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SANTA BARBARA • SANTA CRUZ

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October 8th 2014

US Nuclear Regulatory Commission
Document Control Desk
Washington DC 20555
Attention: A. Jason Lising, Project Manager

Re: Docket 50-326, License R-116
Re: ML141221A517 (TAC NO. ME1579)

Dear Mr Lising:

Please find attached the response regarding financials from the your fiscal RAI (dated May 8, 2014). An SOI letter from our Executive Vice-Chancellor and Provost is being sent directly under separate cover.

I declare under penalty of perjury that the foregoing and the attached is true and correct.

Executed on October 8th 2014

A handwritten signature in black ink that reads "G. E. Miller".

Dr. George E. Miller
Supervisor

A020
MLR

UNIVERSITY OF CALIFORNIA-IRVINE NUCLEAR REACTOR FACILITY

RESPONSE TO

REQUEST FOR ADDITIONAL INFORMATION DATED MAY 8 2014

REGARDING FINANCIAL QUALIFICATIONS FOR THE LICENSE RENEWAL FOR

LICENSE NO. R-116

DOCKET NO. 50-326

For convenience, NRC text is reproduced in italics below. Our responses are added as regular text.

The U.S. Nuclear Regulatory Commission (NRC) is continuing its review of the University of California, Irvine (UCI, the licensee) application for the renewal of Facility Operating License No. R-116 for the UCI Nuclear Reactor Facility dated October 18, 1999 (a redacted version of the application is available on the NRC's public Web site at www.nrc.gov under Agencywide Documents Access and Management System Accession No. ML083110112), as supplemented.

As required by Title 10 of the Code of Federal Regulations (10 CFR) Section 50.33(f)(2), "[a]pplicants to renew or extend the term of an operating license for a nonpower reactor shall include the financial information that is required in an application for an initial license." To comply with this requirement, please provide an update to the supplemental information provided by letter dated August 25, 2010 (ADAMS Accession No. ML102500270). In some cases, the responses provided in afore-mentioned letters may not have changed (e.g., requests for additional information 4.(b) and 4.(c)). In that case, please indicate in the response "no change," no additional information is necessary, and the NRC staff will consider the response provided in the submittals to remain current.

1. The NRC staff will analyze the financial statements for the current year, which are required by 10 CFR 50.71(b), to determine if the applicant is financially qualified to operate the UCI Nuclear Reactor Facility. Since UCI's financial statements included with the application are out of date, please provide a copy of the latest financial statements for the NRC staff's review.

The latest complete University of California Financial report available is for 2012-2013 and may be accessed at <http://finreports.universityofcalifornia.edu/index.php?file=12-13/pdf/fullreport-1213.pdf>

As in 2010, the UC Irvine reference "facts in brief" page for this has been extracted (page number 10) and is presented on the next page. Please note that the data are in thousands of dollars, i.e., the total operating budget is over \$2 billion.

IRVINE

STUDENTS

Undergraduate fall enrollment	22,309
Graduate fall enrollment	5,875
Total fall enrollment	28,184
University Extension enrollment ¹	33,471

DEGREES CONFERRED²

Bachelor	6,378
Advanced	1,677
Cumulative	159,743

FACULTY AND STAFF³ (full-time equivalents) 13,405

LIBRARY COLLECTIONS⁴ (volumes) 3,234,745

CAMPUS LAND AREA (in acres) 1,526

CAMPUS FINANCIAL FACTS⁵ (in thousands of dollars)

OPERATING EXPENSES BY FUNCTION

Instruction	\$ 487,623
Research	248,187
Public service	8,892
Academic support	163,637
Student services	57,041
Institutional support	68,867
Operation and maintenance of plant	38,736
Student financial aid	88,454
Medical centers	704,902
Auxiliary enterprises	122,581
Depreciation and amortization	177,451
Other ⁶	13,529

Total **\$2,179,900**

GRANTS AND CONTRACTS REVENUE

Federal government	\$ 217,427
State government	19,171
Local government	3,481
Private	61,674

Total **\$ 301,753**

UNIVERSITY ENDOWMENTS

Endowments	\$ 63,355
Annual income distribution	2,563

CAMPUS FOUNDATIONS' ENDOWMENTS

Endowments	\$ 261,488
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CAPITAL ASSETS

Capital assets, at net book value	\$ 2,660,577
Capital expenditures	171,553

¹ For academic year 2012-13.

² As of academic year 2011-12.

