

MEMO

DATE: April 10, 2017

TO: Charles Gullickson (Penn Treaty/ANIC Task Force Chair), Richard Klipstein (NOLHGA)

FROM: Vincent L. Bodnar, ASA, MAAA

RE: Penn Treaty Network American Insurance Company and American Network Insurance Company

Estimate of Guaranty Association Covered Liabilities

Long Term Care Group, Inc. ("LTCG") prepared estimates of the covered liabilities of the guaranty associations ("GAs") resulting from the March 1, 2017 Orders of Liquidation of Penn Treaty Network America Insurance Company ("PTNA") and American Network Insurance Company ("ANIC"). We provide these estimates on the following pages on two bases: a discounted basis that considers the time value of money at an annual rate of 4.25%; and an undiscounted basis.

The values shown are as of March 1, 2017. They pertain only to the long-term care insurance policies of PTNA and ANIC, and so exclude a small number of non-LTC policies. The values consider the application of the Moody's interest rate adjustment for policies covered by the Connecticut, Pennsylvania and Wyoming guaranty associations. We derived the covered gross liabilities from our estimate of the future cash outflows (paid benefits plus expenses less collected premium).

PTNA staff provided the value of the assets that are currently expected to be transferred to the GAs in total from the estates of the liquidated companies. We allocated this amount to each GA using the repriced premium method. The covered net liabilities are the covered gross liabilities less allocated estate assets.

The attached spreadsheet, *Cash Outflow 20170410.xlsx*, contains annual detail of projected future cash outflow for each affected GA. We note that the annual cash flows shown are likely not representative of the timing of future assessments made by the affected guaranty associations.

Disclosures:

In developing this document, its attachment, and the underlying actuarial analyses, LTCG relied on information that was supplied by the staff of PTNA. LTCG staff reviewed this information for reasonableness but performed no audits or independent verification of such information. To the extent they exist, material errors in the information provided to us will affect our analysis.

We developed these liability estimates using the assumptions and methods described in a report dated February 24, 2017. Vincent L. Bodnar, ASA, MAAA is the actuary responsible for the actuarial opinions contained in this communication and is qualified to render them. We prepared this document under the terms of the May 1, 2015, engagement letter between LTCG and NOLHGA. LTCG does not permit distribution of this document beyond NOLHGA and its member GAs and advisors without our prior written consent.

LTCG represents and is responsible only to NOLHGA concerning all matters relating to this document and its attachments. Any other user of this information will place no reliance on the information contained therein or related to it that would result in the creation of any duty or liability by LTCG to the user.

Summary of Guaranty Association <u>Discounted</u> Coverage Estimates¹ as of March 1, 2017 Resulting from the Liquidations of Penn Treaty Network America Insurance Company and American Network Insurance Company

