REED COLLEGE

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March 15, 2010

ATTN: Document Control Desk
U S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Docket: 50-288
License No: R-112
Subject: RAI TAC NO. ME1583

Attached are the answers to the subject RAI dated December 10, 2009. The response and attachments do not contain any sensitive information.

Please contact us if you have any questions. Thank you.

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

Executed on 3-15-10

Stephen G. Frantz
Director, Reed Research Reactor.

A020
NRR

As required by Title 10 of the Code of Federal Regulations (CFR) Section 50.33(f)(2), "Applicants 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 the following updated and supplemental information to the August 29, 2007, Reed College application (the application) for a renewed license for the Reed College Research Reactor (RRR).

1. *Pursuant to 10 CFR 50.33(d), "Contents of applications; general information," certain information is required by the applicant, Reed College, as applicable. To comply with the regulation, please update the application to include a statement of the organizational form of Reed College (e.g., corporation, etc.), the state where it is incorporated or organized and the principal location where Reed College does business, and the names, addresses and citizenship of directors and principal officers. Also, please state whether Reed College is owned, controlled, or dominated by an alien, a foreign corporation, or foreign government, and if so give details.*

   Reed Institute (dba Reed College) is incorporated in the state of Oregon. Its principal location of business is 3203 SE Woodstock Blvd., Portland, Oregon. The articles of incorporation are attached.

   The names of the and addresses of the trustees and principal officers are attached.

   Reed College is not owned, controlled, or dominated by an alien, a foreign corporation, or foreign government.

2. *The U. S. Nuclear Regulatory Commission (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 RRR. Since Reed College's financial statements submitted in 2007 are currently out of date, please provide a copy of the latest financial statements for the NRC staff's review.*

   The latest audited financial statements are attached.

3. *Pursuant to 10 CFR 50.33(f)(2), "The 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 outdated, please provide the following additional information:*

   (a) *Provide the estimated operating costs (in full dollar amounts) for each of the fiscal years (FY) 2012 through FY2016 (the first five-year period after the projected license renewal).*

Account	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Staff Salaries	$107,700	$109,000	$113,000	$116,000	$120,000	$123,000
Student Wages	$18,300	$19,200	$19,000	$20,000	$20,000	$21,000
Student Wages: Work-study	$3,800	$4,000	$4,000	$4,000	$4,000	$4,000
Supplies	$15,100	$15,600	$16,000	$16,000	$17,000	$17,000
Postage-Departmental	$500	$500	$500	$500	$500	$500

Account	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Telephone & Fax	$1,300	$1,300	$1,000	$1,000	$1,000	$1,000
Fees & Services	$30,400	$31,300	$32,000	$33,000	$34,000	$35,000
Duplicating/ Printing	$700	$700	$700	$700	$700	$700
Conferences/ Travel	$5,800	$6,000	$6,000	$6,000	$6,000	$6,000
Insurance	$8,200	$8,400	$8,000	$8,000	$9,000	$9,000
TOTAL	$191,800	$196,900	$200,200	$205,200	$212,200	$217,200

(b) *Provide Reed College's primary source(s) of funding to cover the operating costs for the above FY (e.g., state-funded budget, DOE grants, etc.).*

The primary funding source is tuition and the endowment.

4. *The August 29, 2007, submittal from Reed College to the NRC states that the current estimated cost to decommission the RRR is between $1 million and $1.5 million. In order for the NRC staff to complete its review of the decommissioning cost estimate, please update the application by including the following additional information:*

(a) *A current cost estimate (2011 dollars) for the RRR to meet the NRC's radiological release criteria for decommissioning the facility for unrestricted use. Accordingly, describe the basis on how the cost estimate was developed, show costs specifically broken down into the categories of labor, waste disposal, other items (such as energy, equipment, and supplies), and include a contingency factor of at least 25 percent.*

The estimated cost of decommissioning the Reed Research Reactor as of January 2011 is approximately $1,036,000.

The price of decommissioning was estimated by our contractors to be $500,000 in 1992. [Letter from Ronal Katheren, Washington State University and George Miller, University of California, to Reed College dated March 9, 1992]

From 10 CFR 50.75(c)(2) The estimated breakdown would be 0.65 (L) + 0.13 (E) + 0.22 (B)

The Consumer Price Index (CPI-U) for Portland-Salem, all items, was pulled from the U.S. Bureau of Labor and Statistics website, < http://www.bls.gov/ro9/9235.pdf>. 1991 was used for conservatism.

CPI for Portland-Salem in January 2009 = 215.647

CPI for Portland-Salem for 1991 = 133.9

Assuming a 3% inflation for 2010 since there is no CPI for 2011.

	1991	2010	2011
CPI	133.9	215.647	3%
Labor	$325,000	$523,415	$539,118
Energy	$65,000	$104,683	$107,824
Burial	$110,000	$177,156	$182,471
Contingency	$125,000	$201,313	$207,353
Total	$625,000	$1,006,567	$1,036,764

(b) *A statement of the decommissioning method to be used (e.g., DECON or other method).*

The Reed Reactor will be decontaminated to meet the requirements of 10 CFR 20.1402 radiological criteria for unrestricted use.

(c) *A description of the means of adjusting the cost estimate and associated funding level periodically over the life of the facility, pursuant to 10 CFR 50.75(d)(2)(iii). Since the application identified that the decommissioning cost estimate would be adjusted using the formula provided in 10 CFR 50.75(c)(2), please confirm whether that formula will continue to be the means of adjusting the RRR's cost estimate and associated funding level periodically over the life of the facility. Also, provide a detailed numerical example updating the cost estimate to 2011 dollars.*

The cost estimate will be updated using the Portland-Salem Consumer Price Index as in §4(a) above.

5. *The application states that Reed College is using a self-guarantee to fund and carry out the required decommissioning activities if and when the RRR is decommissioned. For renewal of the RRR, please provide the following additional information:*

(a) *An updated self-guarantee, including the current (2011) decommissioning cost estimate for the RRR. The updated submittal must include all the documentation as referenced in Section A.14 of Appendix A of NUREG-1757, Vol. 3, "Consolidated NMSS Decommissioning Guidance." The documentation should be based on a 2011 license renewal date.*

See attached memo dated 03/11/2010.

(b) *Documentation that the signator of the self-guarantee, if not the Chief Executive Officer or Chief Financial Officer (e.g., corporate controller), has the authority to bind Reed College in the self-guarantee.*

See attached memo dated 02/04/2010.