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Office of the President

TO THE MEMBERS OF THE COMMITTEE ON FINANCE:

DISCUSSION ITEM

For the Meeting of November 19, 2014

ANNUAL ACTUARIAL VALUATIONS FOR THE UNIVERSITY OF CALIFORNIA RETIREMENT PLAN AND ITS SEGMENTS AND FOR THE 1991 UNIVERSITY OF CALIFORNIA-PUBLIC EMPLOYEES' RETIREMENT SYSTEM VOLUNTARY EARLY RETIREMENT INCENTIVE PROGRAM

EXECUTIVE SUMMARY

Each year, the Regents' Consulting Actuary performs an actuarial valuation of the University of California Retirement Plan (UCRP or Plan). Consistent with the funding policy approved by the Regents for the campus and medical center segment of UCRP, and separate agreements with the Department of Energy (DOE) for the funding of each Laboratory segment of UCRP, the annual valuation includes highlights of results for each of these segments as noted below. All UCRP assets are maintained in one trust and are available to pay benefits of all members, regardless of the segment to which their benefits are allocated. Highlights of the separate annual valuation of the 1991 University of California-Public Employees' Retirement System Voluntary Early Retirement Incentive Program (UC-PERS Plus 5 Plan) are also provided.

UCRP Valuation Results

- The June 30, 2014 overall market value of assets of UCRP was $52.8 billion, up from $45.3 billion for the prior Plan Year. The assets reflect a net investment return of approximately 17.8 percent after adjusting for contributions, benefit disbursements, and plan expenses. The June 30, 2014 overall actuarial value of assets was $48.3 billion.

- The July 1, 2014 overall Actuarial Accrued Liability for UCRP grew to $60.4 billion from $57.4 billion for the prior Plan Year.

- UCRP's overall funded ratio on an actuarial value of assets basis increased from 76 percent as of July 1, 2013 to 80 percent as of July 1, 2014. On a market value of assets basis, the funded ratio increased from 79 percent to 87 percent.

- The UCRP Normal Cost calculated as of the beginning of Plan Year 2014-15 is $1.64 billion or 17.59 percent of the $9.3 billion covered payroll at July 1, 2014. After adjusting for contributions made throughout the year, the UCRP Normal Cost is 18.24 percent of covered payroll.

- Based on the funding policy approved by the Regents in September 2010, the total funding policy contribution rate for the campus and medical center segment is 28.79 percent of projected covered payroll, which results in an estimated annual dollar amount of $2.7 billion for Plan Year 2015-16.

BACKGROUND

Each year, the Regents' Consulting Actuary, Segal Consulting, performs an actuarial valuation of UCRP and of the UC-PERS Plus 5 Plan.

The purpose of the annual actuarial valuation for UCRP is to disclose UCRP's funded position as of the beginning of the current Plan Year, analyze the preceding year's experience, and determine total funding policy contribution rates for the coming Plan Year. The results of the actuarial valuation as of July 1, 2014 are summarized and presented in the executive summary section of the UCRP actuarial valuation report.

The purpose of the annual actuarial valuation for the UC-PERS Plus 5 Plan is to review the fiscal position of its trust account and funding status to assure that the UC-PERS Plus 5 Plan remains adequately funded. The results of the actuarial valuation as of July 1, 2014 are summarized and presented in the executive summary section of the UC-PERS Plus 5 Plan actuarial valuation report.

Appendix I of this item contains a summary of the annual actuarial valuation results by UCRP segment and for the UC-PERS Plus 5 Plan. A glossary of actuarial terms is provided in Appendix II of this item.