³ As of October 2012.

⁴ Excludes DOE laboratories.

⁵ As of June 30, 2013.

⁶ Includes non-capitalized expenses associated with capital projects at risk for loans.

2. Pursuant to 10 CFR 50.33(f)(2), the regulation states that “[t]he applicant shall submit estimates for total annual operating costs for each of the first five years of operation of the facility.” Since the information included in the application is now out of date, please provide the following additional information:

(a) Projected operating costs for the UCI Nuclear Reactor Facility for each of the fiscal years (FYs) 2015 thru 2019 (the first five year period after the projected license renewal).

Future operating costs are estimated based on past practices over the last few years. These practices are expected to continue. There is currently a small semi-permanent assigned salary budget for the facility, and a full time engineer salary paid partly from a continuing NNSA grant and partly from recharge income. The figures given below are for salaries and for "other" costs as described below.

Administration of the reactor is the responsibility of teaching faculty paid from University of California instructional funds, with occasional teaching relief. Instructional funds derive from a state budget allotment to the Regents of the University of California based on enrollment, and include all benefits. Graduate assistants, who may be operators, are employed as research assistants on grants or as teaching assistants in courses and operate the reactor as part of those responsibilities. Such Assistantships pay all benefits and student fees. The dollar value of these assignments (faculty or students) varies with the salary level of the assigned individual. Radiological Safety oversight is provided by the UCI Environmental, Health and Safety Office at no direct charge to the facility: Emergency and security response is likewise made at no charge (including training and exercises) by UCI EH&S, UCIPD, and Orange County Fire Authority units. None of these costs have been included in the budget presented below.

All other costs -supplies, maintenance, surveillance, including casual (student) labor, and costs of specialized health physics-assistance(e.g., shipping radioisotopes),and fiscal support (billing and accounting)are provided for by external and internal charges for facility use. The reactor operates as a UC standard recharge facility (and charge rates per hour of reactor and/or other facility equipment use have been established for all users.) The projections assume a 3% per annum inflation factor. However, the recharge system allows for annual review of charges which can be adjusted to meet actual or projected changes in costs of operations.

Year	Salaries*	Other costs
2014-15	\$105,839	\$22,000
2015-16	\$119,375	\$22,660
2016-17	\$115,117	\$23,339
2017-18	\$118,570	\$24,040
2018-19	\$122,132	\$24,761

*includes all benefits

(b) Confirm that UCI's primary source of funding to cover the operating costs for the afore-mentioned FYs will be funding by an annual appropriation from the State of California's budget as described in the application.

The funding sources have been described in 2(a) above. There have been substantial changes in the budget situation since first submittal in 1999, and as later submitted in 2010. Partly this is as a result of a marked increase in facility utilization, which has led to both greater demand for services and greater sources of revenue.

3. *The August 25, 2010, supplement (ADAMS Accession No. ML102500270) to the application, references a decommissioning cost estimate for the UCI Nuclear Reactor Facility of 2 million dollars (2011 dollars). In 10 CFR 50.75(d)(1), it states that "[e]ach non-power reactor applicant for or holder of an operating license for a production or utilization facility shall submit a decommissioning report as required by §50.33(k) of this part." Under 10 CFR 50.75(d)(2) the report must "(i) [c]ontain a cost estimate for decommissioning the facility; (ii) [i]ndicate which method or methods described in paragraph (e) of this section as acceptable to the NRC will be used to provide funds for decommissioning; and (iii) [p]rovide a description of the means of adjusting the cost estimate and associated funding level periodically over the life of the facility."*

The NRC staff needs the following additional information to complete its review of the UCI Nuclear Reactor Facility license renewal application, please provide the following:

(a) A current decommissioning cost estimate in 2015 dollars for the UCI Nuclear Reactor Facility to meet the NRC's radiological release criteria for decommissioning the facility for unrestricted use, pursuant to 10 CFR 50.75(d)(2). Accordingly, describe the basis for how the cost estimate was developed, showing costs in current dollars, specifically broken down into the categories of labor, waste disposal, other items (e.g., energy, equipment, and supplies), and a 25 percent contingency factor.

In the 2010 submittal, an overall cost estimate of \$2 million was based on University of Arizona detailed estimates for decommissioning of their facility. Additionally a comparison chart was included to show the similarities and differences for the UC Irvine facility compared to U of A. This is still the basis of our estimate. An additional factor is that the University of Arizona has stated that its total expenditures including hiring of professionals to certify final radiation levels, and renovation of space was only \$1.65 million. (*private communication, August 2014, from Ms. Claudia Garcia, Associate VP for Research*).

