

MEMORANDUM

To: Deferred Compensation Committee
Nevada Public Employees' Deferred Compensation Program

From: Francis Picarelli, Vice President

Date: January 30, 2013

Re: Contract Fees & Revenue Sharing Analysis

We reviewed the revenue sharing and expense ratios of the funds offered by ING and Mass Mutual in the Nevada Public Employees' Deferred Compensation Plan. After analyzing the current revenue and fee structure, we are proposing alternative scenarios for Committee consideration to align the revenue sharing requirements of both Mass Mutual and ING in order to comply with the terms, conditions and fees related to the two-year contract extension.

The first set of attached charts show both the current amounts the participants pay for the investment management fees of the funds and the related revenue sharing that the providers receive to subsidize administration costs. The second set of charts shows the result of our proposed changes to align the funds with the two- year contract requirements.

ING

In order to run the Plan, ING requires revenue sharing of 35 basis points (bps), or approximately \$385,000 on \$110 million. The "revenue sharing" figures represent a portion of each fund's expense ratio that is paid by the fund family back to the providers in order to pay for the recordkeeping services. For example, all investors in the Fidelity Contrafund pay an expense ratio of 0.81%. Fidelity takes out 0.25% of the fee, and gives this to the service provider to cover the recordkeeping costs this applies to both organizations.

Background

In May 18, 2012, ING implemented the following fund changes. Vanguard Mid-Cap Index Fund-Signal Shares & Vanguard Small-Cap Index Fund- Signal shares were mapped to the Vanguard Extended Market Index Fund- Institutional Shares. This fund change had no net effect to the revenue situation because there is a 0.19% wrap administration fee on all Vanguard funds in the ING platform. In addition, the Columbia Mid Cap Value Opportunity Fund- Class R-4 (expense ratio- 1.05%/revenue- 0.35%) and the Wells Fargo Advantage Special Small Cap Value Fund- Class A (expense ratio- 1.35%/revenue- 0.55%) were mapped to the Lord Abbett Value

Opportunities Fund- Class I (expense ratio- 0.96%/revenue – 0.10%). This resulted in a total reduction of 3 bps, bringing the Total Fund revenue share to 32 bps from the contract requirement of 35 bps.

In order to increase the total revenue sharing back to 35 bps, we suggest two options the first is to increase the “wrap” on all Vanguard funds from 19 bps to 25 bps, resulting in a net increase of 6 bps. Vanguard does not offer revenue sharing on any of the funds in the Plan line-up. Therefore, the Plan is able to put an additional “wrap” fee on the Vanguard funds’ expense ratios. For example, the prospectus expense ratio on the Vanguard Institutional Index Fund is 0.04% plus the wrap fee of 25 bps for revenue sharing, which leads to a total expense of 0.29%. The 6 bps increase in the wrap on Vanguard funds will help to generate the shortfall of approximately \$32,000 required by ING. In this scenario we have taken into consideration the recent fund change of the Lazard Mid Cap at 40 bps in revenue sharing being mapped to the Hartford Mid Cap at 30 bps in revenue sharing (Lazard Mid Cap generates \$4,325 in revenue sharing and Hartford Mid Cap generates \$3,119 for net reduction of \$1,206).

Second Option

The Plan can retain the current 19 bps wrap on the Vanguard funds and utilize a portion of ING’s annual credit allowance of \$90,000 to fund the approximate \$32,000 shortfall for a net annual allocation to the credit account of \$58,000. This can be done at the end of 2013 and 2014 based on a reconciliation of the final year-end revenue sharing calculations. Segal Rogerscasey will provide with its quarterly performance reports a revenue sharing report to monitor during the year.

Mass Mutual

Mass Mutual, under the new contract extension, requires revenue sharing of 11 basis points on the variable assets. As of December 31, 2012, there were **\$199,257,750** in Plan Assets, excluding the assets in the Hartford General Fund and the Schwab Self Directed Brokerage Account. As a result of the contract extension, Mass Mutual has reduced their variable revenue sharing from 18 bps to 11 bps, resulting in a net reduction of 7 bps. In order to provide a cushion, we are targeting a total revenue sharing of 12 to 14 basis points range. If there is a surplus above 11 bps, Mass Mutual will refund that money back to the Plan/participants at the end of the year. The Plan will be able to use any excess revenue to allocate back to the participant accounts, or fund Plan level expenses. We propose the following recommendations in order to reduce the expenses in the Mass Mutual variable investment line-up:

- The Vanguard Target Retirement funds currently have a wrap of 15 bps. We propose completely removing this wrap fee on all five Vanguard Target Retirement Funds. As a result, the participants will only be paying the expense ratio for these funds. This will bring down the total revenue sharing figure on funds from a range of 32 bps to 34 bps to a range of 17 bps to 19 bps.
- We have done an analysis of the share classes for all of the other funds in the line-up and have identified five variable funds that are eligible for lower share class management fees within the Mass Mutual fund agreements. Implementing the changes below, while also removing the wrap on Vanguard, will result in lower expense ratios for the plan participants and a total revenue share for the plan of 13 bps.

- 1) **Invesco Equity and Income- Share Class Y to R5** - 56 bps expense ratio with 25 bps in revenue sharing to 44 bps expense ratio with 10 bps in revenue sharing
- 2) **American Beacon Lg Cap Value- Share Class Inv to Inst** – 83 bps expense ratio with 25 bps in revenue sharing to 59 bps expense ratio and no revenue sharing
- 3) **Neuberger Berman Social Responsive- Share Class Inv to Instl** - 90 bps expense ratio with 10 bps in revenue sharing to 71 bps expense ratio and 10bps in revenue sharing
- 4) **Munder Mid Cap Core Growth- Share Class Y to R6** - 108 bps expense ratio with 25 bps in revenue sharing to 84 bps expense ratio with no revenue sharing
- 5) **Mutual Global Discovery- Share Class A to Z** - 131 bps expense ratio with 35 bps plus \$12 per participant account to 1.01 bps expense ratio with 10 bps plus \$12 per participant account in revenue sharing

Second Alternative

The second alternative is to retain the current investment management fees and revenue sharing amounts and allocate the total new contract excess revenue of 7 bps back to the participants accounts based upon process employed in past reallocations. Based on December 31, 2012 variable assets of \$199,257,750, the dollar amount would be \$139,480, and this process would be done at the end of each of the next two contract years.

Under this arrangement, Mass Mutual will continue to provide its pro-rata share of the \$427,128 revenue sharing requirement. Based on 12/31 assets, this would be for Mass Mutual approximately 82%, or \$350,244, plus the ING annual allocation of \$90,000 for a total of \$440,244 based on total assets from both vendors of \$588,838,739 as 12/31/2012.

The attached exhibits summarize the proposed recommendations.

The following is a reconciliation of the annual credit allowance that has been funded by both of the providers.

<u>Hartford Revenue Share</u>		<u>ING</u>	
2008	\$412,000	1Q 2012	\$19,530.65
2009	\$412,000	2Q 2012	\$19,733.08
2010	\$437,000	<u>3Q 2012</u>	<u>\$19,733.08</u>
2011	\$437,000		\$58,996.81
<u>2012</u>	<u>\$437,000</u>	<u>Amount Remaining</u>	<u>\$31,003.19</u>
Amount Remaining	\$147,949.95		\$90,000.00

