

Nebraska Department of Insurance Medical-Hospital Excess Liability Fund

**2017 Surcharge Rate Hearing – Actuarial Testimony
Thursday, October 19, 2017**

I am Gordon Hay, Senior Casualty Actuarial Examiner within the Department. I am a Fellow of the Casualty Actuarial Society, Member of the American Academy of Actuaries, and Chartered Property and Casualty Underwriter. I am qualified by education and experience to make and review rates for property/casualty insurance products, including the surcharge rate for the Excess Liability Fund (the Fund).

The surcharge rate is 26% for 2017. I recommend an increase, to 40% for 2018. My actuarially indicated rate for 2018 is 52%, and the change from last year is driven by the number of cases reported to the Fund from July 1, 2016 through June 30, 2017.

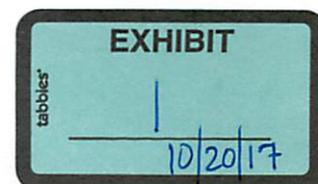
Since the 2013 hearing, I have argued that expected annual revenue shortfalls between \$0.6 Million and 2.4 Million (combined 2014-2017 near \$6.5 Million) were mitigated by the Fund's current size combined with its potential for capital gains. Read below about what changed this year.

The Fund's Recent Actual Costs exceeded the Fund's Revenue -- Exhibit II, Col. (18):

- Exhibit II shows underwriting costs under the current \$500,000 underlying limit per occurrence, with totals for the most recent 4.5 years.
- Column (18) shows recent years' operating ratios. Costs in Col's. (6) and (10), minus investment income in Col. (14), are compared to Fund earned premium, now net of reinsurance, in Col. (17).
- Surcharge rates have increased from 18% in 2013-2014 to 20% in 2015, 22% in 2016 and 26% in 2017. Those 4.5 years produced an operating ratio of 184%. The comparable figure last year was 102%.
- The Fund ran operating deficits of \$4.1 Million in 2014, \$1.3 Million in 2015, \$7.6 Million in 2016 and \$4.6 Million in YTD 2017. The total is close to \$17.6 Million. We should be concerned about this series of years with increasingly large operating losses.

Indicated Surcharge Rate -- Exhibit II, Col. (16):

- To test the adequacy of the current 26% surcharge rate for coverage effective in 2017, I estimated the Fund's expected costs for 2018 as a percent of the underlying primary earned premium. Col. (5) shows underlying primary earned premium.
- After 1/1/2015, the per-occurrence cap increased from \$1.75 Million to \$2.25 Million, causing an estimated 8.1% increase in the cost of Excess Fund coverage. The new cap applied to occurrences beginning 1/1/2015.



- The reinsurance cost in column (11) is due to a Common Loss treaty that covers \$20 Million excess of a retained \$4.5 Million per common loss. A common loss is a catastrophic mass tort with at least two plaintiffs and with costs to the Fund exceeding \$4.5 Million. This treaty expires at year end. Renewal exposes us to renegotiated terms.
- Column (16) shows my 2018 forecast for the Fund's costs, net of investment income, is 52.0% of underlying primary premium. My 2015 and 2016 forecasts were respectively 28.8% and 30.0%.
- The large ratios in Column (16) for 2016 at 69.8% and 2017 at 71.7% are caused by the number of cases newly reported from July 1, 2016 through June 30, 2017.

Closed Claims and Closed Claim Severity Trend -- Exhibit III:

- The first graph shows that closed claim counts since 2000 would have been more stable if the current underlying \$500,000 per occurrence requirement applied from the Fund's inception – especially, almost all the mass tort claims reported in 2002 and closed in 2005 were smaller than the new threshold. At the current \$500,000 threshold, we should expect between 10 and 20 Fund cases annually to close with payment.
- The second graph shows average closed-with-payment severities for calendar years 2000-2016. The actual history (simple line) is comparable to values adjusted to reflect the current \$500,000 threshold (dashes). My 5.0% annual severity trend selection is an amount that roughly accounts for the “slope” over time in the adjusted averages.
- This 5.0% trend contributes to the indicated surcharge rate – see Exhibit II Col. (8).