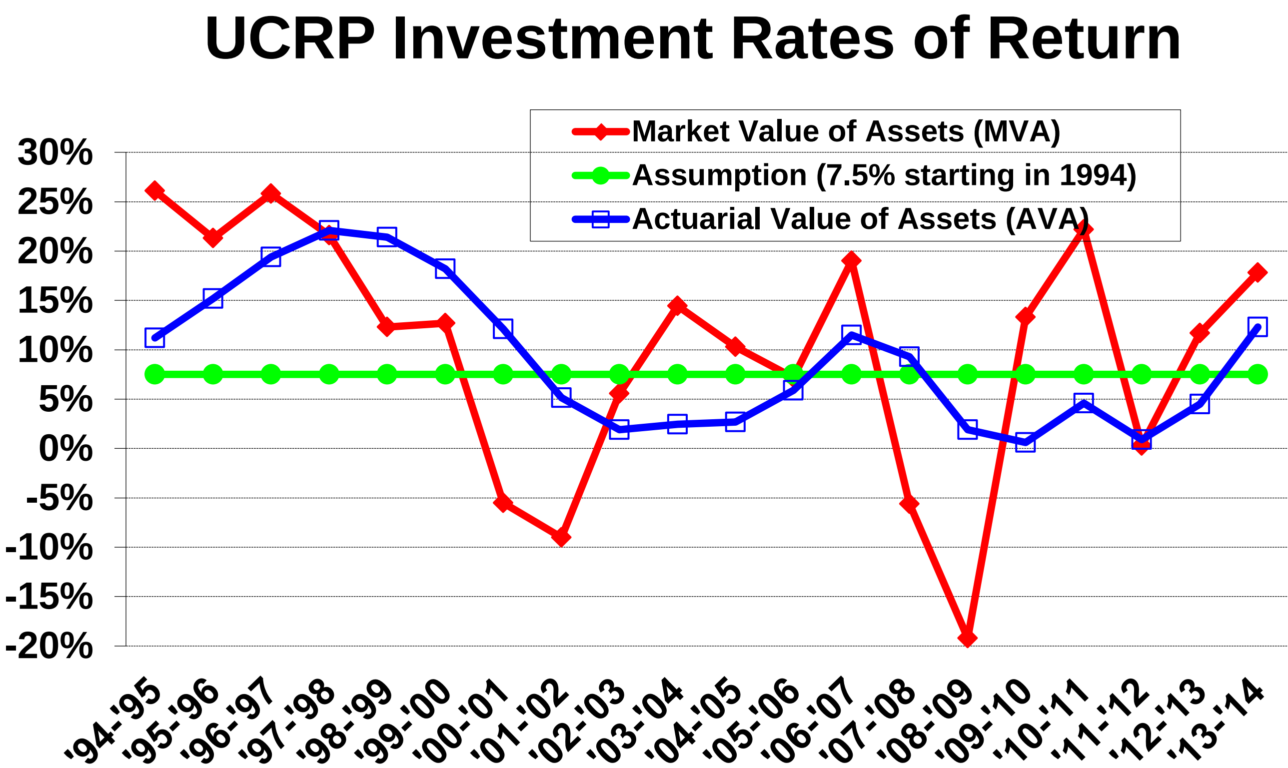
UCRP Valuation Results

As of July 1, 2014, there were 64,191 retired members and beneficiaries, 34,162 vested terminated members, 44,067 terminated non-vested members and 120,568 active members in UCRP for a total of 262,988 members included in this valuation. This compares to a total of 253,625 members included in the July 1, 2013 valuation.

As of June 30, 2014, the UCRP market value of assets, after subtracting benefit claims currently payable and other current payables of UCRP, was $52.8 billion as compared to $45.3 billion as of the end of the prior Plan Year. During Plan Year 2013-14 UCRP experienced an investment return on the market value of its assets of approximately 17.8 percent.

When determining UCRP's funded status ratio, UCRP's Actuarial Accrued Liability (AAL) is compared to the actuarial (smoothed) value of assets. The "smoothing" method reduces the short-term impact of market volatility by recognizing in each year only 20 percent of the investment gains and losses in each of the preceding five years. As of June 30, 2014, this five-year period includes one year of investment returns which were less favorable than UCRP's assumed 7.5 percent earnings rate and four which were more favorable. The net result is a 12.3 percent investment return for Plan Year 2013-14 on an actuarial value of assets basis.

The following chart shows, for the most recent 20-year period, the investment rates of return on the market value of assets (MVA) (red line), and on the smoothed actuarial value of assets (AVA) (blue line) as compared to UCRP's assumed earnings rate (green line) which has been 7.5 percent since the 1994-95 Plan Year.



