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VIA E-MAIL and USPS

March 8, 2012

Mr. James M. Andersen  
Retirement Administrator  
Mendocino County Employees' Retirement Association  
625-B Kings Court  
Ukiah, CA 95482

**Re: Issues Related to June 30, 2011 and Prior Valuations**

Dear Jim:

In this letter, we have provided answers to the questions raised by Board member Ted Stephens in connection with his review of the June 30, 2011 and prior valuations. The questions were summarized in your email to us dated February 21, 2012.

One consideration not explicitly addressed below is whether these issues require a revision of the June 30, 2011 valuation, which would change the employer's 2012/2013 fiscal year contributions. From an actuarial practice viewpoint we believe it would be reasonable to reflect any revisions discussed below only prospectively, i.e., in the next valuation as of June 30, 2012. The Board also may want to review the answers to the questions raised from a materiality standpoint. To the extent that revisions to the prior actuary's results that Segal has relied on in preparing the June 30, 2011 valuation are not deemed by the Board to be material, the Board may find that the more practical approach is to consider incorporating the revised results only prospectively, i.e., in the next valuation as of June 30, 2012.

1. *In the smoothing formula on page 5, line 2(a)<sup>1</sup>, should the dollar return be adjusted downward by \$6 million to reflect funds transferred to the County for retiree healthcare? Would it impact the actuarial value of assets given that 0% is the deferral factor?*

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<sup>1</sup> Reference is to the determination of the actuarial value of assets used in the June 30, 2011 valuation. A copy of page 5 of our June 30, 2011 valuation report is provided as an attachment to this letter.



On page 5 of our June 30, 2011 valuation report, we document the deferred investment gains/losses excluded from the development of the smoothed actuarial value of assets. Included in that documentation were actual and expected market returns determined by the prior actuary of \$50.99 million and \$24.32 million, respectively, for the 2006/2007 plan year. Under the Board's asset smoothing method, the difference between the two amounts (a gain of \$26.67 million) was recognized over a five-year period effective with the June 30, 2007 valuation and was fully recognized by the June 30, 2011 valuation.

Following the determination of the actuarial value of assets as of June 30, 2007, the Board transferred about \$6 million to provide ad hoc retiree health benefits. The question is now raised as to whether the actual market return for that year (\$50.99 million) should be adjusted to reflect that \$6 million transfer.

While a detailed review of the Association's interest crediting and undistributed earnings policy is beyond the scope of this letter, it is our understanding that the Association had maintained its reserves and determined the availability of income to credit regular interest and to allocate undistributed earnings on a book value basis until it was amended by the Board in the June 30, 2005 valuation. Effective with that valuation, the income measure was changed from a book to a smoothed actuarial value basis which means that the Association's ability to recognize unrealized appreciation is no longer tied to the sale of an asset.

We believe that the development of the smoothed actuarial value of assets as of June 30, 2007 (which reflects the \$50.99 million actual and \$24.32 million expected market returns) that led to the subsequent allocation of \$6 million in available undistributed earnings to provide retiree health benefits should not result in a change in the actual market return for that year. The reason is that the market value return measures the actual return on market value, as part of determining the actuarial or "smoothed" value. This occurs before any allocation of undistributed earnings, and in fact is used to determine whether there are any undistributed "excess" for the Board to allocate.

A separate point of note is that the \$50.99 million in net market return used by the prior actuary was different from the \$52.60 million net market return we calculate using the information provided in the CAFR for June 30, 2007. However, that difference should have no impact on setting the contribution rate for the June 30, 2011 valuation as all of the difference between the actual and the expected market returns would have been fully recognized in the June 30, 2011 valuation.

2. *The Association has discussed correcting contribution and return information from Buck for June 30, 2010, line 2(e). Numbers that we know to be wrong. MCERA could also review the other years due to our lack of confidence in Buck's numbers. Do you recommend amending the historical numbers for June 30, 2010? What would be the approximate impact to the contribution rate? What are the pros and cons of reviewing the other years in the smoothing formula?*

For the 2009/2010 plan year, actual market return determined by the prior actuary was \$44.66 million while the amount we now calculate using the information provided in the CAFR for the above plan year was \$38.13 million. The reduction in the market gain was \$6.53 million and because 60% of the investment experience from that year was unrecognized in the June 30, 2011 valuation, an adjustment to change the 2009/2010 market return from \$44.66 million to \$38.13 million would reduce the total unrecognized investment experience as of June 30, 21011 from a net deferred gain of \$3.10 million (reported in line 2(f), page 5 of our June 30, 2011 valuation report) to a net deferred loss of \$0.82 million (\$3.10 million minus 60% of \$6.53 million).

If this adjustment were to be made in the June 30, 2011 valuation, the smoothed valuation value of assets would increase by \$3.92 million<sup>2</sup> and this would result in a decrease in the aggregate contribution rate in the 2011 valuation by about 0.4% of payroll. However, the above impacts are temporary because at the end of the asset smoothing period all the deferred investment gain (whether calculated using \$44.66 million or \$38.13 million) would have been fully recognized in the June 30, 2014 valuation.