New Reports versus Historical Claims – Exhibit IIIA:

- Newly reported claims from July 2016 to June 2017 are not more severe than those reported in 2011 through June 2016.
- 35 claims with estimated financial impact were received from July 2016 to June 2017.
- 35 claims is about 20 more than 14.4 expected from history (2011 through June 2016).
- We don't think this is entirely a random aberration. Nebraska is seeing increasing numbers of severe claims, and Nebraska juries are becoming more like those elsewhere in the country. By the time the Excess Fund incurs a financial obligation, a serious mistake has been made; this seems to be happening more frequently.

The Size of the Existing Fund:

- The Fund's assets, as of 6/30/2015, assets were \$93.99 Million, estimated liabilities were \$20.46 Million and the operating reserve was \$73.53 Million. As of 6/30/2016 the Fund's assets were \$90.40 Million, estimated liabilities were \$20.53 Million and the operating reserve was \$69.87 Million. The operating reserve decreased \$3.66 Million in the fiscal year ending June 2016. As of 6/30/2017, assets were \$92.3 Million and estimated liabilities were \$35.4 Million, so the operating reserve decreased significantly by \$13.0 Million to \$56.9 Million. This drawdown is 19% of the Fund's June 2016 operating reserve.
- The Fund invests in long-term bonds. Realized and unrealized gains/losses were relatively insignificant prior to 2008, when a \$3.0 Million loss was followed by gains

totaling \$18.4 Million through 2012 -- Exhibit II Column (13). 2013 generated a \$1.7 Million capital loss. 2014 brought a \$2.5 Million gain, 2015 a 0.5 Million loss and 2016 brought a \$2.2 Million gain. YTD June 2017 brought a small gain of \$89 Thousand. Generally, bonds' market value rose as interest rates decreased since the 2008 crisis through 2012, but realized gains have varied over time. Near-to-intermediate future interest rates are relevant, but unpredictable.

- Investment income has been fairly steady, between \$1.5 Million and \$1.7 Million annually, in the 2013-2017 period.
- To the nearest million, I expect \$20 Million of 2018 underlying annual premium, which is down from levels developed in 2013-2015, but similar to 2016. Contributing factors are a highly competitive market for primary coverage and continuing consolidation among health care providers.

Number of Participating Providers – Exhibit IV:

- The residual market wrote 2 providers in YTD June 2017, 12 in 2016, 16 in 2015, 20 in 2014 and 16 in 2013. Small numbers are evidence of a competitive voluntary market.
- The numbers of providers participating in the Excess Fund grew from 2010, when the surcharge rate was 35%, through 2014 when the surcharge rate was 18%. The 20% rate in 2011-12 and 18% rate in 2013-14 appear to have encouraged participation, but most of the 2013 increase is due to refined recording of hospitals premium transaction details. With the surcharge rate at 20% in 2015, the number of participants was down 7%. The 2016 surcharge rate was 22%, and participation dropped less than 1%.

Summary and Recommendation:

Assuming 2018 underlying earned premium near \$20 Million, the Fund's expected costs net of investment income are 52.0% of that, or \$10.4 Million. We could think of this as the Fund's budget, but must be aware this makes no provision for risk or profit to the Fund, future interest rate increases, faster decline in primary premium volume if the primary market softens further, or increased pressure on the health care system due to the Affordable Care Act. The Fund's costs now include \$800,000 annually for reinsurance, which provides specifically for catastrophic mass torts.

At the proposed 40% rate, I expect the Fund to generate \$8.0 Million revenue, about 23% less than the Fund's expected \$10.4 Million net costs. So, despite the increase in revenue from the rate increase, I still expect a \$2.4 Million operating deficit for 2018. I expected operating deficits totaling close to \$6.5 Million for 2014-2017 combined, but the reported operating deficit for 2014-YTD June 2017 is \$17.6 Million, including \$12.2 Million from report years 2016-2017. Actual deficits are funded by either capital gains or in the current case, drawing from the Fund.