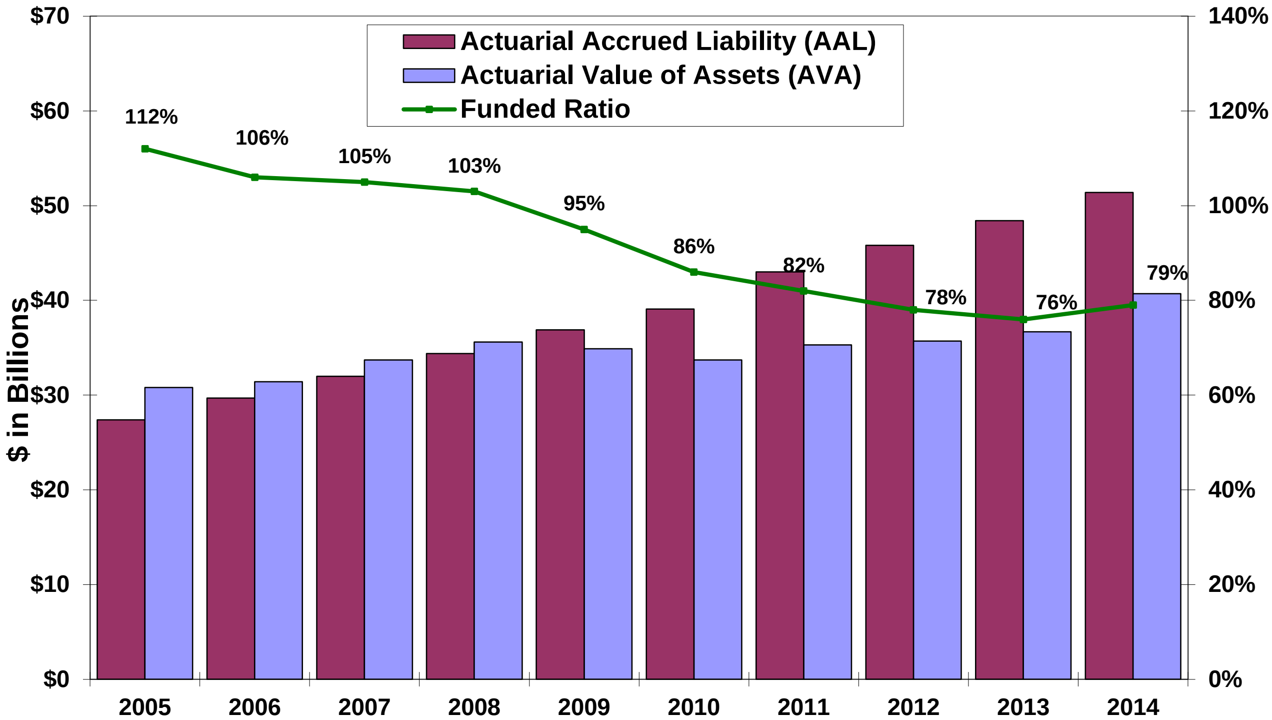
Comparing the market value of assets of $52.8 billion to the actuarial (smoothed) value of assets of $48.3 billion shows that the total unrecognized investment gain as of July 1, 2014 is $4.46 billion. This investment gain will be recognized in the determination of the actuarial value of assets for valuation purposes over the next few years. Thus, if the Plan earns the assumed rate of investment return of 7.5 percent per year (net of investment expenses) on a market value basis, there will be investment gains on the actuarial value of assets in the next few years. More information concerning the impact of these unrecognized investment gains is presented later in this discussion.

UCRP's overall AAL increased from $57.4 billion as of July 1, 2013 to $60.4 billion as of July 1, 2014. UCRP's funded status ratio increased from 76 percent as of July 1, 2013 to 80 percent as of July 1, 2014 mainly due to the investment gain on the actuarial value of assets offset to some extent by actual contributions being less than those expected under the funding policy. Note that on a market value of assets basis the funded status ratio increased from 79 percent to 87 percent.

The "normal cost" of UCRP is the annual amount, expressed as a percent of payroll (the "Normal Cost rate") that must be accrued over the total career of each active member to fully provide for future UCRP benefits, measured as of the valuation date. Under the entry age normal method, the UCRP Normal Cost calculated as of the beginning of the 2014-15 Plan Year is 17.59 percent of covered payroll.

