#### DELAWARE COMPENSATION RATING BUREAU, INC.

#### **Excess Loss Ratios and Loss Limitations**

Page 1 shows a history of loss limits consistent with an excess loss ratio of 0.0757 for excess loss factor revisions since 1981, the 0.0757 ratio corresponding to a loss limit of \$1,500,000 effective with the December 1, 2004 filing when a limited loss approach was first introduced. An exponential curve fit to the loss limitations from 1981 to 2004 showed an average annual change of 6.27% in loss limits which is applicable to policy year December 1, 2004 and prior.

After review of recent changes in loss limitations, an average annual change of 6.55% was selected for policy periods after December 1, 2004.

Page 2 shows the calculation of loss limits by policy year tied to a limit of \$2,830,000 for policies effective during the twelve months beginning December 1, 2014 and with the underlying annual changes in the loss limit as described above.

All calculations on pages 1 and 2 are made on a pre-Senate Bill 1 basis and indicate that a loss limit of \$2,830,000 is appropriate for the policy period beginning December 1, 2014.

The DCRB developed overall empirical distributions using Delaware data with losses adjusted to both pre-Senate Bill 1 and post-House Bill 373 bases. A comparison of these distributions indicated that a pre-Senate Bill 1 loss limit of \$2,830,000 produced an excess loss factor comparable to a post-House Bill 373 loss limit of \$1,459,413.

Page 3 shows the calculation of the excess loss ratio consistent with a loss limitation (post-House Bill 373) of \$1,459,413 per claim in the current filing. Excess ratios, prior to adjustments for expense and risk load, are weighted with standard premiums by hazard group to get an average excess ratio of 0.1249.

### Delaware December 1, 2014 Rate & Loss Cost Filing Loss Limitations for Excess Loss Factor = .0757 All Losses at Pre-Senate Bill 1 Levels

# Applicable to policy years beginning 12/1/04 and Earlier

| Effective<br>Date | Time (t) | Loss Limit<br>at ELF =<br>0.0757 |
|-------------------|----------|----------------------------------|
| 3/1/1981          | 1.0000   | 204,563                          |
| 2/1/1988          | 7.9167   | 457,840                          |
| 8/1/1994          | 14.4167  | 841,596                          |
| 8/1/1997          | 17.4167  | 852,441                          |
| 10/1/1998         | 18.5833  | 650,000                          |
| 12/1/1999         | 19.7500  | 655,000                          |
| 3/1/2001          | 21.0000  | 681,000                          |
| 12/1/2001         | 21.7500  | 685,000                          |
| 12/1/2002         | 22.7500  | 781,000                          |
| 12/1/2003         | 23.7500  | 1,081,000                        |
| 12/1/2004         | 24.7500  | 1,500,000                        |

Annual Trend = .0627

## Applicable to Policy Years after 12/1/04

| Effective<br>Date | Time (t) | Loss Limit<br>at ELF =<br>0.0757 | Ratio<br>to<br>\$1.5M | Annual<br>Change<br>from \$1.5M |
|-------------------|----------|----------------------------------|-----------------------|---------------------------------|
| 12/1/2004         | 1.0000   | 1,500,000                        |                       |                                 |
| 12/1/2005         | 2.0000   | 2,116,000                        | 1.4107                | 1.4107                          |
| 12/1/2006         | 3.0000   | 2,824,000                        | 1.8827                | 1.3721                          |
| 12/1/2007         | 4.0000   | 3,465,000                        | 2.3100                | 1.3219                          |
| 12/1/2008         | 5.0000   | 3,553,800                        | 2.3692                | 1.2407                          |
| 12/1/2009         | 6.0000   | 2,578,707                        | 1.7191                | 1.1145                          |
| 12/1/2010         | 7.0000   | 2,081,258                        | 1.3875                | 1.0561                          |
| 12/1/2011         | 8.0000   | 2,085,950                        | 1.3906                | 1.0482                          |
| 12/1/2012         | 9.0000   | 2,525,405                        | 1.6836                | 1.0673                          |
| 12/1/2013         | 10.0000  | 2,799,040                        | 1.8660                | 1.0718                          |
|                   |          |                                  | Average Last 4        | 1.0608                          |
|                   |          |                                  | Average Last 3        | 1.0624                          |
|                   |          |                                  | Average Last 2        | 1.0695                          |
|                   |          |                                  | Latest                | 1.0718                          |
|                   |          |                                  | Last Year's Selection | 1.0644                          |

Selected Annual Trend = .0655

## Delaware December 1, 2014 Rate & Loss Cost Filing Calculation of Policy Year Loss Limitations All Losses at Pre-Senate Bill 1 Levels

