#### UNIVERSITY OF WASHINGTON SEATTLE, WASHINGTON 98195

College of Engineering, Office of the Dean, FH-10 (206) 543-0340

February 14, 1994

Theodore S. Michaels, Senior Project Manager Non-Power Reactors, Decommissioning and Environmental Project Directorate Division of Advanced Reactors and Special Projects Office of Nuclear Reactor Regulation U.S. Nuclear Regulatory Commission Washington, D.C. 20555-0001

Subject: Second Request for Possession-Only-License Status for the University of Washington (UW) Research Reactor

Reference:

- (1) UW's letter dated November 5, 1993 (Attachment A)
- (2) Chapter 6, University of Kansas Decommissioning Plan dated December 17, 1990/NRC Docket No. 50-148 (Attachment B)
- (3) NRC License No. R-73/Docket No. 50-139

Dear Mr. Michaels:

The University of Washington is hereby submitting a second request for a Possession-Only-License status for our research reactor for a period of five years.

It is our understanding that pursuant to 10 CFR 50.90 we are entitled to request the subject license status along with revised changes to our Technical Specifications supporting the Possession-Only-License status request. We recommend that you contact Mr. Alexander Adams, Jr., NRC Co-Project Manager for UW, regarding this issue since he was responsible for the licensing example cited in Reference (2).

NES, Inc., our decommissioning consultant, has advised us to address the changes in our Tech Specs separately from our Decommissioning Plan, since previous Decommissioning projects which had their Decommissioning Plan addressing changes on Tech Specs, had experienced difficulties in their Decommissioning process.

Finally, the University is committed to the decommissioning of the UW research reactor and wants to do it by obtaining a change in Tech Specs that do represent the actual conditions of our shutdown and defueled research reactor while awaiting the approval of its Decommissioning Plan.

We would appreciate a prompt response to our second request.

Sincerely yours,

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Don G. Brown, Director

Environmental Health & Safety

cc: Oversight Committee

Technical & Safety Committee

B. Faulkenberry, Nuclear Regulatory Commission

Euclosures: Attachments A & B

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## ATTACHMENT A

#### UNIVERSITY OF WASHINGTON SEATTLE, WASHINGTON 98195

College of Engineering, Office of the Dean, FH-10 (206) 543-0340

November 5, 1993

Theodore S. Michaels, Senior Project Manager Non-Power Reactors, Decommissioning and Environmental Project Directorate Division of Advanced Reactors and Special Projects Office of Nuclear Reactor Regulation U.S. Nuclear Regulatory Commission Washington, D.C. 20555-0001

Subject: Possession-Only-License Request and Current Status of the University of Washington Reactor Decommissioning Program

- Reference: (1) Meeting at NRC Headquarters, between F. Trejo (NES) and T. Michaels (NRC) on September 16, 1993
  - Technical Specifications for the University of Washington Nuclear Reactor, dated April 12, 1972, Amendment No. 15
  - (3) NRC License No. R-73/Docket No. 50-139

Dear Mr. Michaels:

The University of Washington is hereby requesting a Possession-Only-License (POL) status for the facility covered by the above NRC license.

Enclosure 1, herein, lists the requested changes in Technical Specifications in support of the POL request, such that all of the decommissioning activities will be performed under 10 CFR 30. In addition, Enclosure 2 provides the current status and planned activities of the University's Decommissioning Program. It is our understanding that Mr. Trejo gave you an overview of the University Decommissioning Program during the above referenced meeting.

Please be informed that the upcoming submittal of the University's reactor Decommissioning Plan will replace in its entirety all of our previous submittals.

Sincerely yours.

J. Ray Bowen

Dean

Don G. Brown, Director

Environmental Health & Safety

cc: Oversight Committee

Technical & Safety Committee

6. Faulkenberry, Nuclear Regulatory Commission

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#### ENCLOSURE 1 - POSSESSION-ONLY-LICENSE REQUEST

#### A. PURPOSE

It is the objective of the University of Washington (UW) to request and obtain a Possession-Only-License (POL) since all of the reactor fuel (unirradiated and spent) was shipped off-site as of February 14, 1990, and the University has taken administrative and functional steps to decommission its research reactor. (See Enclosure 2, herewith.)

#### B. POL ACTIVITIES

The University of Washington requests to perform all reactor decommissioning activities under 10 CFR 30 upon receipt of its Decommissioning Order.