Overview of Funded Status of Campus and Medical Center Segment of UCRP

The following chart shows the recent history of the campus and medical center segment of UCRP's overall AAL growth along with the decrease in the funded status ratio on an actuarial value of assets (AVA) basis, except for the most recent year in which the funded status ratio actually increased.



Total Funding Policy Contribution Rates for Plan Year 2015-16

After applying the UCRP funding policy to the results of this year's UCRP campus and medical center segment, the total funding policy contribution rate for Plan Year 2015-16 is 28.79 percent of projected covered payroll. The components of the total funding policy contribution rate are shown below:

Normal Cost	17.59%
Amortization of Unfunded Actuarial Accrued Liability (or Surplus)	10.18%
	======
Total funding policy contribution rate, before timing adjustment	27.77%
Total funding policy contribution rate, after timing adjustment	28.79%

The total funding policy contribution rate includes a timing adjustment to account for contributions being made throughout the year. No additional adjustment is included to account for contributions at this rate not starting until the Plan Year beginning July 1, 2015.

The total funding policy contribution as an estimated dollar amount for the campus and medical center segment of UCRP is $2.705 billion based on projected covered payroll of $9.4 billion for Plan Year 2015-16.

Actual Contribution Rates

In February 2009, the Regents approved restarting contributions for the campus and medical center segment of UCRP. In July 2013, the Regents approved increases in the contribution rates for the Plan Year beginning July 1, 2014. The University rate increased from 12 percent to 14 percent of covered payroll. The employer contribution rate is uniform, applying to all members regardless of hire date. The pretax contribution rate for 1976 Tier members, other than those members subject to the Modified 2013 Tier contribution rate described below, increased from 6.5 percent to eight percent of covered pay (less $19 per month). The contribution rate for 2013 Tier members remains at seven percent of covered pay (with no $19 per month offset) as of July 1, 2014. The seven percent rate was initially approved by the Regents in December 2010.

Member rates are subject to collective bargaining for represented employees. During bargaining, three unions agreed to modifications to the standard employee contribution rates established for 1976 Tier and 2013 Tier members, pursuant to which all their members began contributing nine percent of covered pay (less $19 per month for 1976 Tier members) effective on or about July 1, 2014. Those unions are California Nurses Association (CNA), University Professional and Technical Employees (UPTE), and the American Federation of State, County and Municipal Employees (AFSCME).

For years in which the actual contributions are less than the total funding policy contributions, future actuarial losses are generated that will lead to increases in future total funding policy contributions.

The University contributions and the member contributions for the LBNL segment are made on the same basis as determined for the campus and medical center segment of UCRP, subject to the terms of the University’s contract with the Department of Energy and subject to collective bargaining for represented members at LBNL.

Modifications Applicable to Certain Unions

In December 2010 the Regents approved a new tier of UCRP benefits for members hired (or rehired after a break in service) on or after July 1, 2013 (the 2013 Tier), which would increase the earliest retirement age from 50 to 55, but retain many of the current features of UCRP. The 2013 Tier has a maximum age factor of 2.5 percent at age 65 in contrast to age 60 for the 1976 Tier. The 2013 Tier does not offer lump sum cashouts, inactive member cost-of-living adjustments (COLAs), or subsidized survivor annuities for spouses and domestic partners. The bargaining units of the CNA, UPTE and AFSCME unions agreed to the following modifications to the standard provisions of the 2013 Tier for their members:

- The range of retirement ages and age factors is the same as those for the 1976 Tier (i.e., earliest retirement age is 50 and the earliest age for the maximum age factor of 2.5 percent is 60).

- The lump sum cashout is available as a payment option on the modified 2013 Tier benefit, similar to the 1976 Tier.
- The member contribution rate is nine percent of covered pay beginning with the 2014-15 Plan Year.

As a result of the higher member contributions, as of their adoption date the modifications were not projected to negatively affect the Plan's funded status over a 30-year projection period. Members subject to these modifications are characterized as Modified 2013 Tier members. Members of the bargaining units of the CNA, UPTE and AFSCME who are 1976 Tier members are also required to contribute at the nine percent rate, but are not subject to the other provisions of the Modified 2013 Tier. For all purposes other than employee contribution rates, they remain 1976 Tier members.

