



**TO:** The Honorable Trinidad Navarro  
 Delaware Insurance Commissioner

**FROM:** John R. Pedrick, FCAS, MAAA  
 Vice President – Actuarial Services

**DATE:** March 16, 2018

**SUBJECT:** Filing No. 1707, Workers Compensation Residual Market Rate Change Due to the Tax Cuts and Jobs Act of 2017, **Proposed Effective June 1, 2018**

On December 22, 2017, the Tax Cuts and Jobs Act (TCJA) was signed into law. The Delaware Compensation Rating Bureau, Inc. (DCRB) has determined that the changes in Federal tax law within the TCJA have a material impact on rates for the Residual Market contained in DCRB Filing No. 1701, as amended and approved, effective December 1, 2017 (Filing 1701). The changes reduce the provision for profit and contingencies that is incorporated in Residual Market rates. The tax changes have no impact on losses and loss adjustment expense (LAE). As a result, there is no impact to Voluntary Market loss costs.

When Filing 1701 was submitted, amended, approved and implemented, the provision for profit and contingencies was developed through an Internal Rate of Return (IRR) model that incorporated elements of Federal tax law in place at that time. As a result of incorporating the Federal tax law changes in the IRR model, the DCRB proposes the following change to Residual Market rates:

Indicated and Proposed Change	
Proposed Effective Date	Residual Market Rates
<b>June 1, 2018</b>	<b>-4.86%</b>

This actuarial memorandum provides a discussion of the analysis performed by the DCRB that results in this proposed change.

**TAX CHANGES AFFECTING RESIDUAL MARKET RATES**

There are three elements of the TCJA addressed in this filing:

1. The maximum corporate tax rate decreased from 35% to 21%.
2. The proration provision for tax-exempt income increased from 15% to 25%.
3. The deduction for qualifying dividends decreased from 70% to 50%.

Other elements of the TCJA are not included because their impact to elements of the DCRB's IRR model is not fully known at this time. For instance, the annual rate used to discount unpaid losses (loss reserves) must be determined by the Secretary of the Treasury, and the IRS publishes discount factors based on that rate. The discount rate and related discount factors have not yet been announced. Thus, the DCRB did not change the IRS discount factors used in this analysis. Also, it is not yet clear how the limitation on the deduction for business interest

expense will impact the analysis. The DCRB expects that the impact of these, and possibly other elements of the TCJA, will be clarified over time.

Additional details of the treatment of the TCJA changes are discussed below.

## **DISCUSSION OF THE ANALYSIS AND FINDINGS**

The DCRB used the details contained in Filing 1701 as the starting point of this analysis. That filing was thoroughly reviewed by several independent actuarial firms with a compromise reached between the Ratepayer Advocate, the Department of Insurance and the DCRB, based upon those reviews. Contained within this filing are only those elements from Filing 1701 that have changed due to the TCJA. Implementation of the resulting proposed rates would supersede the current rates and would remain in place until the next annual Residual Market Rate and Voluntary Market Loss Cost filing, with an anticipated effective date of December 1, 2018. As mentioned above, the changes have no effect on loss costs, which are in place for the Voluntary Market and underlie the Residual Market rates.

### **Indicated Change in Residual Market Rates**

Exhibit 12 illustrates the changes due to the TCJA and the calculation of the indicated incremental change, as summarized in the following table. The filed changes are the originally indicated changes based on DCRB's analysis of experience in Filing 1701. The approved changes are those that resulted from the compromise mentioned above.

In the table below, the column labeled "Indicated Change with New Tax Provisions" is based on the original DCRB analysis. This illustrates that only Residual Market rates are impacted. In order to incorporate the compromise, the indicated results are adjusted by the same Compromise Factor as utilized in Filing 1701. These are shown in the column labeled "Adjusted Indicated Change." Further, this adjustment brings the indicated Voluntary Market loss cost change to the level that resulted from the compromise and produces an indicated Residual Market rate change that is consistent with the compromise. Since the approved changes have already taken place, the additional change necessary to implement the Adjusted Indicated Change is shown in the column labeled "Indicated Incremental Change." This can also be found in Exhibit 12, Line (9d).

