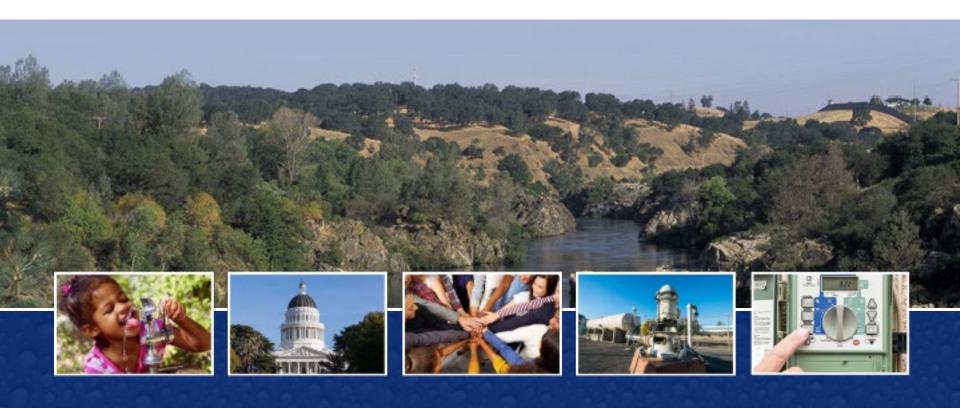
# Policy 500.16 (Allocating Liabilities to Withdrawing Members)



March 26, 2024



CALPERS ACTUARIAL VALUATION - June 30, 2022 Miscellaneous Plan of the Regional Water Authority CalPERS ID: 6065061198

#### Funded Status – Funding Policy Basis

The table below provides information on the current funded status of the plan under the funding policy. The funded status for this purpose is based on the market value of assets relative to the funding target produced by the entry age actuarial cost method and actuarial assumptions adopted by the board. The actuarial cost method allocates the total expected cost of a member's projected benefit (**Present Value of Benefits**) to individual years of service (the **Normal Cost**). The value of the projected benefit that is not allocated to future service is referred to as the **Accrued Liability** and is the plan's funding target on the valuation date. The **Unfunded Accrued Liability** (UAL) equals the funding target minus the assets. The UAL is an absolute measure of funded status and can be viewed as employer debt. The **funded ratio** equals the assets divided by the funding target. The funded ratio is a relative measure of the funded status and allows for comparisons between plans of different sizes.

	June 30, 2021	June 30, 2022
Present Value of Benefits	\$4,022,327	\$4,280,499
2. Entry Age Accrued Liability	2,957,581	3,230,900
Market Value of Assets (MVA)	3,111,362	2,931,699
4. Unfunded Accrued Liability (UAL) [(2) - (3)]	(\$153,781)	\$299,201
5. Funded Ratio [(3) / (2)]	105.2%	90.7%

A funded ratio of 100% (UAL of \$0) implies that the funding of the plan is on target and that future contributions



CALPERS ACTUARIAL VALUATION - June 30, 2022 PEPRA Miscellaneous Plan of the Regional Water Authority CalPERS ID: 6065061198

**PEPRA** 

#### Funded Status – Funding Policy Basis

The table below provides information on the current funded status of the plan under the funding policy. The funded status for this purpose is based on the market value of assets relative to the funding target produced by the entry age actuarial cost method and actuarial assumptions adopted by the board. The actuarial cost method allocates the total expected cost of a member's projected benefit (**Present Value of Benefits**) to individual years of service (the **Normal Cost**). The value of the projected benefit that is not allocated to future service is referred to as the **Accrued Liability** and is the plan's funding target on the valuation date. The **Unfunded Accrued Liability** (UAL) equals the funding target minus the assets. The UAL is an absolute measure of funded status and can be viewed as employer debt. The **funded ratio** equals the assets divided by the funding target. The funded ratio is a relative measure of the funded status and allows for comparisons between plans of different sizes.

	June 30, 2021	June 30, 2022
Present Value of Benefits	\$367,579	\$417,324
2. Entry Age Accrued Liability	26,067	67,581
3. Market Value of Assets (MVA)	29,038	57,861
4. Unfunded Accrued Liability (UAL) [(2) - (3)]	(\$2,971)	\$9,720
5. Funded Ratio [(3) / (2)]	111.4%	85.6%

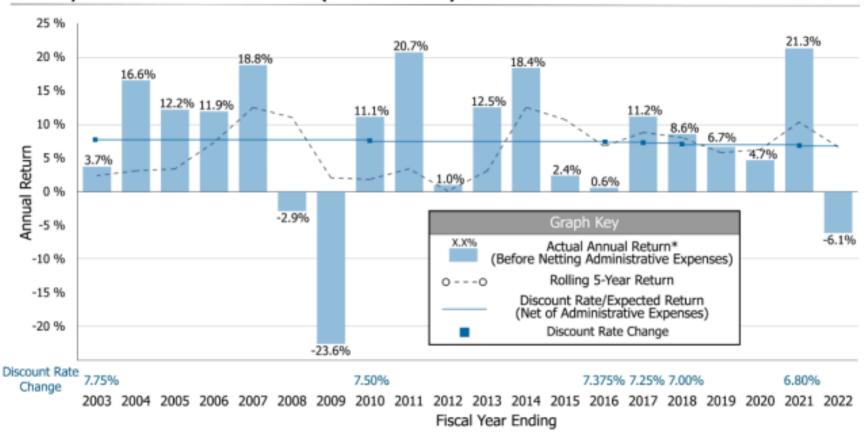
A funded ratio of 100% (UAL of \$0) implies that the funding of the plan is on target and that future contributions



- Why do we have a policy on allocating liabilities to withdrawing members?
- Why are different discount rates used for calculating unfunded pension liabilities?
- What is the fair and appropriate approach to allocating liabilities to withdrawing members.