Funding of "Modified" Annual Required Contribution

In March 2011, the Regents delegated to the President the authority and discretion to make additional contributions to UCRP using one or more of the following options: borrowing from the Short Term Investment Pool (STIP), restructuring of University debt, or funding from other internal or external sources. These additional contributions are intended to fund the Modified Annual Required Contribution (or Modified ARC), which consists of the Normal Cost plus interest on the Unfunded Actuarial Accrued Liability (UAAL). The Regents approved a transfer of $700 million from STIP to UCRP, in order to approximate full funding of the modified ARC for 2013-14. The valuation results exclude the $700 million transfer as the transfer occurred after July 1, 2014.

The locations are assessed a separate supplementary amount to pay for the debt service on the supplemental contributions to UCRP. The additional assessment for FY 2011-12 was 0.63 percent (10.63 percent total), 0.65 percent for FY 2012-13 (12.65 percent total) and 0.72 percent for FY 2013-14 (14.72 percent total).[1]

Impact of Unrecognized Investment Gains for UCRP

The unrecognized investment gains represent about eight percent of UCRP's market value of assets. Unless offset by future investment losses or other unfavorable experience, the recognition of the $4.46 billion in market gains is expected to have an impact on the Plan's future funded ratio and future total funding policy contributions. This potential impact may be illustrated as follows:

- If the deferred gains were recognized immediately in the actuarial value of assets, the funded percentage would increase from 80 percent to 87.4 percent.
- If the deferred gains were recognized immediately in the actuarial value of assets, the total funding policy contribution rate would decrease from 28.8 percent of covered payroll to 25.4 percent of covered payroll.

[1] The additional assessment is repaid to the University accounts that provided the borrowed funds; it is not contributed into UCRP. The assessment amount will be reset each year and is projected to range from 0.60 percent – 1.35 percent of covered payroll over the next five- to ten-year period.

Disclosures and Reporting

The Governmental Accounting Standards Board (GASB) approved two new Statements affecting the reporting of pension liabilities for accounting purposes. Statement 67 replaces Statement 25 and is for Plan reporting. Statement 68 replaces Statement 27 and is for employer reporting. Statement 67 is effective with the fiscal year ending June 30, 2014 for Plan reporting. Statement 68 is effective with the fiscal year ending June 30, 2015 for employer reporting, however, the administration understands that the University intends early implementation of Statement 68 for the fiscal year ending June 30, 2014. The information needed to comply with both Statements 67 and 68 is provided in a separate report.

Actuarial Experience Study

Periodically, the Regents' Consulting Actuary for UCRP conducts an actuarial experience study. The last actuarial experience study covered the period from July 1, 2006 through June 30, 2010. It is anticipated that another actuarial experience study will be performed during the first half of 2015. As part of this study, recommendations for changes in actuarial assumptions may be made. For each of UCRP's demographic actuarial assumptions, these recommendations will generally be based on a comparison of actual experience versus that which was expected to occur. For each of UCRP's economic actuarial assumptions, a determination will be made on whether the current economic assumptions (including price inflation, wage inflation, and investment return) are still appropriate.

UNIVERSITY OF CALIFORNIA RETIREMENT PLAN
Overall Actuarial Valuation Highlights
(Dollars in 000,000's)

Valuation Date	**7/1/2005**	**7/1/2006**	**7/1/2007**[1]	**7/1/2008**	**7/1/2009**	**7/1/2010**	**7/1/2011**[2]	**7/1/2012**	**7/1/2013**	**7/1/2014**
Asset Information										
(1) Plan Assets at Fair Market Value (MV)	$41,858	$43,362	$48,105	$42,023	$32,259	$34,574	$41,873	$41,806	$45,341	$52,784
(2) Actuarial Value of Assets (AVA)[3]	41,085	41,972	43,434	43,840	42,799	41,195	42,757	42,965	43,572	48,328
Actuarial Valuation Results – Contribution Basis										
(3) Normal Cost (Beginning of Plan Year)	$1,250	$1,305	$1,276	$1,262	$1,339	$1,354	$1,404	$1,500	$1,563	$1,636
(4) % Payroll (Beginning of Plan Year)	15.34%	15.81%	16.76%	16.90%	17.00%	16.94%	17.20%	17.44%	17.70%	17.59%
(5) Actuarial Accrued Liability (AAL: Entry Age)[4]	37,252	40,302	41,437	42,577	45,161	47,504	51,831	54,620	57,381	60,417
(6) Actuarial Value of Assets in Excess of AAL	3,832	1,671	1,997	1,263	-2,362	-6,309	-9,074	-11,655	-13,809	-12,089

[1] Liabilities and costs reflect the economic and demographic assumptions adopted 7/1/2007.

