unit statistical data. Also, the questioner wondered if the DCRB had partitioned the unit statistical data into injury types (death, permanent total, major and minor permanent partial and temporary total) to see if one type was driving the observed trends or if there had been shifts in the population of claims between types over time.***

***Answer: Financial data involved some considerations about matching contributing carriers for time series of reports. Notwithstanding those factors, deriving claim closure rates from financial data was feasible.***

Unlimited Loss Exhibits Presented for Purposes of Comparison

While relying on limited loss development and trend as previously described, DCRB staff had performed counterpart analyses of the December 1, 2015 filing on an unlimited loss basis. That analysis was presented in the work contained in the following meeting Exhibits:

- Unlimited Exhibit 1: Table I – Summary of Financial Call Data
- Unlimited Exhibit 2: Paid and Incurred Loss Development and Trend
- Unlimited Exhibit 2a: Graphs of Selected Loss Development Projections
- Unlimited Exhibit 3: Measures of Goodness of Fit in Trend Calculations Using Severity Ratios
- Unlimited Exhibit 6: Retrospective Test of Trend Projections for Severity Ratios

Unlimited loss development had used an eight-year average tail provision and four-year average 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).

Discussion Exhibit, Page 23 – Unlimited Loss Development Analysis – Curves Fitted to Age-to-Age Loss Development Factors less Unity disclosed the following curves selected to smooth unlimited loss development link ratios:

Indemnity Incurred Development Factors:

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

Indemnity Paid Development Factors:

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

Medical Incurred Development Factors:

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

Medical Paid Development Factors:

$$y = a + b/x + c/(x^{1.5})$$

As had been the case for limited loss development, the need for factors converting from paid to case incurred losses in completing the paid loss development estimates for both indemnity and medical losses was noted. For those purposes, staff had applied the most recent actual four-year average paid-to-incurred age-to-age factors at the maturity at which this transition was made.

Staff advised attendees that a rate and loss cost indication had been derived on an unlimited basis for purposes of comparison to the traditional procedure, and for the December 1, 2015 filing the change indications thus obtained had been about seven tenths of a point higher for both residual market rates and voluntary market loss costs.

Delaware Insurance Plan

The topic of the Delaware Insurance Plan was presented in the work contained in the following meeting Exhibits:

Exhibit 19: Delaware Insurance Plan

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

Experience Rating

The topic of Experience Rating was presented in the work contained in the following meeting Exhibits:

- Exhibit 13: Experience Rating Plan Performance
- Exhibit 20: Review of Experience Rating Plan Parameters
- Exhibit 21: Table B

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.

Discussion Exhibit, Pages 27 and 28 – Credit Risks and Debit Risks respectively provided overviews of loss ratio adjustments accomplished by the Experience Rating Plan on employers by premium size group.

Exhibit 20 was discussed as the means of deriving anticipated collectible premium ratios for use in Exhibit 12. It was noted that Market Profile Report data (based on policy reports for early maturities) had been used as the basis for determining Collectible Premium Ratios for this year's filing. Market Profile Report data was available sooner than unit data, and captured observed decreases in average modifications in recent policy years. 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.

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.

Delaware Construction Classification Premium Adjustment Program

The topic of the Delaware Construction Classification Premium Adjustment Program was presented in the work contained in the following meeting Exhibits:

Exhibit 14: DCCPAP

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, 2016 reflected expected future wage level changes, resulting in a proposed wage table with a higher minimum qualifying wage than was in effect for the June 1, 2015 Table (\$19.15 compared to \$18.75).

Workplace Safety Program and Merit Rating

The topics of Workplace Safety Program and Merit Rating were presented in the work contained in the following meeting Exhibit:

Exhibit 29: Delaware Workplace Safety Program & Merit Rating Program

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 2.96 percent adjustment to manual rating values, as compared to the 3.27 percent adjustment currently in effect.

Rating Values Based on Size-of-Loss Analyses

The topic of Rating Values Based on Size-of-Loss Analyses was presented in the work contained in the following meeting Exhibits:

Exhibit 16: Small Deductible Program

Exhibit 17a: Empirical Delaware Loss Distribution

Exhibit 17b: Excess Loss (Pure Premium) Factors

Exhibit 17c: Excess Loss (Pure Premium) Factors Adjusted to Include Allocated Loss Adjustment Expenses

Exhibit 17d: Excess Loss Premium Factors

Exhibit 17e: Excess Loss Premium Factors Adjusted to Include Allocated Loss Adjustment Expenses

Staff noted that DCRB loss cost filings typically included 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.