So we suggest that our 2010 estimate is unchanged (to one significant figure) and stands at \$2 million.

(b) State the decommissioning method to be used. If SAFSTOR is the proposed method, please state.

This discussion is unchanged from 2010.

(c) A description of the means of adjusting the cost estimate and associated funding level periodically over the life of the facility, to comply with 10 CFR 50.75(d)(2)(iii). Also, please provide a detailed numerical example showing how the 2015 cost estimate will be adjusted periodically in the future.

The discussion presented in 2010 is unchanged.

4. *The application includes a statement of intent (SOI) as the chosen method to provide decommissioning funding assurance for the UCI Nuclear Reactor Facility. If the applicant intends to use a SOI as the method to provide decommissioning funding assurance, as provided for by 10 CFR 50.75(e)(1)(iv), the NRC staff must find that the applicant "... is a Federal, State, or local government licensee. ..."* To make this finding, the applicant must state that it is a State government organization and that the decommissioning funding obligations of the applicant are backed by the State government, and also provide corroborating documentation. Further, the applicant must provide documentation verifying that the signatory of the SOI is authorized to execute said document that binds UCI. This document may be a governing body resolution, management directives, or other form that provides an equivalent level of assurance. Since the application does not include all of the above information, please submit the following:

(a) *An updated SOI which includes the current (2015 dollars) cost estimate for decommissioning; a statement that funds for decommissioning will be obtained when necessary; name and title of signatory; and the signatory's oath or affirmation attesting to the information.*

As the cost estimate is unchanged, this is unchanged. However the signatory has changed. A new SOI will be submitted under separate cover from the Executive Vice-Chancellor and Provost's office, as soon as possible after October 1st, 2014.

(b) *Documentation that corroborates the statement in the application that UCI is a State agency and a State of California government licensee under 10 CFR 50.75(e)(2)(iv).*

Unchanged. Article 9 of the State of California Constitution was submitted in evidence

(c) *A statement as to whether the decommissioning funding obligations for UCI are backed by the State of California government. The application must also present documentation that corroborates this statement. For example, the documentation may be a copy of or complete citation to a state statute that expressly provides that the obligations, or at least the decommissioning funding obligations of the applicant are backed or supported by the full faith and credit of the State of California, or an opinion of the applicant's General Counsel with citations to statutes, regulations, and/or case law that the obligations, or at least those with respect to the decommissioning funding of the applicant are obligations backed or supported by the full faith and credit of the State of California.*

See 4(b) above.

(d) *Documentation verifying that the signatory of the SOI is authorized to execute such a document that binds the applicant financially. For example, provide a copy of UCI's governing board or equivalent resolution that shows that the signatory of the SOI has been authorized by UCI to bind UCI financially, at least with respect to funding the decommissioning of the UCI Nuclear Reactor Facility, or provide a copy of an official UCI delegation of authority showing that the signatory of the SOI is authorized to bind UCI financially, at least with respect to funding the decommissioning of the UCI Nuclear Reactor Facility.*

Delegation of authority for UC Irvine budgetary reassignments and for nuclear reactor licensing matters is primarily to the Executive Vice-Chancellor (now Executive

Vice-Chancellor and Provost) and is contained in the following on-line references. Copies of these are attached.

<http://www.policies.uci.edu/da/ida104.html>

<http://www.policies.uci.edu/da/ida099.html>

UC IRVINE DELEGATION OF AUTHORITY

IDA104 - Operating Budget Amendments

IDA 104

July 21, 1995

EXECUTIVE VICE CHANCELLOR
VICE CHANCELLORS
EXECUTIVE DIRECTOR-UCI MEDICAL CENTER
ASSISTANT EXECUTIVE VICE CHANCELLOR-RESOURCE MANAGEMENT AND
ANALYSIS
DEAN OF UNIVERSITY EXTENSION
ASSISTANT VICE CHANCELLOR-ACCOUNTING AND FISCAL SERVICES
DIRECTOR, OFFICE OF FINANCIAL PLANNING

RE: Redelegation of Authority: Amendments to Operating Budget

The authority to approve amendments to the operating budget, as specifically detailed in Chapter 4010, Sections II, IV, VC, and VIC of the University Planning and Budget Manual, is redelegated to the Executive Vice Chancellor for all appropriate categories at UCI, and is also extended to Vice Chancellors, the Executive Director-UCI Medical Center, the Assistant Executive Vice Chancellor-Resource Management and Analysis, and the Dean of University Extension and Director of Summer Session for operating budgets under their control.