	<b>Filed Change</b>	<b>Approved Change</b>	<b>Indicated Change with New Tax Provisions</b>	<b>Adjusted Indicated Change</b>	<b>Indicated Incremental Change</b>
Residual Market Rates	-4.91%	-5.73%	-9.53%	-10.31%	-4.86%
Voluntary Market Loss Costs	-2.15%	-3.00%	-2.15%	-3.00%	No Change

### **The Impact of the Change in the Underwriting Profit and Contingencies Provision**

The DCRB uses an IRR model to determine a provision for underwriting profit and contingencies. The model is provided by an independent economic consultant. Due to the TCJA, the underwriting profit and contingencies provision changed from +1.08% to -2.65%,

resulting in a lower provision for underwriting expense. When underwriting expenses decrease, a greater portion of the premium dollar is available to pay losses and LAE. This effect can be seen in the next table. Total underwriting expenses decreased from 29.44% to 25.83%. This increased the portion of the premium dollar available for loss and loss adjustment expense from 70.56% to 74.17%. This portion is also known as the Permissible Loss and LAE Ratio, which is used in Exhibit 12, Line (6), and has a direct impact on the overall indicated change in Residual Market rates.

Rate Component	Breakdown of the Premium Dollar Using Prior Tax Provisions	Breakdown of the Premium Dollar Using TCJA Tax Provisions
Losses	58.38%	<b>61.36%</b>
Loss Adjustment Expense	12.18%	<b>12.81%</b>
Total Loss & LAE* (Permissible Loss & LAE Ratio)	70.56%	<b>74.17%</b>
Underwriting Expenses Other Than AA**, and UWP&C†	25.84%	25.84%
Administrative Assessment (AA)	2.52%	<b>2.64%</b>
Underwriting Profit and Contingencies (UWP&C)	1.08%	<b>-2.65%</b>
Total Underwriting Expense	29.44%	<b>25.83%</b>
The following percentages are applied to losses to produce the percentages of premium shown above: * LAE, 20.87% ** AA, 4.31% † Commission, Other Acquisition, General Expenses, Premium Discount, State Premium Tax, Other State Tax Uncollectible Premium, Workers Compensation Fund		

### **Impact of the TCJA on the IRR Model**

The IRR model is shown in Exhibit 9, and consists of two steps. First, the Cost of Capital is determined as the average of the results of a Capital Asset Pricing Model and a Discounted Cash Flow model. The result, 8.71%, is the estimated return need on the capital necessary to support writing workers compensation insurance.

The second step involves a Discounted Cash Flow model. Cash flows for underwriting operations and for investment income on unearned premium reserves, loss reserves and the surplus required to support the business are used to determine the provision for profit and contingencies that produces the cost of capital identified above.

Incorporating the changes in the TCJA produced a provision for profit and contingencies of -2.65%.

### **Other Changes**

The changes in the distribution of losses and expenses also impact the tax multiplier used for retrospective rating. The tax multiplier changed from 1.1347 to 1.1383.

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### **CLOSING COMMENTS AND QUALIFICATIONS**

This filing uses the submitted, amended, accepted and implemented analysis found in Filing 1701, and incorporates changes due to the TCJA. The Residual Market rates that result from this approach reflect the most recent available experience indications and underwriting expenses in Delaware. The DCRB respectfully requests a timely review of this filing, allowing implementation on a new and renewal basis **effective June 1, 2018**. A timely review will allow advance notice of final residual market rates to all participants in the Delaware marketplace. Toward that objective, the DCRB will be pleased to answer any questions or provide any available supplementary information that may be necessary.

This filing has been developed by and under the direction of John R. Pedrick, FCAS, MAAA and Kenneth M. Creighton, ACAS, MAAA. They both meet the Qualification Standards of the American Academy of Actuaries to provide the actuarial opinion contained within this filing.

Please direct all questions to:

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## INDEX OF EXHIBITS

Item	Description
Exhibit 9	Internal Rate of Return Model
Exhibit 11	Expense Loading
Exhibit 12	Indicated Residual Market Rate Change
Exhibit 25	Tax Multiplier
Exhibit 27	Manual Rates, Loss Costs and Expected Loss Rates
Filing Forms	Filing State Specifics Form Property & Casualty Transmittal Document Rate/Rule Filing Schedule