#### History of Investment Returns (2003 - 2022)



<sup>\*</sup> As reported by the Investment Office with a 3-month lag on private equity and real assets.



CalPERS Actuarial Valuation – June 30, 2022 Miscellaneous Plan of the Regional Water Authority CalPERS ID: 6065061198

#### Funded Status - Termination Basis

The funded status measured on a termination basis is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2022. The accrued liability on a termination basis (termination liability) is calculated differently compared to the plan's ongoing funding liability. For the termination liability calculation, both compensation and service are frozen as of the valuation date and no future pay increases or service accruals are assumed. This measure of funded status is not appropriate for assessing the need for future employer contributions in the case of an ongoing plan, that is, for an employer that continues to provide CalPERS retirement benefits to active employees. Unlike the actuarial cost method used for ongoing plans, the termination liability is the present value of the benefits earned through the valuation date.

A more conservative investment policy and asset allocation strategy was adopted by the board for the Terminated Agency Pool. The Terminated Agency Pool has limited funding sources since no future employer contributions will be made. Therefore, expected benefit payments are secured by risk-free assets and benefit security for members is increased while limiting the funding risk. However, this asset allocation has a lower expected rate of return than the PERF and consequently, allower discount rate is assumed. The lower discount rate for the Terminated Agency Pool results in higher liabilities for terminated plans.

The effective termination discount rate will depend on actual market rates of return for risk -free securities on the date of termination. As market discount rates are variable, the table below shows a range for the hypothetical termination liability based on the lowest and highest interest rates observed during an approximate 19-month period from 12 months before the valuation date to seven months after.

Discount Rate: 1.75% Discount Rate: 4.50% Price Inflation: 2.50% Price Inflation: 2.75%

Market Value of	Termination	Funded	Unfunded Termination	Termination	Funded	Unfunded Termination
Assets (MVA)	Liability <sup>1,2</sup>	Ratio	Liability	Liability <sup>1,2</sup>	Ratio	Liability
\$2,931,699	\$6,604,730	44.4%	\$3,673,031	\$4,060,073	72.2%	\$1,128,374

<sup>&</sup>lt;sup>1</sup> The termination liabilities calculated above include a 5% contingency load. The contingency load and other actuarial assumptions can be found in Appendix A of the Section 2 report.

In order to terminate the plan, first contact our Pension Contract Services unit to initiate a Resolution of Intent to Terminate. The completed Resolution will allow the plan actuary to provide a preliminary termination valuation with a more up-to-date estimate of the plan liabilities. Before beginning this process, please consult with the plan actuary.

<sup>&</sup>lt;sup>2</sup> The discount rate used for termination valuations is a weighted average of the 10-year and 30-year U.S. Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The discount rates used in the table are based on 20-year Treasury bonds, rounded to the nearest quarter percentage point, which is a good proxy for most plans. The 20-year Treasury yield was 3.38% on June 30, 2022, the valuation date.



#### 20 Year Treasury Rate (I:20YTRNK)

4.47% for Mar 22 2024



Source: YCHARTS (https://ycharts.com/indicators/30\_year\_treasury\_rate\_h15)



Discount Rate: 1.75% Discount Rate: 4.50% Price Inflation: 2.50% Price Inflation: 2.75%

Market			Unfunded			Unfunded	
Value of	Termination	Funded	Termination	Termination	Funded	Termination	
Assets (MVA)	Liability <sup>1,2</sup>	Ratio	Liability	Liability <sup>1,2</sup>	Ratio	Liability	_
\$2,931,699	\$6,604,730	44.4%	\$3,673,031	\$4,060,073	72.2%	\$1,128,374	_

The termination liabilities calculated above include a 5% contingency load. The contingency load and other actuarial assumptions can be found in Appendix A of the Section 2 report.

#### **PFPRA**

Discount Rate: 1.75% Discount Rate: 4.50% Price Inflation: 2.50% Price Inflation: 2.75%

Market			Unfunded			Unfunded	
Value of	Termination	Funded	Termination	Termination	Funded	Termination	
Assets (MVA)	Liability <sup>1,2</sup>	Ratio	Liability	Liability <sup>1,2</sup>	Ratio	Liability	_
\$57,861	\$149,518	38.7%	\$91,657	\$73,511	78.7%	\$15,650	_

The discount rate used for termination valuations is a weighted average of the 10-year and 30-year U.S. Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The discount rates used in the table are based on 20-year Treasury bonds, rounded to the nearest quarter percentage point, which is a good proxy for most plans. The 20-year Treasury yield was 3.38% on June 30, 2022, the valuation date.

# DISCUSSION

