Attachment A3

DOLLAR-DENOMINATED FIXED INCOME LIMITED LIQUIDITY ENHANCED RETURN PROGRAM

February 14, 2011

I. PERFORMANCE OBJECTIVE AND BENCHMARK

The performance objective of the Dollar-Denominated Fixed Income <u>Limited Liquidity Enhanced Return Program</u> ("LLER Program") is to exceed the return of a <u>one-month LIBOR</u> based index while maintaining a low level of diversification. The low level of diversification within the LLER Program portfolio is balanced by the expectation that the LLER Program will represent a small portion of the overall assets for the asset class utilizing the LLER Program.

The benchmark for Dollar-Denominated Fixed Income Short Duration Program is specified in the Benchmark Modification and Benchmark Details Policy.

II. INVESTMENT APPROACHES AND PARAMETERS

A. Investment Approach

Identifying opportunities across limited duration <u>bond</u> market sectors and investing where risks are both understood and manageable while maintaining credit quality, <u>duration</u>, <u>convexity</u>, and liquidity as specified in this Policy is the investment approach of the LLER Program. Given the mandate for the LLER Program to be a low liquidity, total rate of return program, measured versus a LIBOR based benchmark, it is expected that investment grade rated, <u>Floating Rate Securities</u>, will represent a majority of the LLER Program holdings.

Given the higher risk, lower liquidity nature of the LLER Program, the portfolio will likely have high security concentrations. Larger concentration in fewer securities is prudent as long as the LLER Program represents a small portion of the overall assets for the asset class utilizing the LLER Program.

B. Specific Risk Parameters

CalPERS shall manage the following major categories of fixed income risk:

1. <u>Benchmark Risk</u> was reviewed by the Consultant who determined that the one-month LIBOR based index was the appropriate reference point.

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2. <u>Interest Rate Risk</u> must be controlled by limiting the LLER Program's duration to not exceed 270 days and by limiting duration by the asset type through the table below. Decisions shall be managed using historical <u>real return relationships</u> and <u>economic analysis</u>.

Maturity and Duration Constraints

	Floating Rate	Fixed Rate
Asset	Maturity Limits	Maturity Limits
AA & AAA Rated <u>Structured</u> <u>Securities</u>	10 year WAL	3 year WAL
Less than AA Rated Structured Securities	7 year WAL	18 month WAL
Note: Mortgage-backed securities maximum WAL calculation to be run at 100 PSA		
Corporate & Yankee Sovereign (AA & AAA rated)	10 Years	2 years
Corporate & <u>Yankee Sovereign</u> (less than AA rated)	5 Years	15 months

- 3. <u>Yield Curve Risk</u> must be managed in a controlled, disciplined fashion by employing <u>break-even</u>, economic analysis, <u>partial duration</u>, and <u>principal component analysis</u>.
- 4. <u>Convexity Risk</u> must be managed using <u>option-adjusted</u> and <u>scenario</u> analyses.
- 5. <u>Sector Risk</u> and <u>Asset Risk</u> will be controlled using the table below. Based on the economic outlook, <u>historical factors</u>, and break-even analysis, Staff shall estimate the impact on various sectors' and assets' spreads and make allocations accordingly.

Given the higher risk, lower liquidity nature of the LLER Program, the portfolio will likely have large security concentrations. Larger concentration in fewer securities is prudent as long as the LLER Program represents a small portion of the overall assets for the asset class utilizing the LLER Program. Accordingly, during the portfolio ramp-up period, calculation of asset and sector diversification limits will be based on the assumption of a \$2 billion portfolio size. The larger ramp-up period portfolio size relative to the HQL and SD Programs is needed due to the larger security

concentration nature of the security purchases in the LLER Program.

Asset and Sector Diversification

Asset / Counterparty	Diversification Limits
AA & AAA Rated Structured Securities	15%
Less than AA Rated Structured Securities	5%
Corporate & Yankee Sovereign	2%

Sector	Sector Limits
Floating Rate	No Restriction
Fixed Rate	25%
AA & AAA Rated Securities	No Restriction
Less than AA Rated Securities	25%

6. Credit Risk will be controlled by requiring minimum ratings by asset type as outlined in the table below. Credit Risk shall be actively managed on a risk/return basis. A downgrading of a security, which causes a violation in the guidelines, shall not require an immediate sale if the Senior Investment Officer of Global Fixed Income believes that no further risk of credit deterioration exists or the sale diminishes the total return to CalPERS. The CalPERS internal research staff and the external rating agencies shall analyze such situations to ensure that an informed decision is made. The following is the minimum quality for each of the sectors.