Staff further noted that many of the size-of-loss studies and rating values proposed in the filing vary by hazard group and that the hazard groups were modified and expanded from four (designated I, II, III and IV) to seven (designated A, B, C, D, E, F and G) hazard groups as part of the December 1, 2009 filing. Beginning with the December 1, 2012 filing, DCRB filings have only supported analysis for the seven hazard groups (A-G).

#### 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.

It was noted that in past filings selected factors had been rounded to the nearest 0.005. Beginning with last year's filing, values were shown to the nearest 0.001 as some adjacent deductible amounts otherwise produced identical loss elimination ratios.

#### 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 re-accumulated. 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, 2014 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

This subject was addressed in the following meeting exhibit:

Exhibit 18: State & Hazard Group Relativities

Exhibit 18 shows the derivation of the December 1, 2015 proposed State & Hazard Group Relativities. DCRB and NCCI average costs were shown by hazard group and in total. A credibility weight was calculated for each hazard group based on the number of claims. A credibility weighted average cost was then calculated, and these average costs were related to the NCCI overall average cost to generate the indicated relativities. Selections were made where the indicated values for a given hazard group were inconsistent with indicated values for adjacent hazard groups. An adjustment was made to recognize the impact of recent legislation on Delaware average costs.

#### Retrospective Rating

The topic of Retrospective rating was presented in the work contained in the following meeting Exhibits:

Exhibit 24: Retrospective Development Factors

Exhibit 25: Tax Multiplier

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

The topic of classification relativities was briefly discussed along with the following meeting Exhibit:

Exhibit 15: Rate and Loss Cost Formulae

Exhibit 15 described the formulae and procedures used for analysis of classification experience in the annual filing. Staff commented on a secondary capping procedure intended to avoid large fluctuations about the average changes in rating values from year to year.

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 minimum payroll amount for executive officers effective December 1, 2015 was proposed to be increased from \$700 to \$800 per week as the third step in a multi-year transition toward basing minimum executive officer payrolls on 100 percent of the Statewide Average Weekly Wage. Owing to changes in Statewide Average Weekly Wage data, the maximum executive officer payroll was proposed to be increased from the current value of \$2,500 to \$2,550.

Proposed changes to Manual language were provided as part of a staff memorandum dated July 15, 2015 and included in the meeting agenda materials.

Proposed Housekeeping Revisions – Sections 1 & 2

A staff memorandum dated July 27, 2015 described various housekeeping proposals falling into the following groups:

- Two changes to classification procedure (those applicable to “Door Installation” and “Insulation Work”)
- Retitling selected classifications,
- Section 1 language amendments to make Section 1, Rule IV paragraphs B.3. and C.3.b read more consistently
- Adding Underwriting Guide entries for eleven classifications
- Revising Section 2 listing for thirty classifications
- Deleting the definition of “Campus” from the Manual, and
- Elimination of Underwriting Guide entries for “Cooper” and “Pony Rides”

Proposed Classification Mergers – Code 287, “Publisher, Performs Distribution” into Code 924, “Wholesale Store N.O.C.” and Codes 442, “Hand Tool Mfg. – Non-Forged” and 443, “Saw Blade Mfg.” into Code 445, “Hardware Mfg., N.O.C.”

A staff memorandum dated August 7, 2015 presented the background and rationale for these proposals.

Proposed Revisions to Appeal Procedures

Draft language amending existing Manual rules pertaining to appeals had been included in the second mailing to the Committees.

The purposes of the amendments under consideration were two-fold: first, to streamline language pertaining to existing procedures for employer appeals against applications of the Delaware rating system to their workers compensation policies, and secondly, to establish a procedure that would apply to instances in which the aggrieved party to an application of the rating system might be a DCRB member insurer rather than an insured employer. Attendees were advised that very similar changes had been filed and approved for use in Pennsylvania effective October 1, 2015.

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

Respectfully submitted,

Timothy L. Wisecarver  
Chair - Ex Officio

TLW/jf