Nevada Public Employees' Deferred Compensation Program

CURRENT Revenue Sharing Analysis for ING Funds
As of December 31, 2012

Fund Name	Ticker	Asset Class	Plan Assets 12/31/12	Mutual Fund	Mutual Fund Total \$ Expense	Revenue Sharing	Revenue Sharing \$
				Expense Ratio			
ING Stable Value Fund	n/a	Stable Value	\$ 29,807,956	0.75%	\$ 223,560	0.55%	\$ 163,944
Vanguard Total Bond Market Index I	VBPIX	Core Fixed Income	\$ 5,600,537	0.26%	\$ 14,561	0.19%	\$ 10,641
ING T. Rowe Price Cap Apprec Port I	ITRIX	Balanced	\$ 3,768,564	0.65%	\$ 24,496	0.28%	\$ 10,552
Allianz NFJ Dividend Value Instl	NFJEX	Large Cap Value	\$ 3,756,786	0.71%	\$ 26,673	0.10%	\$ 3,757
Vanguard Institutional Index I	VINIX	Large Cap Core	\$ 5,108,530	0.23%	\$ 11,750	0.19%	\$ 9,706
Parnassus Equity Income - Inv	PRBLX	Socially Responsive	\$ 426,887	0.94%	\$ 4,013	0.40%	\$ 1,708
American Funds Growth Fund of Amer R3	RGACX	Large Cap Growth	\$ 5,369,644	0.97%	\$ 52,086	0.65%	\$ 34,903
Fidelity Contrafund	FCNTX	Large Cap Growth	\$ 1,941,002	0.81%	\$ 15,722	0.25%	\$ 4,853
Hartford MidCap HLS IA*	HBMCX	Mid Cap Core	\$ 1,039,813	0.95%	\$ 9,878	0.30%	\$ 3,119
Baron Growth Retail	BGRFX	Mid Cap Growth	\$ 1,613,428	1.32%	\$ 21,297	0.40%	\$ 6,454
Lord Abbett Value Opportunities I	LVOYX	Smid Core	\$ 3,254,104	0.96%	\$ 31,239	0.10%	\$ 3,254
Vanguard Extended Market Idx I	VIEIX	Smid Core	\$ 2,885,478	0.31%	\$ 8,945	0.19%	\$ 5,482
Columbia Acorn A	LACAX	Smid Growth	\$ 1,878,742	1.11%	\$ 20,854	0.50%	\$ 9,394
Keeley Small Cap Value A	KSCVX	Small Cap Core	\$ 445,515	1.35%	\$ 6,014	0.35%	\$ 1,559
Vanguard Developed Markets Index Admiral	VDMAX	International Equity	\$ 449,500	0.31%	\$ 1,393	0.19%	\$ 854
Dodge & Cox International Stock	DODFX	International Equity	\$ 3,622,371	0.64%	\$ 23,183	0.10%	\$ 3,622
American Funds Capital World G/I R3	RWICX	Global Equity	\$ 1,432,500	1.10%	\$ 15,758	0.65%	\$ 9,311
Vanguard Target Retirement Income Inv	VTINX	Lifecycle	\$ 4,063,711	0.36%	\$ 14,629	0.19%	\$ 7,721
Vanguard Target Retirement 2015 Inv	VTTVX	Lifecycle	\$ 16,512,611	0.36%	\$ 59,445	0.19%	\$ 31,374
Vanguard Target Retirement 2025 Inv	VTTVX	Lifecycle	\$ 2,426,103	0.37%	\$ 8,977	0.19%	\$ 4,610
Vanguard Target Retirement 2035 Inv	VTTHX	Lifecycle	\$ 13,566,129	0.38%	\$ 51,551	0.19%	\$ 25,776
Vanguard Target Retirement 2045 Inv	VTIVX	Lifecycle	\$ 431,410	0.38%	\$ 1,639	0.19%	\$ 820
TD Ameritrade SDBA	n/a	Brokerage account	\$ 408,197	-	\$ -	0.08%	\$ 327
TOTALS			\$ 109,809,519		\$ 647,664		\$ 353,739

*Reflects the Fund change from the Lazard US Mid Cap Fund with 40 bps in revenue sharing to the Hartford Mid Cap HLS with 30 bps in revenue sharing.

All Funds	
Average Expense Ratio ¹	0.69%
Weighted Average Variable Expense Ratio ¹	0.53%
Weighted Average Variable Revenue Share (w/brokerage)	0.24%
Weighted Average Stable Value Revenue Sharing	0.55%
Weighted Average Total Revenue Sharing	0.32%

¹ Does not include Stable Value or Brokerage Account

ING Contract Requirements:

Total Revenue Sharing All Funds: 35 bps

Total Revenue Sharing on Variable: 26 bps

Total Revenue Sharing on Stable Value: 55 bps

Nevada Public Employees' Deferred Compensation Program

CURRENT Revenue Sharing Analysis for Hartford Funds

As of December 31, 2012

Fund Name	Ticker	Asset Class	Plan Assets 12/31/12	Mutual Fund Expense Ratio	Mutual Fund Total \$ Expense	Revenue Sharing	Revenue Sharing \$
General Fund	n/a	Stable Value	\$ 277,251,183	n/a	-	n/a	-
SSgA US Bond Market INLS	n/a	Core Fixed Income	\$ 9,458,223	0.15%	\$ 14,187	0.09%	\$ 8,512
Invesco Equity and Income Y	ACETX	Balanced	\$ 28,374,193	0.56%	\$ 158,895	0.25%	\$ 70,935
American Beacon Lg Cap Value Inv	AAGPX	Large Cap Value	\$ 10,030,596	0.83%	\$ 83,254	0.25%	\$ 25,076
Vanguard Institutional Index I	VINIX	Large Cap Core	\$ 14,591,830	0.04%	\$ 5,837	0.00%	\$ -
Victory Diversified Stock I	VDSIX	Large Cap Core	\$ 23,892,901	0.81%	\$ 193,533	0.15%	\$ 35,839
Neuberger Berman Socially Resp Inv	NBSRX	Socially Responsive	\$ 3,565,419	0.90%	\$ 32,089	0.10%	\$ 3,565
T. Rowe Price Growth Stock	PRGFX	Large Cap Growth	\$ 21,220,390	0.70%	\$ 148,543	0.15%	\$ 31,831
Hartford MidCap HLS IA	HIMCX	Mid Cap Core	\$ 32,539,700	0.70%	\$ 227,778	0.25%	\$ 81,349
Munder Mid-Cap Core Growth Y	MGOYX	Mid Cap Growth	\$ 2,022,859	1.08%	\$ 21,847	0.25%	\$ 5,057
Vanguard Extended Market Idx I	VIEIX	Smid Core	\$ 3,940,994	0.12%	\$ 4,729	0.00%	\$ -
Lord Abbett Value Opportunities I	LVOYX	Smid Core	\$ 9,039,669	0.96%	\$ 86,781	0.10%	\$ 9,040
Oppenheimer Main Street Sm & Mid Cap Y	OPMYX	Smid Core	\$ 7,938,665	0.83%	\$ 65,891	0.30%	\$ 23,816
Hartford Small Company HLS IA	HIASX	Small Cap Growth	\$ 3,360,766	0.71%	\$ 23,861	0.25%	\$ 8,402
American Beacon Intl Eq Index Inst	AIIXX	International Equity	\$ 8,824,231	0.24%	\$ 21,178	0.00%	\$ -
Mutual Global Discovery A ¹	TEDIX	Global Equity	\$ 9,007,267	1.31%	\$ 117,995	0.35% + \$12 PP	\$ 45,853
Vanguard Target Retirement Income Inv	VTINX	Lifecycle	\$ 1,692,185	0.32%	\$ 5,415	0.15%	\$ 2,538
Vanguard Target Retirement 2015 Inv	VTXVX	Lifecycle	\$ 3,100,475	0.32%	\$ 9,922	0.15%	\$ 4,651
Vanguard Target Retirement 2025 Inv	VTTVX	Lifecycle	\$ 3,252,825	0.33%	\$ 10,734	0.15%	\$ 4,879
Vanguard Target Retirement 2035 Inv	VTTHX	Lifecycle	\$ 1,924,388	0.34%	\$ 6,543	0.15%	\$ 2,887
Vanguard Target Retirement 2045 Inv	VTIVX	Lifecycle	\$ 1,480,172	0.34%	\$ 5,033	0.15%	\$ 2,220
Schwab SDBA	n/a	Brokerage account	\$ 2,520,287	-	\$ -	-	-
TOTALS			\$ 479,029,220		\$ 1,244,044		\$366,452

¹Revenue sharing based on 1,194 participants.

All Funds	
Average Expense Ratio ¹	0.58%
Weighted Average Variable Expense Ratio ¹	0.62%
Weighted Average Variable Revenue Share ¹	0.18%

¹Does not include Stable Value or Brokerage Account.

Hartford Contract Requirements:

Total Revenue Sharing on Variable Funds: 11 bps

PROPOSED Revenue Sharing Analysis for ING Funds
As of December 31, 2012

Fund Name	Ticker	Asset Class	Plan Assets 12/31/12	Mutual Fund		Revenue Sharing	Revenue Sharing \$
				Expense Ratio	Mutual Fund Total \$ Expense		
ING Stable Value Fund	n/a	Stable Value	\$ 29,807,956	0.75%	\$ 223,560	0.55%	\$ 163,944
Vanguard Total Bond Market Index I*	VBTIX	Core Fixed Income	\$ 5,600,537	0.32%	\$ 17,922	0.25%	\$ 14,001
ING T. Rowe Price Cap Apprec Port I	ITRIX	Balanced	\$ 3,768,564	0.65%	\$ 24,496	0.28%	\$ 10,552
Allianz NFJ Dividend Value Instl	NFJEX	Large Cap Value	\$ 3,756,786	0.71%	\$ 26,673	0.10%	\$ 3,757
Vanguard Institutional Index I*	VINIX	Large Cap Core	\$ 5,108,530	0.29%	\$ 14,815	0.25%	\$ 12,771
Parnassus Equity Income - Inv	PRBLX	Socially Responsive	\$ 426,887	0.94%	\$ 4,013	0.40%	\$ 1,708
American Funds Growth Fund of Amer R3	RGACX	Large Cap Growth	\$ 5,369,644	0.98%	\$ 52,623	0.65%	\$ 34,903
Fidelity Contrafund	FCNTX	Large Cap Growth	\$ 1,941,002	0.81%	\$ 15,722	0.25%	\$ 4,853
Hartford MidCap HLS IA**	HBMCX	Mid Cap Core	\$ 1,039,813	0.95%	\$ 9,878	0.30%	\$ 3,119
Baron Growth Retail	BGRFX	Mid Cap Growth	\$ 1,613,428	1.32%	\$ 21,297	0.40%	\$ 6,454
Lord Abbett Value Opportunities I	LVOYX	Smid Core	\$ 3,254,104	0.96%	\$ 31,239	0.10%	\$ 3,254
Vanguard Extended Market Idx I*	VIEIX	Smid Core	\$ 2,885,478	0.37%	\$ 10,676	0.25%	\$ 7,214
Columbia Acorn A	LACAX	Smid Growth	\$ 1,878,742	1.11%	\$ 20,854	0.50%	\$ 9,394
Keeley Small Cap Value A	KSCVX	Small Cap Core	\$ 445,515	1.35%	\$ 6,014	0.35%	\$ 1,559
Vanguard Developed Markets Index Admiral*	VDMAX	International Equity	\$ 449,500	0.37%	\$ 1,663	0.25%	\$ 1,124
Dodge & Cox International Stock	DODFX	International Equity	\$ 3,622,371	0.64%	\$ 23,183	0.10%	\$ 3,622
American Funds Capital World G/I R3	RWICX	Global Equity	\$ 1,432,500	1.10%	\$ 15,758	0.65%	\$ 9,311
Vanguard Target Retirement Income Inv*	VTINX	Lifecycle	\$ 4,063,711	0.42%	\$ 17,068	0.25%	\$ 10,159
Vanguard Target Retirement 2015 Inv*	VTTVX	Lifecycle	\$ 16,512,611	0.42%	\$ 69,353	0.25%	\$ 41,282
Vanguard Target Retirement 2025 Inv*	VTTVX	Lifecycle	\$ 2,426,103	0.43%	\$ 10,432	0.25%	\$ 6,065
Vanguard Target Retirement 2035 Inv*	VTTHX	Lifecycle	\$ 13,566,129	0.44%	\$ 59,691	0.25%	\$ 33,915
Vanguard Target Retirement 2045 Inv*	VTIVX	Lifecycle	\$ 431,410	0.44%	\$ 1,898	0.25%	\$ 1,079
TD Ameritrade SDBA	n/a	Brokerage account	\$ 408,197	-	\$ -	0.08%	\$ 327
TOTALS			\$ 109,809,519		\$ 678,828		\$ 384,366

* All Vanguard funds reflect 6 bp increase in management fees, generating 25 bps in revenue sharing.

** Reflects the Fund change from the Lazard US Mid Cap Fund with 40 bps in revenue sharing to the Hartford Mid Cap HLS with 30 bps in revenue sharing.

