

**CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM
PARALLEL VALUATION AND CERTIFICATION SERVICES
REVISED SERVICES TO BE PROVIDED**

The Contractor shall perform parallel valuations to independently validate the rates and accrued liabilities, including reconciliation services. "Parallel valuations" means performing independent valuations from input data provided by CalPERS for specified categories using the Contractor's computer software and hardware. The input data provided by CalPERS will be the same data used by CalPERS to develop the rates for the specified categories. "Reconciliation services" means determining the reasons for Contractor's parallel valuation results falling outside CalPERS stated tolerance level regardless of cause. The tolerance level for contribution rates and accrued liabilities is plus or minus five percent of CalPERS staff results (e.g., if CalPERS calculates an employer contribution rate to be 10 percent, the Contractor is required to reconcile any differences that cause their parallel calculation to be lower than 9.5 percent or higher than 10.5 percent).

Contractor shall complete and prepare the following tasks and deliverables. CalPERS may ask vendor to provide additional services related to, or similar to, the tasks below. Unless directed otherwise, Contractor must provide 24 copies and 1 camera ready copy of all approved reports.

Task 1:

Parallel valuation and certification of the 2014 annual valuations of contracting public agency pension plans.

1. Upon the completion of the June 30, 2014 public agency valuations by CalPERS staff, approximately in November 2015, the Contractor shall perform a parallel valuation and certification of those valuations. This will include a review of those assumptions, methods, and procedures which are relevant and necessary in accordance with generally accepted actuarial standards and certification of the contribution rates and accrued liabilities. At a minimum, the Contractor will perform a parallel valuation of the ten largest public agency plans plus a minimum of ten other public agency plans chosen by an acceptable random sample technique. The Contractor shall deliver the certification to CalPERS staff by July 1, 2016 and subsequently present the report at the Risk and Audit Committee meeting scheduled by CalPERS staff.

Task 2:

Parallel valuation and certification of the 2015 annual valuations of the state and schools pension plans.

1. Upon the completion of the June 30, 2015 state and schools annual valuations by CalPERS staff, approximately in April 2016, the Contractor shall perform a parallel valuation and certification of those valuations. This will include a review of those assumptions, methods, and procedures which are relevant and necessary in accordance with generally accepted actuarial standards and certification of the contribution rates and accrued liabilities.
2. Certification shall include independent validation of state miscellaneous first and second tiers, state safety, state industrial, peace officer and fire fighters, California Highway Patrol and schools. The Contractor shall deliver the certification to CalPERS staff by October 1, 2016 and subsequently present the report at the Risk and Audit Committee meeting scheduled by CalPERS staff.

Task 3:

Parallel valuation and certification of the 2016 annual valuations of the Judges' Retirement System (JRS), Judges' Retirement System II (JRSII), Legislators' Retirement System (LRS), and 1959 Survivors Benefit Program (SBP).

1. Upon the completion of the June 30, 2016 actuarial valuations of JRS, JRSII, LRS, and 1959 SBP by CalPERS staff, approximately in February 2017, the Contractor shall perform a parallel valuation and certification of those valuations. This will include a review of those assumptions, methods, and procedures which are relevant and necessary in accordance with generally accepted actuarial standards and certification of the contribution rates and accrued liabilities. The Contractor shall deliver the certification to CalPERS staff by August 1, 2017 and subsequently present the report at the Risk and Audit Committee meeting scheduled by CalPERS staff.

Task 4:

Parallel valuation and certification of the 2017 annual valuations of contracting public agency pension plans.

1. Upon the completion of the June 30, 2017 public agency valuations by CalPERS staff, approximately in October 2018, the Contractor shall perform a parallel valuation and certification of those valuations. This will include a review of those assumptions, methods, and procedures which are relevant and necessary in accordance with generally accepted actuarial standards and certification of the contribution rates and accrued liabilities. At a minimum, the Contractor will perform a parallel valuation of the ten largest public agency plans plus a minimum of ten other public

agency plans chosen by an acceptable random sample technique. The Contractor shall deliver the certification to CalPERS staff by July 1, 2019 and subsequently present the report at the Risk and Audit Committee meeting scheduled by CalPERS staff.

Task 5:

Parallel valuation and certification of the 2018 annual valuations of the state and schools pension plans.

1. Upon the completion of the June 30, 2018 state and schools annual valuations by CalPERS staff, approximately in April 2019, the Contractor shall perform a parallel valuation and certification of those valuations. This will include a review of those assumptions, methods, and procedures which are relevant and necessary in accordance with generally accepted actuarial standards and certification of the contribution rates and accrued liabilities.
2. Certification shall include independent validation of state miscellaneous first and second tiers, state safety, state industrial, peace officer and fire fighters, California Highway Patrol and schools. The Contractor shall deliver the certification to CalPERS staff by October 1, 2019 and subsequently present the report at the Risk and Audit Committee meeting scheduled by CalPERS staff.

Task 6:

Parallel valuation and certification of the 2019 annual valuations of the JRS, JRSII, LRS, and 1959 SBP.

1. Upon the completion of the June 30, 2019 actuarial valuations of JRS, JRSII, LRS, and 1959 SBP by CalPERS staff, approximately in February 2020, the Contractor shall perform a parallel valuation and certification of those valuations. This will include a review of those assumptions, methods, and procedures which are relevant and necessary in accordance with generally accepted actuarial standards and certification of the contribution rates and accrued liabilities. The Contractor shall deliver the certification to CalPERS staff by August 1, 2020 and subsequently present the report at the Risk and Audit Committee meeting scheduled by CalPERS staff.

Task 7:

Final Actuarial Review Report

1. Contractor will prepare a Final Actuarial Review Report for the contract period November 1, 2015 through October 31, 2020. The report shall contain at a minimum:
 - Recap of issues found during each actuarial review.
 - How issues were resolved.
 - What issues remain outstanding.
2. This report also provides the Contractor an opportunity to comment on the overall status of the actuarial process at CalPERS for items such as funding status, actuarial assumptions and member data. The Contractor shall deliver the report to CalPERS staff by September 1, 2020. The Contractor shall present the report at the Risk and Audit Committee meeting scheduled by CalPERS staff after the final actuarial review report is due.