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January 27, 2015

Mr. David DeJonge
Assistant Executive Director
Public Employees Retirement Association of MN
60 Empire Drive, Suite 200
Saint Paul, Minnesota 55103

Re: Consolidation of Minneapolis Employees Retirement Fund with the Public Employees Retirement Association General Employees Retirement Plan

Dear Dave:

Enclosed is a supplemental actuarial calculation of the final funded status and employer contributions resulting from the consolidation of the **Minneapolis Employees Retirement Fund (MERF)** into the Public Employees Retirement Association General Employees Retirement Plan (General Plan).

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

This report should not be relied on for any purpose other than the purpose described in the primary communication. Determinations of the financial results associated with the benefits described in this report in a manner other than the intended purpose may produce significantly different results.

The valuation was based upon information furnished by PERA, concerning Retirement System benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries.

The actuaries issuing this report are independent of the plan sponsor, Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Please call if you have any questions regarding the calculations enclosed.

Sincerely,

Bonita J. Wurst

Bonita J. Wurst, ASA, MAAA

Brian B. Murphy

Brian B. Murphy, FSA, EA, MAAA

BJW/BBM:ah
Enclosure

GENERAL EMPLOYEES RETIREMENT PLAN MINNEAPOLIS EMPLOYEES RETIREMENT FUND CONTRIBUTION CALCULATION AS OF JANUARY 1, 2015

Requested By: Mr. David DeJonge, Assistant Executive Director

Date: January 27, 2015

Submitted By: Bonita J. Wurst, ASA, MAAA and Brian B. Murphy, FSA, EA, MAAA
Gabriel, Roeder, Smith & Company

This report contains an actuarial valuation of the final funded status and employer contributions resulting from the consolidation of MERF into the General Plan.

Per Minnesota Statutes 353.50 Subd. 9, a MERF funding ratio of 80% or greater triggers consolidation of the MERF Division into the General Plan, effective the first day of the month following the date on which the triggering actuarial valuation report is filed with PERA. In the actuarial valuation of MERF as of July 1, 2014, an actuarial accrued liability funding ratio of 82.03% was calculated. Based on a report date of December 3, 2014, the merger was effective January 1, 2015.

Upon consolidation, total employer contributions are calculated as a fixed dollar amount to amortize the remaining unfunded liability as a level dollar amount through June 30, 2031.

Plan provisions are consistent with those described in the MERF valuation report dated December 3, 2014. Other than the mortality assumptions, actuarial assumptions and methods were consistent with those used in the regular actuarial valuation of MERF as of July 1, 2014. As directed by PERA, mortality assumptions were consistent with those used in the regular actuarial valuation of the General Plan as of July 1, 2014. Assumptions and methods are prescribed by Minnesota Statutes Section 356.215 and 353.50, the requirements of the Standards for Actuarial Work established by the Legislative Commission on Pensions and Retirement (LCPR) and the Trustees. In particular:

- The assumed discount rate was 8.0% through June 30, 2017, and 8.5% thereafter. The equivalent interest rate as of January 1, 2015 was 8.33%.
- Benefit increases after retirement were assumed to be 1.0% per year through 2026 and 2.5% thereafter.
- Healthy Pre-retirement Mortality: RP-2000 employee generational mortality table for males and females, white collar adjustment, set forward 5 years for males and set back 3 years for females. Future mortality improvements are assumed each year using scale AA.
- Healthy Post-retirement Mortality: RP-2000 annuitant generational mortality table for males and females, white collar adjustment, no adjustment for males and set back 2 years for females. Future mortality improvements are assumed each year using scale AA.
- Disabled Mortality: RP-2000 disabled mortality table for males and females, set back 4 years for males and set forward 7 years for females.

The date of the valuation was January 1, 2015. Supplemental valuations do **not** predict the result of future actuarial valuations.

GENERAL EMPLOYEES RETIREMENT PLAN
MINNEAPOLIS EMPLOYEES RETIREMENT FUND CONTRIBUTION
CALCULATION AS OF JANUARY 1, 2015

MERF Assets

Financial information as of December 31, 2014 was provided by PERA for this valuation. We checked for internal and year-to-year consistency, but did not otherwise audit the data. A summary of the plan assets used in this valuation as well as a statement of changes in plan assets since June 30, 2014 is presented herein.