Asset / Counterparty Minimum Credit Rating All Securities (at time of purchase) Baa3/BBB-/BBB-

- 7. <u>Structure Risk</u> must be managed using option-adjusted and scenario analysis.
- 8. Reinvestment Risk must be managed through <u>call risk</u> and cash flow analysis.
- 9. <u>Liquidity Risk</u> is a low priority given the LLER Program's mandate as a limited duration program that will provide little to no liquidity.
- 10. <u>Currency Risk</u> is reduced by requiring all securities to be denominated in U.S. dollars.
- C. Restrictions and Prohibitions

- 1. Investments in a AA & AAA-rated single <u>issuer</u> shall not exceed (at the time of purchase) 15%. For structured securities, each separate trust (pool of assets) is defined as a separate issuer.
- 2. Investments in less than AA rated single issuer shall not exceed (at the time of purchase) 5%. For structured securities, each separate trust (pool of assets) is defined as a separate issuer.
- 3. The option-adjusted duration of the LLER Program must not exceed 270 days.
- 4. Non-investment grade securities (at the time of purchase) are prohibited.
- Tobacco company investments are prohibited.

D. Authorized Securities

- Notes, bonds, and debentures issued by the U.S. Government and its agencies, U.S. corporations, Canadian, <u>supranational</u>, and Yankee Sovereign entities subject to the maturity and credit quality limitations specified in this Policy.
- 2. Structured securities subject to the maturity and credit quality constraints detailed in this Policy.
- 3. Floating rate and <u>variable rate securities</u>, subject to maturity, credit quality, and reset limitations specified in this Policy.
- 4. Derivatives, subject to the requirements of Section IV.

III. CALCULATIONS AND COMPUTATIONS

- A. For securities with periodic principal payments, the <u>weighted-average days</u> to maturity must be calculated from the <u>evaluation date</u> to the date of the security's <u>average life</u>.
- B. The LLER Program weighted-average days to maturity must be calculated from the evaluation date to the date of the next coupon reset for floating rate securities.

IV. DERIVATIVES AND LEVERAGE POLICY

All transactions involving <u>derivatives</u> and <u>leverage</u> are governed by CalPERS Statement of Investment Policy for Development of Derivatives Strategies. In addition to the restrictions defined in the Derivatives Policy, the following conditions apply specifically to the LLER Program.

A. <u>Financial Futures, Swaps</u>, and <u>Options</u>

- 1. <u>Short selling</u> of securities is prohibited, except in financial futures (as outlined in Section IV. A. 4);
- 2. Leverage is prohibited except <u>futures</u> position where there is an associated cash position (which effectively creates a synthetic bond);
- 3. Staff may buy or sell the following fixed income related derivatives: financial futures including <u>eurodollar futures</u>, <u>total return swaps</u>, <u>index swaps</u>, <u>credit default swaps</u>, <u>interest rate swaps</u>, and <u>over-the-counter</u> options; and
- 4. Acceptable strategies include bona fide hedges (to help achieve the target durations) and strategies that result in a more efficient method of implementing the investment objectives of the LLER Program.

B. Restrictions and Prohibitions

- 1. <u>Uncovered Call</u> writing is prohibited.
- 2. <u>Speculation</u> or <u>arbitrage</u> between two derivatives is prohibited. If a derivative is more attractively priced than the underlying security, the transaction is considered a substitution.

C. Counterparty Exposure for Options, Swaps and Futures

Transactions shall be executed with only domestic or non-U.S. brokers registered in the U.S. or the U.K. with a short-term debt rating of at least A1 (<u>S&P</u>) and at least P1 (<u>Moody's</u>), or rated on a long-term basis at least A3 (Moody's) and at least A- (S&P). CalPERS internal research staff shall actively review these brokers.