[2] Liabilities and costs reflect the economic and demographic assumptions adopted 7/1/2011.

[3] Actuarial Value of Assets: The expected market value plus investment gains/losses recognized over a five-year period.

[4] AAL: The actuarial accrued liability based on the funding method used to value UCRP. The actuarial present value of plan benefits and expenses allocated to years prior to the valuation date.

UC-PERS Plus 5 Plan Valuation Results

On October 18, 1990, the Regents approved an early retirement incentive program for University employees who were covered under the California Public Employees' Retirement System (CalPERS) pension plan. The most tax-effective method to provide this group with a benefit generally comparable to the incentive offered to UCRP members was to establish a "frozen" defined benefit plan described in Section 401(a) of the Internal Revenue Code.

The UC-PERS Plus 5 Plan required campus and Laboratory locations to fund their individual liabilities over a period no longer than five years. The UC-PERS Plus 5 Plan is a standard terminal funding arrangement under a wasting trust which, in this instance, is obligated to make fixed lifetime payments under either a single life or joint and survivor annuity option. The assets must remain in the trust until all benefit obligations have been satisfied. Market value of assets, rather than a smoothed value, is used for actuarial valuation purposes. The Regents' Consulting Actuary, Segal Consulting, reviews the trust's fiscal position and funding status annually to assure that the UC-PERS Plus 5 Plan is adequately funded.

In December 2010, the Regents approved a one-time ad hoc cost-of-living adjustment (COLA) of 15.19 percent for all PERS Plus 5 Plan annuitants as of April 1, 2011 and an annual COLA provision, effective July 1, 2011, using the equivalent UCRP COLA formula.

As of July 1, 2014, the net assets of the wasting trust were $70 million and the Actuarial Accrued Liability was $38.6 million. The primary reason for the increase in the surplus was investment performance that was more favorable than assumed (approximately an 18 percent investment return versus the assumed 7.5 percent investment return).

As of July 1, 2014, there were 614 retired members and beneficiaries in the UC-PERS Plus 5 Plan, down from 634 as of July 1, 2013.

APPENDIX I – Summary of Annual Actuarial Valuation Results by UCRP Segment and for the UC-PERS Plus 5 Plan

APPENDIX II - Glossary of Actuarial Terms

Attachment 1 - UCRP Actuarial Valuation Report as of July 1, 2014;
Attachment 2 - UC-PERS Plus 5 Plan Actuarial Valuation Report as of July 1, 2014

APPENDIX I
SUMMARY OF ANNUAL ACTUARIAL VALUATION RESULTS BY UCRP SEGMENT AND FOR THE UC-PERS PLUS 5 PLAN

UCRP Campus and Medical Center Segment Valuation Results

- The June 30, 2014 campus and medical center segment market value of assets was $44.5 billion and the segment actuarial value of assets was $40.7 billion.
- The July 1, 2014 segment Actuarial Accrued Liability was $51.4 billion.
- The segment funded ratio on an actuarial value of assets basis was 79.2 percent as of July 1, 2014.
- The segment Normal Cost calculated as of the beginning of Plan Year 2014-15 is $1.59 billion or 17.59 percent of the $9.03 billion covered payroll at July 1, 2014. After adjusting for contributions made throughout the year, the segment Normal Cost is 18.24 percent of covered payroll.
- Based on the funding policy approved by the Regents, the total funding policy contribution rate is 28.79 percent of projected covered payroll, which results in an estimated annual dollar amount of $2.71 billion for Plan Year 2015-16.