I foresaw no need for the Fund to recoup actual 2013, 2014 or 2015 deficits, but I am concerned about the \$13 Million drawdown in the Fund's operating balance from July 1, 2016 to June 30, 2017. I think it is prudent at this time to increase the surcharge rate from 26% to 40%. I anticipate reviewing the Fund's position again at year end for the Annual Report. The next opportunity to review the surcharge rate will be third quarter, 2018.

**Nebraska Department of Insurance
Nebraska Medical-Hospital Liability Act
Historical Costs to the Fund, and Forecast for 2018
Based on Data as of 6/30/2017**

Report Year	Excess Fund and Underlying Primary Premium					Fund Costs Net of Investment Income Related to Underlying Primary Earned Premium											Fund Claims Made Net Operating Ratio			
	Direct Written Premium		Direct Earned Premium			Projected Underwriting Cost Ratio											Investment Income Considered		Fund's Claims Made Net Earned Premium	Operating Ratio = [Fund Costs minus Investment Income] / [Net Earned Premium]
	Excess Fund Claims Written Premium	Historical Surcharge Factor	Underlying Primary Claims Written Premium	Earned Premium at Actual Surcharge Rate	Estimated Underlying Primary Earned Premium	Report Year Ultimate Loss and ALAE (Claims Made, Net of Reins)	Ratio to Underlying Direct Earned Premium	With 5% Annual Severity Trend, to 2018	Cost of Increasing Cap from \$1.75M to \$2.25M Effective 1/1/2015	Administrative Expenses	\$600,000 Annual Reinsurance Cost (See Note)	Projected Underwriting Cost Ratio	Investment Activity Total	Realized & Unrealized Gain/Loss on Long-Term Investments	Investment Income (Minus Investment Expenses)	Ratio to Primary Earned Premium	Projected Underwriting Cost Ratio Minus Investment Income Ratio			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(12)	(13)	(14)	(15)	(16)	(17)	(18) = [(6) + (10) - (14)] / (17)		
2000	593,699	5%	11,873,984																	
2001	2,942,694	20%	14,713,468	1,738,066	12,230,152	7,361,790	60.2%													
2002	5,356,695	35%	15,304,843	4,214,014	14,255,709	13,069,044	91.7%													
2003	8,866,509	50%	17,733,018	6,918,795	15,442,421	6,767,332	43.8%	6,767,332												
2004	9,287,260	50%	18,574,520	9,320,670	17,950,713	8,001,521	44.6%	16,235,593												