		PTNA					А	NIC		Total				
		Policy	Gross		Net	Policy	Gross		Net	Policy	Gross		Net	
Assoc.	Limit	Count	Liabilities ²	Assets ³	Liabilities	Count	Liabilities ²	Assets ³	Liabilities	Count	Liabilities ²	Assets ³	Liabilities	
AL	300,000	297	8,004,651	630,130	7,374,521	5	82,871	23,673	59,199	302	8,087,522	653,803	7,433,720	
AK	300,000	32	1,229,825	81,851	1,147,974	0	0	0	0	32	1,229,825	81,851	1,147,974	
AZ	300,000	2,937	131,313,224	8,835,488	122,477,736	53	2,317,736	520,245	1,797,491	2,990	133,630,960	9,355,732	124,275,227	
AR	300,000	211	4,817,000	399,658	4,417,342	1	18,426	4,688	13,739	212	4,835,426	404,345	4,431,081	
CA	560,929	8,059	428,986,713	30,645,393	398,341,319	35	2,896,035	631,273	2,264,762	8,094	431,882,747	31,276,666	400,606,081	
CO	300,000	1,510	45,453,786	3,310,203	42,143,583	975	24,825,774	6,075,319	18,750,456	2,485	70,279,560	9,385,521	60,894,039	
CT	500,000	63	3,133,515	208,805	2,924,710	550	29,859,427	6,381,715	23,477,711	612	32,992,942	6,590,521	26,402,421	
DC	300,000	37	1,490,230	98,645	1,391,585	4	209,093	47,052	162,041	41	1,699,323	145,696	1,553,627	
DE	300,000	72	3,022,247	205,626	2,816,620	10	595,946	129,405	466,541	82	3,618,193	335,031	3,283,162	
FL	300,000	8,433	369,981,033	24,075,878	345,905,155	349	18,549,526	4,056,387	14,493,138	8,782	388,530,559	28,132,266	360,398,293	
GA	300,000	1,667	69,108,198	4,590,295	64,517,903	32	1,778,697	385,032	1,393,665	1,699	70,886,895	4,975,327	65,911,568	
HI	300,000	245	9,279,079	630,386	8,648,692	1	20,134	7,029	13,105	246	9,299,212	637,415	8,661,797	
ID	300,000	278	8,449,472	620,910	7,828,563	5	149,851	38,336	111,515	283	8,599,324	659,246	7,940,078	
IL	300,000	3,475	91,358,269	7,266,007	84,092,262	8	363,744	72,427	291,317	3,483	91,722,013	7,338,434	84,383,579	
IN	300,000	893	29,335,093	2,055,977	27,279,116	4	193,364	37,020	156,343	897	29,528,457	2,092,998	27,435,459	
IA	300,000	2,169	92,616,561	5,945,287	86,671,274	0	0	0	0	2,169	92,616,561	5,945,287	86,671,274	
KS	300,000	0	0	0	0	624	15,340,479	4,271,645	11,068,834	624	15,340,479	4,271,645	11,068,834	
KY	300,000	875	30,406,202	2,222,508	28,183,694	5	180,929	54,157	126,771	880	30,587,131	2,276,666	28,310,466	
LA	500,000	394	10,937,475	830,179	10,107,297	3	191,178	46,080	145,098	397	11,128,653	876,259	10,252,395	
ME	300,000	0	0	0	0	51	977,908	323,984	653,924	51	977,908	323,984	653,924	
MD	300,000	749	31,575,128	2,179,791	29,395,337	43	2,703,276	631,218	2,072,058	792	34,278,404	2,811,008	31,467,396	
MA	300,000	0	0	0	0	64	2,512,884	550,347	1,962,537	64	2,512,884	550,347	1,962,537	
MI	300,000	1,205	34,797,146	2,640,265	32,156,881	0	0	0	0	1,205	34,797,146	2,640,265	32,156,881	
MN	410,000	141	4,194,520	312,094	3,882,425	4	163,833	40,016	123,817	145	4,358,352	352,110	4,006,242	
MS	300,000	429	14,676,700	1,064,800	13,611,900	1	13,772	4,646	9,127	430	14,690,473	1,069,446	13,621,027	
MO	100,000	762	12,916,746	1,034,417	11,882,330	37	446,441	134,297	312,144	799	13,363,187	1,168,714	12,194,473	
MT	300,000	184	4,727,219	369,562	4,357,657	3	102,854	24,799	78,055	187	4,830,073	394,362	4,435,712	
NE	300,000	763	26,946,958	1,987,936	24,959,022	11	133,276	43,487	89,788	774	27,080,233	2,031,423	25,048,810	
NV	300,000	339	14,375,176	960,434	13,414,742	7	220,019	55,203	164,816	346	14,595,195	1,015,637	13,579,558	
NH	300,000	157	7,444,422	474,229	6,970,193	19	497,583	139,190	358,393	176	7,942,005	613,419	7,328,586	
NJ	Unlimited	0	0	0	0	1,893	186,268,346	41,690,807	144,577,539	1,893	186,268,346	41,690,807	144,577,539	
NM	300,000	216	8,410,019	576,963	7,833,056	14	430,975	101,081	329,894	230	8,840,994	678,044	8,162,950	
NC	300,000	2,271	108,628,473	7,124,133	101,504,341	77	3,508,329	808,878	2,699,451	2,348	112,136,802	7,933,011	104,203,791	
ND	300,000	177	2,733,526	269,822	2,463,704	0	0	0	0	177	2,733,526	269,822	2,463,704	
OH	300,000	1,976	63,464,842	4,645,204	58,819,639	16	392,936	112,312	280,624	1,992	63,857,778	4,757,516	59,100,263	
OK	300,000	424	13,835,977	981,370	12,854,607	7	231,300	57,353	173,948	431	14,067,278	1,038,722	13,028,555	
OR	100,000	662	12,115,847	770,288	11,345,559	12	173,583	48,727	124,856	674	12,289,430	819,015	11,470,415	
PA	300,000	9,181	280,979,518	19,629,183	261,350,335	324	11,021,691	2,499,397	8,522,294	9,505	292,001,209	22,128,580	269,872,629	
RI	300,000	43	1,540,649	113,277	1,427,372	7	388,849	83,588	305,261	50	1,929,499	196,865	1,732,633	
SC	300,000	555	18,333,329	1,334,026	16,999,304	75	3,262,190	741,457	2,520,734	630	21,595,520	2,075,482	19,520,038	
SD	300,000	1,106	43,537,369	3,157,290	40,380,079	3	67,972	19,163	48,809	1,109	43,605,342	3,176,453	40,428,888	
TN	300,000	1,349	50,109,910	3,375,473	46,734,437	32	1,431,774	345,573	1,086,201	1,381	51,541,683	3,721,045	47,820,638	