|               |          |          | Trend                |                   |                     |                          |
|---------------|----------|----------|----------------------|-------------------|---------------------|--------------------------|
|               |          |          | period               | A                 |                     | 1                        |
| Dallay Vaar * | Midaelat | T: (4)   | To/From<br>12/1/2005 | Annual<br>Trend + | Trend Factor        | Loss<br>Limit            |
| Policy Year * | -        | Time (t) |                      |                   |                     |                          |
| (1)           | (2)      | (3)      | (4)                  | (5)               | $(6) = [1+(5)]^{4}$ | (7) = (6) *<br>1,500,000 |
|               |          |          |                      |                   |                     | 1,300,000                |
| 1983          | 01/01/84 | 1.0000   | -21.9167             | 0.0627            | 0.263733            | 395,600                  |
| 1984          | 01/01/85 | 2.0000   | -20.9167             | 0.0627            | 0.280269            | 420,404                  |
| 1985          | 01/01/86 | 3.0000   | -19.9167             | 0.0627            | 0.297842            | 446,763                  |
| 1986          | 01/01/87 | 4.0000   | -18.9167             | 0.0627            | 0.316517            | 474,776                  |
| 1987          | 01/01/88 | 5.0000   | -17.9167             | 0.0627            | 0.336363            | 504,544                  |
| 1988          | 01/01/89 | 6.0000   | -16.9167             | 0.0627            | 0.357453            | 536,179                  |
| 1989          | 01/01/90 | 7.0000   | -15.9167             | 0.0627            | 0.379865            | 569,797                  |
| 1990          | 01/01/91 | 8.0000   | -14.9167             | 0.0627            | 0.403682            | 605,524                  |
| 1991          | 01/01/92 | 9.0000   | -13.9167             | 0.0627            | 0.428993            | 643,490                  |
| 1992          | 01/01/93 | 10.0000  | -12.9167             | 0.0627            | 0.455891            | 683,837                  |
| 1993          | 01/01/94 | 11.0000  | -11.9167             | 0.0627            | 0.484476            | 726,713                  |
| 1994          | 01/01/95 | 12.0000  | -10.9167             | 0.0627            | 0.514852            | 772,278                  |
| 1995          | 01/01/96 | 13.0000  | -9.9167              | 0.0627            | 0.547133            | 820,700                  |
| 1996          | 01/01/97 | 14.0000  | -8.9167              | 0.0627            | 0.581439            | 872,158                  |
| 1997          | 01/01/98 | 15.0000  | -7.9167              | 0.0627            | 0.617895            | 926,842                  |
| 1998          | 01/01/99 | 16.0000  | -6.9167              | 0.0627            | 0.656637            | 984,955                  |
| 1999          | 01/01/00 | 17.0000  | -5.9167              | 0.0627            | 0.697808            | 1,046,712                |
| 2000          | 01/01/01 | 18.0000  | -4.9167              | 0.0627            | 0.741561            | 1,112,341                |
| 2001          | 01/01/02 | 19.0000  | -3.9167              | 0.0627            | 0.788056            | 1,182,085                |
| 2002          | 01/01/03 | 20.0000  | -2.9167              | 0.0627            | 0.837468            | 1,256,201                |
| 2003          | 01/01/04 | 21.0000  | -1.9167              | 0.0627            | 0.889977            | 1,334,965                |
| 2004          | 01/01/05 | 22.0000  | -0.9167              | 0.0627            | 0.945778            | 1,418,667                |
| 12/01/04      | 12/01/05 | 22.9167  | 0.0000               | -                 | 1.000000            | 1,500,000                |
| 2005          | 01/01/06 | 23.0000  | 0.0833               | 0.0655            | 1.005299            | 1,507,948                |
| 2006          | 01/01/07 | 24.0000  | 1.0833               | 0.0655            | 1.071146            | 1,606,719                |
| 2007          | 01/01/08 | 25.0000  | 2.0833               | 0.0655            | 1.141306            | 1,711,959                |
| 2008          | 01/01/09 | 26.0000  | 3.0833               | 0.0655            | 1.216062            | 1,824,092                |
| 2009          | 01/01/10 | 27.0000  | 4.0833               | 0.0655            | 1.295714            | 1,943,570                |
| 2010          | 01/01/11 | 28.0000  | 5.0833               | 0.0655            | 1.380583            | 2,070,874                |
| 2011          | 01/01/12 | 29.0000  | 6.0833               | 0.0655            | 1.471011            | 2,206,517                |
| 2012          | 01/01/13 | 30.0000  | 7.0833               | 0.0655            | 1.567362            | 2,351,043                |
| 2013          | 01/01/14 | 31.0000  | 8.0833               | 0.0655            | 1.670024            | 2,505,037                |
| 12/01/14      | 12/01/15 | 32.9167  | 10.0000              | 0.0655            | 1.885969            | 2,828,953                |
|               |          |          |                      |                   |                     | 2,830,000 (Selected)     |

<sup>\*</sup> Beginning 1/1/XX unless otherwise noted.

<sup>+</sup> See page 1.

# Delaware December 1, 2014 Rate & Loss Cost Filing Average Excess Ratio for Losses Limited at \$1,459,413 # (Post-House Bill 373 Basis)

| Hazard<br>Group | Standard<br>Earned<br>Premium | Average Excess<br>Ratio<br>\$1,459,413 # |
|-----------------|-------------------------------|--|
| А               | 33,097,509                    | 0.0435                                   |
| В               | 91,014,245                    | 0.0868                                   |
| С               | 230,256,128                   | 0.0944                                   |
| D               | 60,592,168                    | 0.1264                                   |
| Е               | 125,371,208                   | 0.1615                                   |
| F               | 69,364,696                    | 0.2120                                   |
| G               | 18,217,849                    | 0.2594                                   |
| TOTAL           | 627,913,803                   | 0.1249                                   |

<sup># \$1,459,413</sup> represents a loss limit on a post-House Bill 373 basis consistent with a pre-Senate Bill 1 loss limit of \$2,830,000.