# DELAWARE COMPENSATION RATING BUREAU, INC. 

Small Deductible Program

The attached exhibits review the impact of deductibles on loss costs and residual market manual rates. Staff has proposed slight decreases to the loss elimination ratios and premium credit factors currently in effect.

## 2011 DELAWARE DEDUCTIBLE STUDY

## Proposed Effective Date 12/1/11

| Deduct. <br> Level | Effect of <br> Deductible <br> on Losses | Selected | Loss <br> Elimination <br> Ratio | Current Loss <br> Elimination <br> Ratio |
| ---: | :---: | :---: | :---: | :---: |
| 500 | 0.9839 | 0.980 | 0.020 | $(12)$ |
| 1,000 | 0.9698 | 0.965 | 0.035 | 0.020 |
| 1,500 | 0.9583 | 0.955 | 0.045 | 0.035 |
| 2,000 | 0.9486 | 0.945 | 0.055 | 0.050 |
| 2,500 | 0.9403 | 0.935 | 0.065 | 0.070 |
| 3,000 | 0.9331 | 0.925 | 0.075 | 0.075 |
| 3,500 | 0.9266 | 0.920 | 0.080 | 0.085 |
| 4,000 | 0.9206 | 0.915 | 0.085 | 0.090 |
| 4,500 | 0.9151 | 0.910 | 0.090 | 0.095 |
| 5,000 | 0.9100 | 0.905 | 0.095 | 0.100 |


|  |  |  | Current |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Deduct. <br> Level | Effect of <br> Deductible <br> on Man.Rate | Selected | Premium <br> Credit | Premium <br> Credit |
|  |  | $(15)$ | $(16)$ | $(17)$ |
| 500 | 0.9873 | 0.985 | 0.0150 | 0.0150 |
| 1,000 | 0.9762 | 0.975 | 0.0250 | 0.0300 |
| 1,500 | 0.9671 | 0.965 | 0.0350 | 0.0400 |
| 2,000 | 0.9595 | 0.955 | 0.0450 | 0.0500 |
| 2,500 | 0.9530 | 0.945 | 0.0550 | 0.0550 |
| 3,000 | 0.9473 | 0.940 | 0.0600 | 0.0650 |
| 3,500 | 0.9422 | 0.935 | 0.0650 | 0.0700 |
| 4,000 | 0.9374 | 0.930 | 0.0700 | 0.0750 |
| 4,500 | 0.9331 | 0.925 | 0.0750 | 0.0800 |
| 5,000 | 0.9291 | 0.920 | 0.0800 | 0.0850 |

