

## UNIVERSITY OF WASHINGTON

OFFICE OF THE DEAN College of Engineering

March 18, 2005

Document Control Desk U.S. Nuclear Regulatory Commission Washington, D.C. 20555

RE: Docket No. 50-139, Request for Additional Information

Dear Sirs:

This document is a response to a letter of request for additional information from Al Adams, dated 2/9/05, regarding the use of 10 CFR 50.59 type modifications in the decommissioning of the UW Research Reactor. The two questions posed by Mr. Adams are italicized below, and our response follows:

## REQUEST FOR ADDITIONAL INFORMATION

## UNIVERSITY OF WASHINGTON RESEARCH REACTOR

## **DOCKET NO. 50-139**

1. The wording in 10 CFR 50.59 is for Final Safety Analysis Reports and does not exactly fit your situation of a decommissioning plan. Please propose modifications to the wording in 10 CFR 50.59 that is appropriate for your situation.

The University proposes the following verbiage: (a) Definitions for the purposes of this section:

(1) Change means a modification or addition to, or removal from, the facility or procedures that affects a design function, method of performing or controlling the function, or an evaluation that demonstrates that intended functions will be accomplished.

(2) Departure from a method of evaluation described in the Decommissioning Plan (as updated) used in establishing the design bases or in the safety analyses means:

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(i) Changing any of the elements of the method described in the Decommissioning Plan (as updated) unless the results of the analysis are conservative or essentially the same; or

(ii) Changing from a method described in the Decommissioning Plan to another method unless that method has been approved by NRC for the intended application.

(3) Facility as described in the Decommissioning Plan (as updated) means:

(i) The structures, systems, and components (SSC) that are described in the Decommissioning Plan (as updated),

(ii) The design and performance requirements for such SSCs described in the Decommissioning Plan (as updated), and

(iii) The evaluations or methods of evaluation included in the Decommissioning Plan (as updated) for such SSCs which demonstrate that their intended function(s) will be accomplished.

(4) Decommissioning Plan means the Decommissioning Plan submitted and approved by the Commission, as amended and supplemented, and as updated per the requirements of Sec. 50.71, as applicable.

(5) Procedures as described in the Decommissioning Plan (as updated) means those procedures that contain information described in the Decommissioning Plan (as updated) such as how structures, systems, and components are operated and controlled (including assumed operator actions and response times).

(6) Tests or experiments not described in the Decommissioning Plan (as updated) means any activity where any structure, system, or component is utilized or controlled in a manner which is either:

(i) Outside the reference bounds of the design bases as described in the Decommissioning Plan (as updated) or

(ii) Inconsistent with the analyses or descriptions in the Decommissioning Plan (as updated).

(c)(1) The University may make changes in the facility as described in the Decommissioning Plan, and make changes in the procedures as described in the Decommissioning Plan, and conduct tests or experiments not described in the Decommissioning Plan (as updated) without obtaining Commission approval only if:

(i) A change to the technical specifications incorporated in the license is not required, and

(ii) The change does not meet any of the criteria in paragraph (c)(2) of this section.

(2) The University shall obtain Commission approval prior to implementing a proposed change, test, or experiment if the change, test, or experiment if the change would:

(i) Result in more than a minimal increase in the frequency of occurrence of an accident previously evaluated in the Decommissioning Plan (as updated);

(ii) Result in more than a minimal increase in the likelihood of occurrence of a malfunction of a structure, system, or component (SSC) important to safety previously evaluated in the Decommissioning Plan (as updated);

(iii) Result in more than a minimal increase in the consequences of an accident previously evaluated in the Decommissioning Plan (as updated);

(iv) Result in more than a minimal increase in the consequences of a malfunction of an SSC important to safety previously evaluated in the Decommissioning Plan (as updated);

(3) In implementing this paragraph, the Decommissioning Plan (as updated ) is considered to include Decommissioning Plan changes pursuant to this condition and changes ordered by the Commission.

(4) The provisions in this section do not apply to changes to the facility or procedures when the applicable regulations establish more specific criteria for accomplishing such changes.

(d)(1) The licensee shall maintain records of changes in the facility, of changes in procedures, and of tests and experiments made pursuant to paragraph (c) of this section. These records must include a written evaluation which provides the bases for the determination that the change, test, or experiment does not require Commission approval pursuant to paragraph (c)(2) of this section.

(2) The licensee shall submit, as specified in Sec. 50.4, a report containing a brief description of any changes, tests, and experiments, including a summary of the evaluation of each. A report must be submitted at intervals not to exceed 24 months.

(3) The records of changes in the facility must be maintained until the termination of a license issued pursuant to this part or the termination of a license issued pursuant to 10 CFR part 54, whichever is later. Records of changes in procedures and records of tests and experiments must be maintained for a period of 5 years.

2. Some aspects of your decommissioning plan (e.g. radiological release criteria) should not be changed although it would be possible with a 50.59 process. Please propose which aspects of your decommissioning plans should only be changed with Commission approval.

The University understands that the intent of this modification is to allow for minor changes to the Decommissioning Plan when Commission approval is not necessary. It is not intended to modify significant aspects of the Decommissioning Plan such as release criteria. The following sections of the Decommissioning Plan will be considered exempt from this modification and will require Commission approval in order to be modified:

1.3.7.1 Surface contamination shall be below the limits specified in Table 1, "Acceptable Surface Contamination Levels," of USNRC Regulatory Guide 1.86, "Termination of Operating Licenses for Nuclear Reactors."

1.3.7.2 Residual radioactivity shall not cause area dose levels to exceed 5 urem/hr above background at 1m above the surface of the radioactive materials.

- 2.3.2 Technical and Safety Committee
- 2.6 Radioactive Materials Unrestricted Release Criteria
- 3.2.2 Occupational Radiation Exposure Limits

If you have any further questions, please contact me.

I declare under penalty of perjury that the forgoing is true and correct, Signature/close

Mani Soma

Acting Dean

Cc: Alexander Adams Jr., U.S. Nuclear Regulatory Commission
Dwight Vann, Scientech
Mike Carette, Assistant to the Dean (Facilities), College of Engineering
Stanley Addison, Radiation Safety Officer, Environmental Health and Safety