2005	11,691,771	50%	23,383,543	10,679,366	19,508,237	12,162,749	62.3%	23,504,582	1,903,871	398,392	800,000	136.4%	3,699,006	853,959	2,845,047	14.6%	121.8%	10,679,366	91.0%	
2006	11,376,335	45%	25,169,632	11,461,499	22,783,715	11,099,714	48.7%	20,429,502	1,654,790	490,273	800,000	102.6%	2,593,113	(518,951)	3,112,064	13.7%	88.9%	11,461,499	74.0%	
2007	10,040,342	40%	25,100,855	10,513,031	23,914,288	7,275,822	30.4%	12,754,202	1,033,090	352,116	800,000	62.5%	2,581,239	674,371	1,906,868	8.0%	54.5%	10,513,031	54.4%	
2008	8,534,325	35%	24,383,787	9,446,411	24,145,226	3,870,047	16.0%	4,460,329	523,287	289,098	800,000	33.4%	(497,649)	(3,023,139)	2,525,490	10.5%	23.0%	9,446,411	17.3%	
2009	8,706,062	35%	24,874,403	8,637,843	23,267,965	3,870,047	16.0%	4,460,329	523,287	289,098	800,000	38.4%	9,681,857	7,831,902	1,849,956	8.0%	30.5%	8,637,843	34.8%	
2010	8,890,376	35%	25,401,075	8,783,389	24,008,241	5,620,000	23.4%	8,509,913	689,303	301,525	800,000	42.9%	8,340,686	5,753,762	2,586,924	10.8%	32.1%	8,783,389	38.0%	
2011	4,961,368	20%	24,806,841	6,877,688	23,853,641	9,817,535	41.2%	14,158,474	1,140,836	215,943	800,000	68.4%	2,868,206	909,663	1,958,543	8.2%	60.2%	6,877,688	117.4%	
2012	4,880,435	20%	24,402,174	4,917,304	22,551,617	5,751,625	25.5%	7,898,994	639,818	179,667	800,000	42.2%	5,960,884	3,866,074	2,094,809	9.3%	32.9%	4,917,304	78.0%	
2013	4,560,289	18%	25,334,941	4,626,887	21,973,283	6,154,057	28.0%	8,049,482	652,008	258,440	800,000	44.4%	7,214	(1,674,362)	1,681,576	7.7%	36.8%	4,626,887	102.2%	
2014	4,339,715	18%	24,109,526	4,338,205	22,340,107	9,765,736	43.7%	12,165,685	985,421	360,273	800,000	63.6%	4,031,801	2,460,160	1,571,640	7.0%	56.6%	4,338,205	194.9%	
2015	4,352,140	20%	21,760,702	4,408,105	21,925,104	6,962,491	31.8%	8,260,787	401,474	390,444	800,000	44.9%	1,186,121	(481,409)	1,667,531	7.6%	37.3%	4,408,105	129.0%	
2016	4,736,694	22%	21,530,426	4,413,355	19,738,734	12,478,511	63.2%	14,096,960	-	377,097	800,000	77.4%	3,742,312	2,246,806	1,495,505	7.6%	69.8%	3,720,022	305.4%	
2017	2,153,229	20%	8,281,651	2,025,659	10,083,692	6,846,181	67.9%	7,460,485	-	221,825	400,000	80.2%	942,927	89,201	853,726	8.5%	71.7%	1,663,892	373.7%	
4.5 Yrs	20,142,067		101,017,246	18,812,212	96,000,620	42,260,976	43.9%	50,035,390	2,038,903	1,610,079	3,600,000	59.5%	9,910,375	2,640,396	7,269,979	7.6%	52.0%	18,757,111	184.0%	