	Market Value (000's)	
Assets in Trust	**December 31, 2014**	**June 30, 2014**
Cash, equivalents, short term securities	$ 26,803	$ 24,264
Fixed income	206,633	205,527
Equity	542,912	540,176
SBI Alternative	111,657	111,099
Other	0	0
Total Assets in Trust	**$ 888,005**	**$ 881,066**
Assets Receivable*	3,634	55,014
Amounts Payable	0	(134)
Net Assets Held in Trust for Pension Benefits	**$ 891,639**	**$ 935,946**

**Assets receivable include the following:*

	Market Value as of December 31, 2014	*Market Value as of June 30, 2014*
Source	*Amount*	*Amount*
State Contributions	*$0*	*$24.00 million*
Employer Contributions	*$3.6 million*	*$31.00 million*

GENERAL EMPLOYEES RETIREMENT PLAN
MINNEAPOLIS EMPLOYEES RETIREMENT FUND CONTRIBUTION
CALCULATION AS OF JANUARY 1, 2015

MERF Assets *(Concluded)*

	Market Value (000's)	
Change in Assets	**December 31, 2014**	**June 30, 2014**
1. Fund balance at market value at beginning of period*	$ 935,946	$ 868,813
2. Contributions		
a. Member	117	370
b. Employer	150	31,426
c. Other sources	0	24,000
d. Total contributions	267	55,796
3. Investment income		
a. Investment income/(loss)	21,648	147,184
b. Investment expenses	(79)	(1,227)
c. Net subtotal	21,569	145,957
4. Other	3	39
5. Total income: *(2.d.) + (3.c.) + (4.)*	**$ 21,839**	**$ 201,792**
6. Benefits Paid		
a. Annuity benefits	(66,093)	(134,466)
b. Refunds	(51)	(47)
c. Total benefits paid	(66,144)	(134,513)
7. Expenses		
a. Other	0	0
b. Administrative	(2)	(146)
c. Total expenses	(2)	(146)
8. Total disbursements: *(6.c.) + (7.c.)*	**(66,146)**	**(134,659)**
9. Fund balance at market value at end of period*: *(1.) + (5.) + (8.)*	**$ 891,639**	**$ 935,946**
10. Approximate return on market value of assets	2.4%	18.3%

**Assets include the following contributions as assets receivable:*

	Market Value as of December 31, 2014	*Market Value as of June 30, 2014*	*Market Value as of June 30, 2013*
Source	*Amount*	*Amount*	*Amount*
State	*$0*	*$24.00 million*	*$24.00 million*
Employer	*$3.6 million*	*$31.00 million*	*$31.00 million*

MERF Membership Data

Membership information as of January 1, 2015 was provided by PERA for this valuation. We checked for internal and year-to-year consistency, but did not otherwise audit the data. A brief summary of the membership data as of January 1, 2015 used in this valuation is presented below.

		Terminated	Recipients			
	Actives	Deferred Retirement	Service Retirement	Disability Retirement	Survivor	Total
Members on 7/1/2014	**42**	**43**	**2,929**	**109**	**739**	**3,862**
New members	0	0	0	0	0	**0**
Return to active	0	0	0	0	0	**0**
Terminated non-vested	0	0	0	0	0	**0**
Service retirements	(2)	(7)	9	0	0	**0**
Terminated deferred	0	0	0	0	0	**0**
Terminated refund/transfer	0	0	0	0	0	**0**
Deaths	(1)	0	(78)	(7)	(39)	**(125)**
New beneficiary	0	0	0	0	17	**17**
Disabled	0	0	0	0	0	**0**
Data adjustments	0	0	1	0	(1)	**0**
Net change	(3)	(7)	(68)	(7)	(23)	**(108)**
Members on 1/1/2015	**39**	**36**	**2,861**	**102**	**716**	**3,754**

Group	Number	Total Projected Payroll (000's)	Total Annual Benefits (000's)	Average
Active	39	$ 2,679		62.6
Terminated Deferred	36		521 *	61.9
Service Retirements	2,861		105,173	75.5
Disability Retirements	102		2,644	72.7
Survivors	716		23,309	81.1
Total	**3,754**	**$ 2,679**	**$ 131,647**	**76.2**

** Includes augmentation to Normal Retirement Date and 30% Combined Service Annuity load.*

Actuarial Statement

The contribution calculation in this report is based on Minnesota Statutes 353.50 Subd. 9(b):

If the market value of the MERF division account is less than 100 percent of the actuarial accrued liability of the MERF division under paragraph (a), the total employer contribution of employing units referenced in subdivision 7, paragraph (e), for the period after the full consolidation and June 30, 2031, to amortize on a level annual dollar payment the remaining unfunded actuarial accrued liability of the former MERF division account on the full consolidation date by June 30, 2031, shall be calculated by the consulting actuary retained under section 356.214 using the applicable postretirement interest rate actuarial assumption for the general employees retirement plan under section 356.215. The actuarial accrued liability of the MERF division must be calculated using the healthy retired life mortality assumption applicable to the general employees retirement plan.