While the Board may strive to audit and correct the values of historical actual and expected market returns that are now determined to be inaccurate, the actuarial value of assets will ultimately converge to the market value of assets as stated above. Since there is an additional cost associated with revising and recalculating the contribution rates in the June 30, 2011 (and possibly earlier) valuation, the Board may find that the more practical approach is to consider incorporating the revised results only prospectively, i.e., in the next valuation as of June 30, 2012. We would recommend this approach especially if the Board deems the impact of a 1.1% increase in the actuarial value of assets as of June 30, 2011 to be not material. This judgment might be made with the Board's outside auditor.

3. *On line 7(a), should Segal have backed out the \$658,654 given that the funds are not in a truly restricted reserve, or should the historical practice of recognizing these funds as restricted be maintained until disclosure and a recommended solution to the IRS is adopted? Hanson and Bridgett may have an opinion on this item.*

As you have indicated, Hanson and Bridgett has been requested to provide input from a legal perspective as to how the maintenance of the \$658,654 in a restricted reserve would factor into the Association's determination letter filing with the IRS. Therefore, we are only addressing this issue from an actuarial perspective.

We believe it is common practice within the 1937 Act retirement systems to count as valuation assets in an actuarial valuation only those assets maintained in the Member, County Advance and Retiree Reserves. In other words, an amount maintained in a special designated reserve<sup>3</sup> would not normally be counted in the valuation value of assets. We believe it is within the purview of the Board to direct Segal to count the amount in the Retiree Insurance designation in the valuation value of assets. This may be appropriate, for instance, if the Board no longer wishes to

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<sup>2</sup> This is equivalent to an approximate 1.1% increase in the actuarial value of assets as of June 30, 2011.

<sup>3</sup> \$658,654 was reported as the balance in the Retiree Insurance designation.

provide ad hoc benefits from that designation or use that money later for other purposes as permitted by the 1937 Act CERL. However, if that is not the case, then maintaining the amount in that designation would avoid increase in the UAAL if and when that money is later used to provide benefits.

4. *In general, the valuation study cites different rate of return than Callan or our audited financial statements. As we and the Board have discussed, this is due in many cases to the appropriateness of using time-weighted versus dollar-weighted returns. Please review the returns noted by Board member Stephens and let the Board know how Segal arrived at those returns, and why they may be different than Callan or the financial auditor.*

The actual market return that Segal calculated was 21.68% for the 2010/2011 plan year and the comparable return calculated by Callan was 21.87% as communicated to us by the Association.

As we discussed, the most common reason why the market return calculated by the actuary may differ from that calculated by the investment consultant is the use of time-weighted versus dollar-weighted returns.

Segal reports rate of return calculated using the dollar-weighted method that not only includes return on assets at of the beginning of the year but also reflects the effect on the return of the cashflows (i.e., contributions coming in and benefit payments going out) during the year. In contrast, it is our understanding that most investment consultants would generally report rate of return calculated using the time-weighted method that only includes return on assets at the beginning of the year and but excludes the effect on the return of the cashflows during the year.

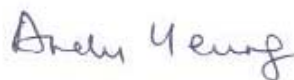
We believe the use of the dollar-weighted method is both more common among pension actuaries and more appropriate for comparing actual return to assumed return. We also note that this is the methodology prescribed by the IRS for use in reporting such return for multi-employer pension plans in their annual tax filings.

Please let us know if you have any questions or would like to discuss further.

Sincerely,



Paul Angelo, FSA, EA, MAAA, FCA  
Senior Vice President and Actuary



Andy Yeung, ASA, EA, MAAA, FCA  
Vice President and Associate Actuary

AYY/hy  
Attachment (5179373)

## SECTION 2: Valuation Results for the Mendocino County Employees' Retirement Association

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board of Retirement has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

### CHART 7

#### Determination of Actuarial Value of Assets for Year Ended June 30, 2011

*The chart shows the determination of the actuarial value of assets as of the valuation date.*

1. Market value of assets:					\$355,042,523
2. Calculation of deferred return:	Actual Market Return (net)	Expected Market Return (net)	Investment Gain / (Loss)	Deferred Factor	Deferred Return
(a) Year ended June 30, 2007	\$50,991,137	\$24,317,842	\$26,673,295	0%	\$0
(b) Year ended June 30, 2008	(28,174,415)	27,967,796	(56,142,211)	20%	(11,228,442)
(c) Year ended June 30, 2009	(53,511,078)	26,278,512	(79,789,590)	40%	(31,915,836)
(d) Year ended June 30, 2010	44,658,046	21,494,203	23,163,843	60%	13,898,306
(e) Year ended June 30, 2011	64,075,101	23,640,399	40,434,702	80%	<u>32,347,762</u>
(f) Total unrecognized return*					\$3,101,790
3. Preliminary actuarial value of assets: (1) - (2f)					\$351,940,733
4. Adjustment to be within 25% corridor of market value					\$0
5. Final actuarial value of assets: (3) + (4)					\$351,940,733
6. Actuarial value as a percentage of market value: (5) ÷ (1)					99.1%
7. Non-pension reserves:					
(a) Retirees insurance reserve					\$658,654
(b) Contingency reserve					<u>3,550,472</u>
(c) Total					\$4,209,126
8. Valuation value of assets: (5) - (7c)					<u>\$347,731,607</u>

*Note: Information prior to 2011 has been extracted from the previous actuary's past valuation reports.*

\* The amount of deferred return that will be recognized in each subsequent valuation is as follows:

6/30/2012	\$(14,466,650)
6/30/2013	(3,238,209)
6/30/2014	12,719,709
6/30/2015	<u>8,086,940</u>
Total	\$3,101,790