In addition, the authority to approve amendments to the operating budget is delegated to the Director, Office of Financial Planning for staff salary adjustments and benefits (all coordinating points) and to the Assistant Vice Chancellor-Accounting and Fiscal Services for routine ledger corrections (all coordinating points).

Any further redelegation of this authority must be approved by the Executive Vice Chancellor and copies must be on file with the Office of Financial Planning and the Accounting Office.

The Executive Vice Chancellor may approve temporary and permanent transfers of campus appropriations between operating functions (program and sub-budget points) except General Funds, State Specific Appropriations, State Special Funds, Educational Fee, Educational Fund, Federal Endowment Fund, Nuclear Science Fund, Searles Fund, State Tideland Fund, University Fund, University Opportunity Fund, and University Patent Fund. This authority may not be redelegated.

This redelegation of authority supersedes Chancellor Peltason's December 13, 1985 redelegation on the same subject.

Laurel L. Wilkening
Chancellor

cc: Secretary of the Regents
Provost and Senior Vice President-Academic Affairs
Special Assistant-Coordination and Review
Associate Executive Vice Chancellor
Director, Financial Planning
Counsel to the Chancellor
Director, Internal Audit
Coordinator, Campus Administrative Policies

**UC Irvine Delegations Index : Official University Policies &
Procedures : Questions : UC Irvine**

UC IRVINE DELEGATION OF AUTHORITY

IDA099 - Radioactive Materials

IDA 099

April 2, 1994

EXECUTIVE VICE CHANCELLOR
VICE CHANCELLOR-ADMINISTRATIVE AND BUSINESS SERVICES
EXECUTIVE DIRECTOR-UCI MEDICAL CENTER
DEAN, PHYSICAL SCIENCES
DIRECTOR, ENVIRONMENT, HEALTH AND SAFETY

RE: Redlegation of Authority - Radioactive Materials

The responsibility for nuclear reactor construction and operating licenses, for Department of Energy licenses for out-of-state operations and for any other licenses for radioactive materials and related activities was delegated to Chancellors by Presidential Delegation of Authority DA 0131, November 23, 1966. I am redelegating that authority as follows:

Vice Chancellor-Administrative and Business Services; Director, Environment, Health and Safety; and the Health Physics Manager

The Vice Chancellor-Administrative and Business Services; the Director, Environment, Health and Safety; and the Health Physics Manager are delegated the authority and responsibility for nuclear reactor construction and operating licenses, for Department of Energy licenses for out-of-state operations, and for any other licenses for radioactive materials, except as noted below. This authority and responsibility may not be redelegated further.

Executive Director, UCI Medical Center

The Executive Director is delegated the authority and responsibility to act on behalf of the University in correspondence with the regulatory and accreditation agencies regarding the Radiation Safety Program at UCI Medical Center, to review all amendments to the UCI Medical Center radioactive materials

license to the State, and to sign all applications for renewal of the UCI Medical Center radioactive materials license. This authority may be redelegated further.

Dean, Physical Sciences

The Dean of Physical Sciences is delegated the authority to file nuclear reactor fuel inventory reports with the Nuclear Regulatory Commission. This authority may not be redelegated further.

Executive Vice Chancellor

The Executive Vice Chancellor is delegated the authority to represent the Irvine campus on license matters pertaining to the Department of Chemistry's nuclear reactor. This authority may not be redelegated further.

This delegation supersedes the following delegations of authority:

Chancellor to Vice Chancellor Administrative and Business Services, July 12, 1985 re Licenses for Radioactive Materials

Acting Vice Chancellor-Administrative and Business Services to Director, Environmental Health and Safety, January 2, 1987, re Licenses for Radioactive Materials

Chancellor to Executive Vice Chancellor and Dean of Physical Sciences, March 13, 1986, re Department of Chemistry Nuclear Reactor

Chancellor to Director of Clinical Services, March 26, 1986, re Radiation Safety Program at UCIMC (only that portion concerning the specific issued addressed in this memo is superseded.)

Laurel L. Wilkening
Chancellor

cc: Counsel to the Chancellor
Director, Internal Audit
Coordinator, Campus Administrative Policies