## 2011 DELAWARE DEDUCTIBLE STUDY

|  |  | Total Incurred Losses | Adj Factor | Adj Factor | Adjusted Losses $(1)^{\star}(2)^{\star}(3)$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Loss Range |  | (1) | (2) | (3) | (4) |
|  |  |  | a | b |  |
| 0 | 499 | 1,727,874 | 1.000 | 0.9996 | 1,727,183 |
| 500 | 999 | 5,861,720 | 0.995 | 0.9996 | 5,830,078 |
| 1,000 | 1,499 | 7,245,875 | 0.990 | 0.9996 | 7,170,547 |
| 1,500 | 1,999 | 7,430,966 | 0.985 | 0.9996 | 7,316,574 |
| 2,000 | 2,499 | 7,189,353 | 0.980 | 0.9996 | 7,042,748 |
| 2,500 | 2,999 | 6,090,598 | 0.975 | 0.9996 | 5,935,958 |
| 3,000 | 3,499 | 5,452,304 | 0.970 | 0.9996 | 5,286,619 |
| 3,500 | 3,999 | 4,951,399 | 0.965 | 0.9996 | 4,776,189 |
| 4,000 | 4,499 | 4,608,088 | 0.960 | 0.9996 | 4,421,995 |
| 4,500 | 4,999 | 4,076,201 | 0.955 | 0.9996 | 3,891,215 |
| 5,000 | \& UP | 970,162,215 | 0.950 | 0.9996 | 921,285,443 |
|  | Deduct. Level (5) | \# Claims | Adj Losses |  | Adj Tot Ded |
|  |  | >= Deduct | < Deduct. | [(2)*(3)* | Collected |
|  |  | Level | Level | (5)*(6)] | (7)+(8) |
|  |  | (6) | (7) | (8) | (9) |
|  |  | c |  |  |  |
|  | 500 | 43,635 | 1,727,183 | 21,699,729 | 23,426,912 |
|  | 1,000 | 35,642 | 7,557,261 | 35,271,466 | 42,828,727 |
|  | 1,500 | 29,816 | 14,727,808 | 44,035,519 | 58,763,327 |
|  | 2,000 | 25,541 | 22,044,382 | 50,040,336 | 72,084,718 |
|  | 2,500 | 22,324 | 29,087,130 | 54,392,984 | 83,480,114 |
|  | 3,000 | 20,100 | 35,023,088 | 58,467,604 | 93,490,692 |
|  | 3,500 | 18,419 | 40,309,707 | 62,185,288 | 102,494,995 |
|  | 4,000 | 17,096 | 45,085,896 | 65,622,381 | 110,708,277 |
|  | 4,500 | 16,009 | 49,507,891 | 68,771,158 | 118,279,049 |
|  | 5,000 | 15,150 | 53,399,106 | 71,933,715 | 125,332,821 |
|  | Deduct. Level (5) | Effect of | Effect of |  |  |
|  |  | Deductible | Deductible |  |  |
|  |  | on Losses | on Manual Rate |  |  |
|  |  | (10) | (11) |  |  |
|  |  | d | e |  |  |
|  | 500 | 0.9839 | 0.9873 |  |  |
|  | 1,000 | 0.9698 | 0.9762 |  |  |
|  | 1,500 | 0.9583 | 0.9671 |  |  |
|  | 2,000 | 0.9486 | 0.9595 |  |  |
|  | 2,500 | 0.9403 | 0.9530 |  |  |
|  | 3,000 | 0.9331 | 0.9473 |  |  |
|  | 3,500 | 0.9266 | 0.9422 |  |  |
|  | 4,000 | 0.9206 | 0.9374 |  |  |
|  | 4,500 | 0.9151 | 0.9331 |  |  |
|  | 5,000 | 0.9100 | 0.9291 |  |  |

a Adjustment factor for the amount of the deductible which will actually be reimbursed to the insurer by the insured.
b Adjustment factor to put deductibles on a per occurrence basis instead of a per claim basis =
0.9996

Downward accumulation of Column (4).
d

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    fect of deductible on Losses
    = [ A/B - Col(9) + P*C*Col(3) ]/(A/B)
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                    A = Total incurred indemnity on death claims plus
                    total incurred medical on all claims =
                    sum of Column (4) = 974,684,549
                    \(B=\) Death indemnity losses plus all medical losses
                                as a \(\%\) of all losses \(=\quad 0.707\)
                Per Table II 2011 , Sect C
                1.All Losses 1,556,228,975
                2.Death Indem (00) 223,290
                3.All Medical (00) 10,773,884
                \(4 .[((2)+(3)) /(1)] \quad 0.707\)
            *100
                C = \# of death indemnity claims plus \# of claims with
                    some medical portion =
                                    49,705
    $\mathrm{P}=$ Processing expense per claim $=$
25.00

Total effect of deductible
$=$ [(Column (10) * permissible loss ratio) + fixed expenses] /
( 1 - variable expenses )
Fixed expenses $=$ LAE + General + Admin
=
0.1630

Variable expenses $=$ Acquisition + P\&C + Prem Tax

+ Workers' Comp. Fund + Misc. Tax + Prem Discount
+ Uncollectible Premium = 0.2319
Permissible Loss Ratio $=\quad 0.6051$