Notes: Earned premium for each half-year reflects 1/4th weight on current, 1/2 weight on previous and 1/4th weight on second previous half-year's written premium.

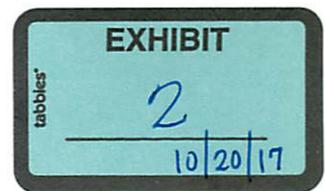
Column (16): The surcharge rate equals the ratio of Fund revenue to Underlying Primary Premium. Column (16) is the indicated surcharge rate for policies effective in 2018. Assuming anticipated 2018 cost levels and investment activity similar to recent years, the indicated surcharge rate is 52%, a 100% increase, which would exceed the 50% statutory maximum.

Column (18) compares the Fund's historical costs in (6) and (10) minus investment income in (15) to the Fund's net earned premium in (17). The 2013 - 2017 operating ratio is 201.5%. The main difference between net earned premium in (17) and direct earned premium in (4) is ceded reinsurance, which was new in 2016.

Written Premium is based on coverage effective in the period. Primary carrier written premium is estimated above from Excess Fund written premium and then-current surcharge rates.

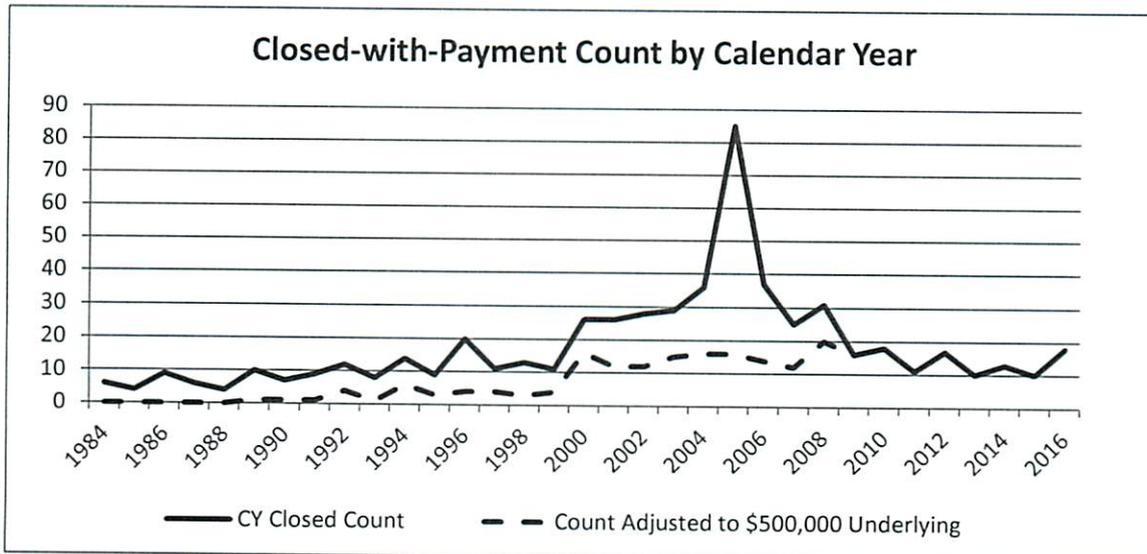
In column (8), the trend period is from the year's average earned date (i.e. June 30, except March 31st for YTD 2017), to average earning date for coverage effective in 2018 (i.e. Dec. 31, 2018).

The Fund purchased a Common Loss reinsurance treaty effective May 1, 2016. The annual cost is currently \$600,000. The treaty provides \$20 Million of limit excess of a \$4.5 Million retention for situations involving multiple plaintiffs whose claims arise from shared underlying circumstances. The \$600,000 cost will be renegotiable on renewal at 1/1/2018, but I have built no change into my 2018 indicated surcharge rate.

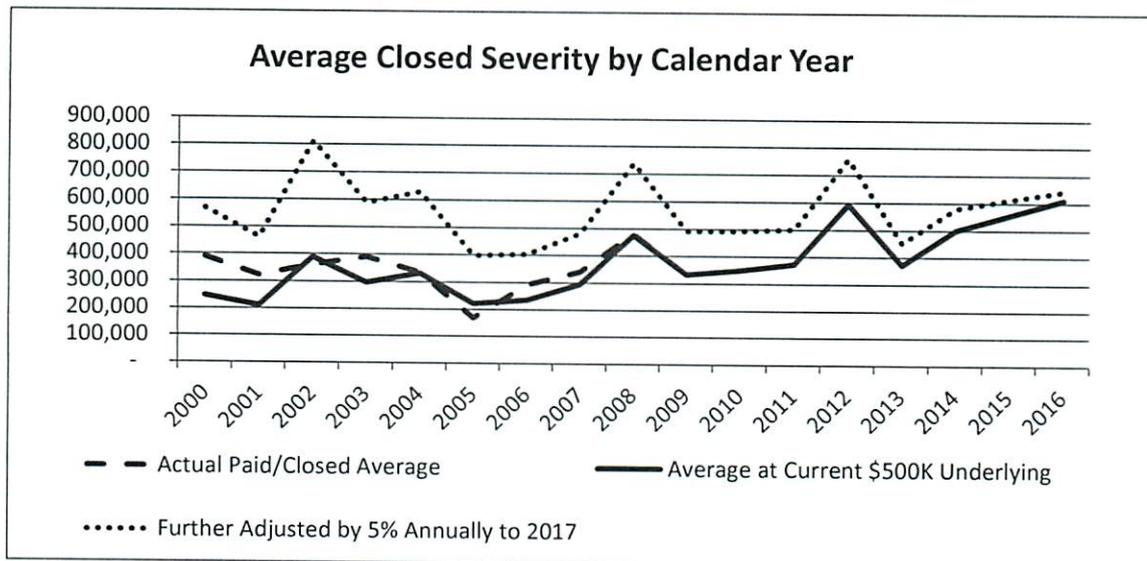


Nebraska Medical-Hospital Liability Act Closed Claims and Closed Claim Severity Trend