All Funds	
Average Expense Ratio ¹	0.72%
Weighted Average Variable Expense Ratio ¹	0.57%
Weighted Average Variable Revenue Share (w/brokerage)	0.28%
Weighted Average Stable Value Revenue Sharing	0.55%
Weighted Average Total Revenue Sharing	0.35%

¹ Does not include Stable Value or Brokerage Account

ING Contract Requirements:

Total Revenue Sharing All Funds: 35 bps
Total Revenue Sharing on Variable: 26 bps
Total Revenue Sharing on Stable Value: 55 bps

Nevada Public Employees' Deferred Compensation Program

PROPOSED Revenue Sharing Analysis for Hartford Funds

As of December 31, 2012

Fund Name	Ticker	Asset Class	Plan Assets 12/31/12	Mutual Fund Expense Ratio	Mutual Fund Total \$ Expense	Revenue Sharing	Revenue Sharing \$	Minimum
General Fund	n/a	Stable Value	\$ 277,251,183	n/a	-	n/a	-	
SSgA US Bond Market INLS	n/a	Core Fixed Income	\$ 9,458,223	0.15%	\$ 14,187	0.09%	\$ 8,512	
Invesco Equity and Income R5	ACEKX	Balanced	\$ 28,374,193	0.44%	\$ 124,846	0.10%	\$ 28,374	\$10,000,000
American Beacon Lg Cap Inst	AADEX	Large Cap Value	\$ 10,030,596	0.59%	\$ 59,181	0.00%	\$ -	
Vanguard Institutional Index I	VINIX	Large Cap Core	\$ 14,591,830	0.04%	\$ 5,837	0.00%	\$ -	
Victory Diversified Stock I	VDSIX	Large Cap Core	\$ 23,892,901	0.81%	\$ 193,533	0.15%	\$ 35,839	
Neuberger Berman Socially Resp Instl	NBSLX	Socially Responsive	\$ 3,565,419	0.71%	\$ 25,314	0.10%	\$ 3,565	\$1,000,000
T. Rowe Price Growth Stock	PRGFX	Large Cap Growth	\$ 21,220,390	0.70%	\$ 148,543	0.15%	\$ 31,831	
Hartford MidCap HLS IA	HIMCX	Mid Cap Core	\$ 32,539,700	0.70%	\$ 227,778	0.25%	\$ 81,349	
Munder Mid-Cap Core Growth R6	MGOSX	Mid Cap Growth	\$ 2,022,859	0.84%	\$ 16,992	0.00%	\$ -	
Vanguard Extended Market Idx I	VIEIX	Smid Core	\$ 3,940,994	0.12%	\$ 4,729	0.00%	\$ -	
Lord Abbett Value Opportunities I	LVOYX	Smid Core	\$ 9,039,669	0.96%	\$ 86,781	0.10%	\$ 9,040	
Oppenheimer Main Street Sm & Mid Cap Y	OPMYX	Smid Core	\$ 7,938,665	0.83%	\$ 65,891	0.30%	\$ 23,816	
Hartford Small Company HLS IA	HIASX	Small Cap Growth	\$ 3,360,766	0.71%	\$ 23,861	0.25%	\$ 8,402	
American Beacon Intl Eq Index Inst	AIIIX	International Equity	\$ 8,824,231	0.24%	\$ 21,178	0.00%	\$ -	
Mutual Global Discovery Z*	MDISX	Global Equity	\$ 9,007,267	1.01%	\$ 90,973	0.10% + \$12 PP	\$ 23,335	\$1,000
Vanguard Target Retirement Income Inv	VTINX	Lifecycle	\$ 1,692,185	0.17%	\$ 2,877	0.00%	\$ -	
Vanguard Target Retirement 2015 Inv	VTXVX	Lifecycle	\$ 3,100,475	0.17%	\$ 5,271	0.00%	\$ -	
Vanguard Target Retirement 2025 Inv	VTTVX	Lifecycle	\$ 3,252,825	0.18%	\$ 5,855	0.00%	\$ -	
Vanguard Target Retirement 2035 Inv	VTTHX	Lifecycle	\$ 1,924,388	0.19%	\$ 3,656	0.00%	\$ -	
Vanguard Target Retirement 2045 Inv	VTIVX	Lifecycle	\$ 1,480,172	0.19%	\$ 2,812	0.00%	\$ -	
Schwab SDBA	n/a	Brokerage account	\$ 2,520,287	-	\$ -	-	-	
TOTALS			\$ 479,029,220		\$ 1,130,096		\$254,064	

*Revenue sharing based on 1,194 participants.

All Funds	
Average Expense Ratio ¹	0.49%
Weighted Average Variable Expense Ratio ¹	0.57%
Weighted Average Variable Revenue Share ¹	0.13%

¹Does not include Stable Value or Brokerage Account.

Hartford Contract Requirements:

Total Revenue Sharing on Variable Funds: 11 bps