Determination of MERF Unfunded Actuarial Accrued Liability and Post-Consolidation Contribution as of January 1, 2015 *(Dollars in Thousands)*

	Actuarial Present Value of Projected Benefits	Actuarial Present Value of Future Normal Costs	Actuarial Accrued Liability
A. Determination of Actuarial Accrued Liability (AAL)			
1. Active members			
a. Retirement annuities	$ 24,369	$ 130	$ 24,239
b. Disability benefits	145	63	82
c. Survivor's benefits	44	8	36
d. Deferred retirements	175	85	90
e. Refunds*	1	23	(22)
f. Total	$ 24,734	$ 309	$ 24,425
2. Deferred retirements with future augmentation	5,643	0	5,643
3. Former members without vested rights	0	0	0
4. Annuitants	1,124,898	0	1,124,898
5. Total	$1,155,275	$ 309	$ 1,154,966
B. Determination of Unfunded Actuarial Accrued Liability (UAAL)			
1. Actuarial accrued liability			$ 1,154,966
2. Current assets (AVA)			891,639
3. Unfunded actuarial accrued liability			$ 263,327
C. Determination of Post-Consolidation Contribution Rate			
1. Unfunded actuarial accrued liability to be amortized by June 30, 2031			$ 263,327
2. Post-Consolidation contribution amount			30,383

* *Includes non-vested refunds and non-married survivor benefits only.*

Actuarial Statement *(Concluded)*

The level annual dollar contribution after consolidation required to amortize the remaining unfunded actuarial accrued liability of MERF as of January 1, 2015 by June 30, 2031 based on the assumptions and methods described in this report is $30,383,000. Different assumptions would result in a different amount.

The amortization factor as of January 1, 2015 is 8.6670. The factor is based on an interest rate of 8.0% for the first 2.5 years, and 8.5% for the next 13.5 years. The payment assumes sixteen annual payments are made beginning December 31, 2015 and ending December 31, 2030. If annual contributions are actually received earlier than December 31st, the unfunded actuarial accrued liability may be eliminated slightly faster than expected.

The amortization payment of $30,383,000 calculated in this report does not include normal cost or expenses. As of July 1, 2014, the annual requirement for normal cost was $307,000 (10.77% of pay), the annual administrative expense requirement was $152,000 (5.33% of pay), and the allowance for 1992 investment expenses was $207,000 (7.26% of pay). The 1992 investment expense allowance is a fixed dollar amortization amount with 6 payments remaining as of July 1, 2014.

Comments

Comment 1 — The calculations are based upon assumptions regarding future events, which may or may not materialize. They are also based upon plan provisions that are outlined in this report. If you have reason to believe that the assumptions that were used are unreasonable, that the plan provisions are incorrectly described, that important plan provisions relevant to this proposal are not described, or that conditions have changed since the calculations were made, you should contact the author of this report prior to relying on information in the report.

Comment 2 — If you have reason to believe that the information provided in this report is inaccurate, or is in any way incomplete, or if you need further information in order to make an informed decision on the subject matter of this report, please contact the author of the report prior to making such decision.

Comment 3 — This report is intended to calculate the final funded status and employer contribution requirements related to the merger of the MERF into the General Plan. Except as otherwise noted, potential effects on other benefit plans were not considered.

Comment 4 — The reader of this report should keep in mind that actuarial calculations are mathematical estimates based on current data and assumptions about future events (which may or may not materialize). Please note that actuarial calculations can and do vary from one valuation year to the next, sometimes significantly if the group valued is very small (less than 30 lives).

Comment 5 — In the event the General Plan becomes 90% funded on a market value of assets basis for two consecutive years, post-retirement benefit increases will change from 1.0% to 2.5%. For purposes of this valuation it was assumed that the post-retirement benefit increase will increase to 2.5% on January 1, 2027, consistent with recent valuations of the General Plan.

Comment 6 — Guidance regarding the selection of economic assumptions for measuring pension obligations is provided by Actuarial Standards of Practice (ASOP) No. 27. A revision of ASOP No. 27, applicable to valuation dates on or after September 30, 2014, will guide assumption setting for future valuations. A recent review of inflation and investment return assumptions for accounting purposes resulted in a recommended range of 7% to 8% for assumed investment return. If we used a discount rate within this range, the MERF unfunded actuarial accrued liability would be greater than the amount in this report.

Comments *(Concluded)*

Comment 7 — Based on direction from the LCPR's actuary, the select and ultimate discount rate methodology was applied to the entry age normal results as follows:

1. The present value of projected benefits was calculated using the prescribed select and ultimate discount rates.
2. An equivalent single interest rate that produced approximately the same present value of projected benefits was determined.
3. The equivalent single interest rate was used to determine the entry age normal accrued liability and normal cost.

The equivalent single interest rate for determining liabilities in this valuation was 8.33%. This rate was determined as of July 1, 2014. If the rate was determined as of January 1, 2015 there would be no material difference.