UCRP Lawrence Berkeley National Laboratory (LBNL) Segment Valuation Results

- The June 30, 2014 LBNL segment market value of assets was $2.08 billion and the segment actuarial value of assets was $1.91 billion.
- The July 1, 2014 segment Actuarial Accrued Liability is $2 billion.
- The segment funded ratio on an actuarial value of assets basis was 95.6 percent as of July 1, 2014.
- The University contributions and the member contributions for the LBNL segment will be made on the same basis as determined for the campus and medical center segment of UCRP, subject to the terms of the University’s contract with the Department of Energy and subject to collective bargaining for represented members at LBNL.

UCRP Lawrence Livermore National Laboratory (LLNL) Retained Segment Valuation Results

- The June 30, 2014 LLNL segment market value of assets was $3.35 billion and the segment actuarial value of assets was $3.07 billion.
- The July 1, 2014 segment Actuarial Accrued Liability was $3.84 billion.
- The segment funded ratio on an actuarial value of assets basis was 79.9 percent as of July 1, 2014.
- Based on a contractual obligation, the required contribution from the Department of Energy (DOE), subject to available funding, for Plan Year 2014-15 (due by February 29, 2016) is $237.1 million.

UCRP Los Alamos National Laboratory (LANL) Retained Segment Valuation Results

- The June 30, 2014 LANL segment market value of assets was $2.87 billion and the segment actuarial value of assets was $2.62 billion.
- The July 1, 2014 segment Actuarial Accrued Liability was $3.17 billion.
- The segment funded ratio on an actuarial value of assets basis was 82.6 percent as of July 1, 2014.
- Based on a contractual obligation, the required contribution from the Department of Energy (DOE), subject to available funding, for Plan Year 2014-15 (due by February 29, 2016) is $141.4 million.

UC-PERS Plus 5 Plan Valuation Results

- The June 30, 2014 market value of assets of the UC-PERS Plus 5 Plan was $70 million, up from $64.1 million for the prior year, reflecting approximately an 18 percent net investment return.
- The July 1, 2014 Actuarial Accrued Liability for the UC-PERS Plus 5 Plan decreased to $38.6 million from $40.7 million for the prior year.
- The UC-PERS Plus 5 Plan funded ratio increased from 158 percent as of July 1, 2013 to 181 percent as of July 1, 2014.

APPENDIX II: GLOSSARY OF ACTUARIAL TERMS

- **Present Value of Benefits (PVB)**: the "value" at a particular point in time of all projected future benefit payments for current plan members. The "future benefit payments" and the "value" of those payments are determined using actuarial assumptions as to future events. Examples of these assumptions are estimates of retirement patterns, salary increases, investment returns, etc. Another way to think of the PVB is that if the plan has assets equal to the PVB and all actuarial assumptions are met, then no future contributions would be needed to provide all future service benefits for all current members, including future service and salary increases for active members.

- **Actuarial Cost Method**: allocates a portion of the total cost (PVB) to each year of service, both past service and future service.

- **Normal Cost (NC)**: the cost allocated under the Actuarial Cost Method to each year of active member service.

- **Actuarial Accrued Liability (AAL)**: the value at a particular point in time of all past Normal Costs. Plan assets would match this amount if the current plan provisions, actuarial assumptions and participant data had always been in effect, contributions equal to the Normal Cost had been made and all actuarial assumptions came true.

- **Actuarial Value of Assets (AVA) or smoothed value**: a market-related value of the plan assets for determining contribution requirements. The AVA tracks the market value of assets over time, smoothes out short-term fluctuations in market values and produces a smoother pattern of contributions than would result from using market value.

- **Market Value of Assets**: the fair value of assets of the plan as reported by the Plan's trustee, typically shown in the Plan's audited financial statements.

- **Unfunded Actuarial Accrued Liability (UAAL)**: the positive difference, if any, between the AAL and the AVA.

- **Surplus**: the positive difference, if any, between the AVA and the AAL.

- **Actuarial Value Funded Ratio**: the ratio of the AVA to the AAL.

- **Market Value Funded Ratio**: the ratio of the MVA to the AAL.

- **Actuarial Gains and Losses**: changes in UAAL or surplus due to actual experience different from what is assumed in the actuarial valuation. For example, if during a given year the assets earn more than the current assumption of 7.5 percent, the amount of earnings above 7.5 percent will cause an unexpected reduction in UAAL, or "actuarial gain" as of the next valuation. These include contribution gains and losses that result from actual contributions made being greater or less than the level determined under the funding policy.