Summary of Guaranty Association <u>Discounted</u> Coverage Estimates¹ as of March 1, 2017 Resulting from the Liquidations of Penn Treaty Network America Insurance Company and American Network Insurance Company

			P ⁻	TNA			А	NIC		Total				
		Policy	Gross		Net	Policy	Gross		Net	Policy	Gross		Net	
Assoc.	Limit	Count	Liabilities ²	Assets ³	Liabilities	Count	Liabilities ²	Assets ³	Liabilities	Count	Liabilities ²	Assets ³	Liabilities	
TX	300,000	3,870	135,978,138	9,981,710	125,996,428	31	1,035,132	238,481	796,651	3,901	137,013,270	10,220,191	126,793,079	
UT	500,000	363	12,677,985	919,399	11,758,586	2	49,078	11,127	37,951	365	12,727,063	930,526	11,796,536	
VT	300,000	185	11,515,320	612,971	10,902,349	11	460,404	111,140	349,264	196	11,975,724	724,111	11,251,614	
VA	300,000	3,725	157,771,896	10,935,144	146,836,753	1,370	66,603,231	16,430,120	50,173,111	5,095	224,375,127	27,365,264	197,009,863	
WA	500,000	2,996	139,622,590	9,364,151	130,258,439	5	329,111	63,616	265,494	3,001	139,951,701	9,427,767	130,523,933	
WV	300,000	0	0	0	0	203	4,667,196	1,264,559	3,402,637	203	4,667,196	1,264,559	3,402,637	
WI	300,000	539	17,536,187	1,312,476	16,223,711	0	0	0	0	539	17,536,187	1,312,476	16,223,711	
WY	300,000	112	2,389,692	196,794	2,192,898	0	0	0	0	112	2,389,692	196,794	2,192,898	
Undet.	0	3	0	0	0	0	0	0	0	3	0	0	0	
Total		66,127	2,571,757,856	178,976,425	2,392,781,431	6,984	385,667,154	89,356,050	296,311,104	73,111	2,957,425,010	268,332,475	2,689,092,535	

¹Future cash outflows are discounted at an annual rate of 4.25%.

²Based on Moody's rate as of January 2017, and assumes application of interest rate adjustment in CT, PA and WY.

³Based on estimated 3/1/2017 assets, distributed based on re-priced premium.

Summary of Guaranty Association <u>Undiscounted</u> Coverage Estimates¹ as of March 1, 2017 Resulting from the Liquidations of Penn Treaty Network America Insurance Company and American Network Insurance Company