Claim Counts More Stable After Underlying Coverage Increased to \$500K Per Occurrence:



Paid/Closed Claims Severity Trend Is Approximately 3.0 Percent Annually:



**Nebraska Department of Insurance
Nebraska Medical-Hospital Liability Act
Case-Basis Annual New Reports and Severity**

<u>Report Period</u>		<u>Case-Basis Summaries</u>	
Report Period	Half	Cases with Incurred Dollars	Average Case Incurred
2011		18	545,419
2012		10	538,124
2013		12	525,833
2014		20	531,473
2015		13	521,154
2016	1	6	450,000
Average		14.4	526,750
2016	2	20	560,000
2017	1	15	440,000
Fiscal Year		35	508,571
Actual vs. Expected		20.6	(18,178)

Nebraska Department of Insurance
Nebraska Medical-Hospital Liability Act
History through June 2017
Number of Participating Providers

Cal. Year	CRNA	Osteopath	Hospital	Intern	MD	PC	Total
2007	242	107	85	94	3,014	450	3,992
2008	233	92	95	33	2,717	422	3,592
2009	246	106	102	1	2,988	454	3,897
2010	231	108	111	2	3,000	443	3,895
2011	274	127	127	3	2,933	455	3,919
2012	316	151	120	2	3,045	450	4,084
2013	358	178	116	2	3,852	460	4,966
2014	417	188	171	-	3,848	466	5,093
2015	382	176	143	-	3,599	456	4,756
2016	363	172	142	-	3,598	456	4,731
2017 YTD	221	64	68	-	1,734	266	2,353

Excess Fund Written Premium

Cal. Year	CRNA	Osteopath	Hospital	Intern	MD	PC	Total
2007	126,744	179,244	2,996,439	60,790	6,322,184	843,080	10,528,481
2008	112,366	159,325	2,456,068	997	5,186,381	935,648	8,850,785
2009	100,707	171,324	2,550,457	2,146	5,114,184	929,474	8,868,293
2010	103,959	193,070	2,549,868	2,126	5,317,655	934,892	9,101,569
2011	63,158	105,859	1,374,883	639	2,975,735	524,062	5,044,337
2012	69,602	118,227	1,449,010	599	2,872,837	527,717	5,037,992
2013	88,309	121,612	997,403	954	3,079,714	334,294	4,622,286
2014	91,295	119,092	1,006,985	739	2,859,138	373,518	4,450,766
2015	92,147	118,633	1,199,562	-	2,766,331	270,692	4,447,364
2016	109,116	122,149	1,178,338	-	2,843,594	546,881	4,800,078
2017 YTD	49,143	51,905	433,114	321	1,539,566	102,950	2,279,949

Average Annual Excess Fund Surcharge

Cal. Year	CRNA	Osteopath	Hospital	Intern	MD	PC	Total
2007	524	1,675	35,252	647	2,098	1,874	2,637
2008	482	1,732	25,853	30	1,909	2,217	2,464
2009	409	1,616	25,004	2,146	1,712	2,047	2,276
2010	450	1,788	22,972	1,063	1,773	2,110	2,337
2011	231	834	10,826	213	1,015	1,152	1,287
2012	220	783	12,075	299	943	1,173	1,234
2013	247	683	8,598	477	800	727	931
2014	219	633	5,889		743	802	874
2015	241	674	8,389		769	594	935
2016	301	710	8,298		790	1,199	1,015
2017 YTD	222	811	6,369		888	387	969

NOTES: In 2013, the premium for UNM policy 14501275 is allocated to individual providers (mostly MD's) where it was previously grouped as a single Professional Corporation.

In 2013, the premium for Creighton policy 20662046 is allocated to individual providers (mostly MD's) where it was previously grouped under a single MD.

These changes added hundreds to the 2013 count of MD's and reduced the PC average premium.