		PTNA					А	NIC		Total				
		Policy	Gross		Net	Policy	Gross		Net	Policy	Gross		Net	
Assoc.	Limit	Count	Liabilities ²	Assets ³	Liabilities	Count	Liabilities ²	Assets ³	Liabilities	Count	Liabilities ²	Assets ³	Liabilities	
AL	300,000	297	12,875,363	630,130	12,245,233	5	132,462	23,673	108,789	302	13,007,825	653,803	12,354,022	
AK	300,000	32	2,064,909	81,851	1,983,058	0	0	0	0	32	2,064,909	81,851	1,983,058	
AZ	300,000	2,937	194,869,651	8,835,488	186,034,164	53	3,964,528	520,245	3,444,284	2,990	198,834,180	9,355,732	189,478,447	
AR	300,000	211	7,810,789	399,658	7,411,131	1	29,256	4,688	24,568	212	7,840,045	404,345	7,435,699	
CA	560,929	8,059	637,040,398	30,645,393	606,395,005	35	4,581,056	631,273	3,949,783	8,094	641,621,454	31,276,666	610,344,788	
CO	300,000	1,510	73,850,298	3,310,203	70,540,095	975	49,134,502	6,075,319	43,059,184	2,485	122,984,801	9,385,521	113,599,279	
CT	500,000	63	4,620,035	208,805	4,411,230	550	54,297,195	6,381,715	47,915,479	612	58,917,230	6,590,521	52,326,709	
DC	300,000	37	2,275,705	98,645	2,177,060	4	339,897	47,052	292,845	41	2,615,601	145,696	2,469,905	
DE	300,000	72	4,423,215	205,626	4,217,589	10	924,621	129,405	795,216	82	5,347,836	335,031	5,012,805	
FL	300,000	8,433	539,132,497	24,075,878	515,056,619	349	29,351,988	4,056,387	25,295,601	8,782	568,484,485	28,132,266	540,352,219	
GA	300,000	1,667	104,038,000	4,590,295	99,447,706	32	2,714,041	385,032	2,329,008	1,699	106,752,041	4,975,327	101,776,714	
HI	300,000	245	14,790,914	630,386	14,160,528	1	32,714	7,029	25,685	246	14,823,628	637,415	14,186,212	
ID	300,000	278	12,605,797	620,910	11,984,888	5	249,948	38,336	211,612	283	12,855,746	659,246	12,196,500	
IL	300,000	3,475	136,109,595	7,266,007	128,843,588	8	558,690	72,427	486,263	3,483	136,668,285	7,338,434	129,329,851	
IN	300,000	893	46,458,818	2,055,977	44,402,841	4	343,433	37,020	306,412	897	46,802,251	2,092,998	44,709,253	
IA	300,000	2,169	144,500,550	5,945,287	138,555,263	0	0	0	0	2,169	144,500,550	5,945,287	138,555,263	
KS	300,000	0	0	0	0	624	24,925,056	4,271,645	20,653,411	624	24,925,056	4,271,645	20,653,411	
KY	300,000	875	44,102,538	2,222,508	41,880,030	5	308,176	54,157	254,018	880	44,410,714	2,276,666	42,134,048	
LA	500,000	394	16,758,342	830,179	15,928,164	3	235,298	46,080	189,218	397	16,993,641	876,259	16,117,382	
ME	300,000	0	0	0	0	51	1,713,467	323,984	1,389,483	51	1,713,467	323,984	1,389,483	
MD	300,000	749	47,894,313	2,179,791	45,714,522	43	3,778,262	631,218	3,147,045	792	51,672,575	2,811,008	48,861,567	
MA	300,000	0	0	0	0	64	4,380,106	550,347	3,829,758	64	4,380,106	550,347	3,829,758	
MI	300,000	1,205	53,364,077	2,640,265	50,723,811	0	0	0	0	1,205	53,364,077	2,640,265	50,723,811	
MN	410,000	141	7,235,024	312,094	6,922,930	4	276,677	40,016	236,661	145	7,511,701	352,110	7,159,590	
MS	300,000	429	20,941,699	1,064,800	19,876,899	1	16,832	4,646	12,186	430	20,958,530	1,069,446	19,889,085	
MO	100,000	762	17,971,674	1,034,417	16,937,257	37	760,509	134,297	626,212	799	18,732,183	1,168,714	17,563,469	
MT	300,000	184	7,105,569	369,562	6,736,007	3	172,862	24,799	148,063	187	7,278,431	394,362	6,884,070	
NE	300,000	763	39,545,843	1,987,936	37,557,907	11	235,135	43,487	191,648	774	39,780,978	2,031,423	37,749,555	
NV	300,000	339	21,402,696	960,434	20,442,262	7	351,321	55,203	296,118	346	21,754,017	1,015,637	20,738,380	
NH	300,000	157	11,774,941	474,229	11,300,712	19	918,204	139,190	779,014	176	12,693,145	613,419	12,079,727	
NJ	Unlimited	0	0	0	0	1,893	348,736,803	41,690,807	307,045,997	1,893	348,736,803	41,690,807	307,045,997	
NM	300,000	216	13,229,158	576,963	12,652,195	14	767,371	101,081	666,290	230	13,996,529	678,044	13,318,485	
NC	300,000	2,271	157,855,387	7,124,133	150,731,254	77	5,651,342	808,878	4,842,464	2,348	163,506,729	7,933,011	155,573,718	
ND	300,000	177	4,777,696	269,822	4,507,875	0	0	0	0	177	4,777,696	269,822	4,507,875	
OH	300,000	1,976	96,534,846	4,645,204	91,889,642	16	680,850	112,312	568,538	1,992	97,215,696	4,757,516	92,458,180	
OK	300,000	424	21,125,197	981,370	20,143,827	7	351,925	57,353	294,572	431	21,477,122	1,038,722	20,438,399	
OR	100,000	662	18,124,465	770,288	17,354,177	12	318,367	48,727	269,640	674	18,442,833	819,015	17,623,817	
PA	300,000	9,181	435,481,351	19,629,183	415,852,169	324	18,013,401	2,499,397	15,514,004	9,505	453,494,752	22,128,580	431,366,172	
RI	300,000	43	2,409,600	113,277	2,296,324	7	627,380	83,588	543,792	50	3,036,981	196,865	2,840,116	
SC	300,000	555	28,561,060	1,334,026	27,227,034	75	5,481,304	741,457	4,739,847	630	34,042,364	2,075,482	31,966,882	
SD	300,000	1,106	63,959,265	3,157,290	60,801,975	3	161,864	19,163	142,701	1,109	64,121,129	3,176,453	60,944,675	
TN	300,000	1,349	79,481,798	3,375,473	76,106,325	32	2,001,995	345,573	1,656,422	1,381	81,483,792	3,721,045	77,762,747	

Summary of Guaranty Association <u>Undiscounted</u> Coverage Estimates¹ as of March 1, 2017 Resulting from the Liquidations of Penn Treaty Network America Insurance Company and American Network Insurance Company

			Pl	ΓΝΑ			Α	NIC		Total				
		Policy	Gross		Net	Policy	Gross		Net	Policy	Gross		Net	
Assoc.	Limit	Count	Liabilities ²	Assets ³	Liabilities	Count	Liabilities ²	Assets ³	Liabilities	Count	Liabilities ²	Assets ³	Liabilities	
TX	300,000	3,870	200,224,022	9,981,710	190,242,312	31	1,810,257	238,481	1,571,776	3,901	202,034,279	10,220,191	191,814,088	
UT	500,000	363	20,956,895	919,399	20,037,496	2	88,791	11,127	77,664	365	21,045,686	930,526	20,115,160	
VT	300,000	185	18,784,382	612,971	18,171,412	11	748,572	111,140	637,432	196	19,532,954	724,111	18,808,844	
VA	300,000	3,725	235,909,391	10,935,144	224,974,247	1,370	93,761,749	16,430,120	77,331,629	5,095	329,671,140	27,365,264	302,305,876	
WA	500,000	2,996	242,678,542	9,364,151	233,314,391	5	655,327	63,616	591,710	3,001	243,333,869	9,427,767	233,906,101	
WV	300,000	0	0	0	0	203	7,337,109	1,264,559	6,072,550	203	7,337,109	1,264,559	6,072,550	
WI	300,000	539	25,160,926	1,312,476	23,848,450	0	0	0	0	539	25,160,926	1,312,476	23,848,450	
WY	300,000	112	3,673,690	196,794	3,476,895	0	0	0	0	112	3,673,690	196,794	3,476,895	
Undet.	0	3	0	0	0	0	0	0	0	3	0	0	0	
Total	<u></u>	66,127	3,894,490,921	178,976,425	3,715,514,496	6,984	671,920,644	89,356,050	582,564,594	73,111	4,566,411,565	268,332,475	4,298,079,090	

¹No discount rate is applied to projected cash outflows.

²Based on Moody's rate as of January 2017, and assumes application of interest rate adjustment in CT, PA and WY.

³Based on estimated 3/1/2017 assets, distributed based on re-priced premium.