#### C. CHANGES TO THE UW'S REACTOR TECHNICAL SPECIFICATIONS

The University is hereby requesting the following changes in the Technical Specification for Facility License No. R-73, dated April 12, 1972 and as changed per Amendments No. 14 and No. 15:

1) Section II.B: delete 2, 3, 4, and 5

Basis for Request: There is no fuel present at all in the reactor. There are no off-gas releases nor gaseous activities. The University does continue to conduct air supply operations inside the reactor area.

2) Section III: delete this section in its entirety

Basis for Request: The University has no plans to re-start this reactor. The University plans to decommission this facility and obtain a license termination for its reactor.

3) Section IV: delete this section in its entirety

Basis for Request: See 2) above.

4) Section V.B: delete this section in its entirety

Section V.C: Change to read: "The radiation monitors in item A shall be calibrated at least annually."

Basis for Request: See 1) above.

5) Section VII: delete this section in its entirety

Basis for Request: See 2) above.

6) Section VI: delete this section in its entirety.

Basis for Request: See 1) and 2) above.

7) Section VII: delete this section in its entirety.

Basis for Request: See 2) above.

8) Sections VII.B, D, and E: delete these sections in their entirety.

Section VII.G: Change to read: A Technical and Safety Committee shall review and approve all activities to be performed under the University's Research Reactor Decommissioning Project. The committee shall review and audit the D&D project operators and activities. Committee members shall be appointed by the Dean of the College of Engineering and shall include the University Radiological Safety Officer and a representative of the University's Environmental, Health and Safety Office. The Committee shall keep written records of its meetings. The Committee shall report directly to the Dean of the College of Engineering.

Basis for Request: See 1) and 2) above.

#### **ENCLOSURE 2 - STATUS REPORT**

#### University of Washington Reactor Decommissioning Program

#### A. GENERAL

The University of Washington (UW) has retained the services of NES, Inc. to fulfill the role of Executive Engineer/Owner's Representative for this project. On August 24, 1993 UW and NES had a Project Kick-off Meeting to review the anticipated activities to be performed as part of the D&D program.

On September 14, 1993 UW and NES met with the City-University-Community Advisory Committee (CUCAC) and informed them of UW's plans regarding the decommissioning of UW's Research Reactor.

On September 16, 1993 NES, on behalf of UW, met with Mr. Theodore S. Michaels, NRC Project Manager, to present the University's approach and schedule toward obtaining a license termination for UW's Research Reactor. Specifically, that NES was going to conduct a site characterization of the reactor site to collect radiological data for the preparation of the decommissioning plan. NES was informed that the NRC did not need to review or approve the NES Site Characterization Plan. However, the NRC expects that the Site Characterization Plan and Report will be part of the Decommissioning Plan as well as the financial assurance instrument. Mr. Michaels was also informed of the intent to request the Possession-Only-License status.

#### B. PROJECT ORGANIZATION

The University of Washington as the licensee of the facility has total responsibility for the activities performed by its representatives and subcontractors, and as such, the University has elected to appoint a Technical and Safety Committee to: 1) set policy, 2) review and approve subcontractor's activities, and 3) inspect and audit all D&D activities. This particular committee intends to function in place of Reactor Facility Advisory Committee. Most of the members of the Technical and Safety Committee were part of the Reactor Facility Advisory Committee, and the rest of the members come from the environmental, health and safety organizations of the University. There is one additional member representing the University's Facility Management Operations/Capital Projects and who also acts as the Project Management for this D&D project. All specialized subcontractors report to this individual.

#### C. SITE ACTIVITIES

NES will be performing a radiological and hazardous characterization of the facility the week of October 18, 1993. The UW's Technical and Safety Committee received the Site Characterization Plan on September 24, 1993. Comments to the plan were issued to NES on October 5, 1993 and the resolution to the comments were submitted by NES on October 14, 1993. The reactor room, the Crystal Spectroscopy room, and the Radiochemistry Laboratory

room will not be used for any activities not related with the reactor D&D program. These rooms are kept under locked-key at all times.

#### D. ATTACHMENTS

NES/IES' Proposed Project Performance Summary - This document was discussed with Mr. Michaels, U.S. NRC, on September 16, 1993.

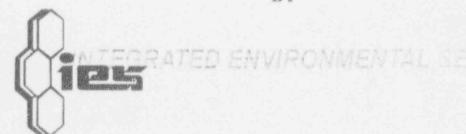
## ATTACHMENT TO ENCLOSURE 2



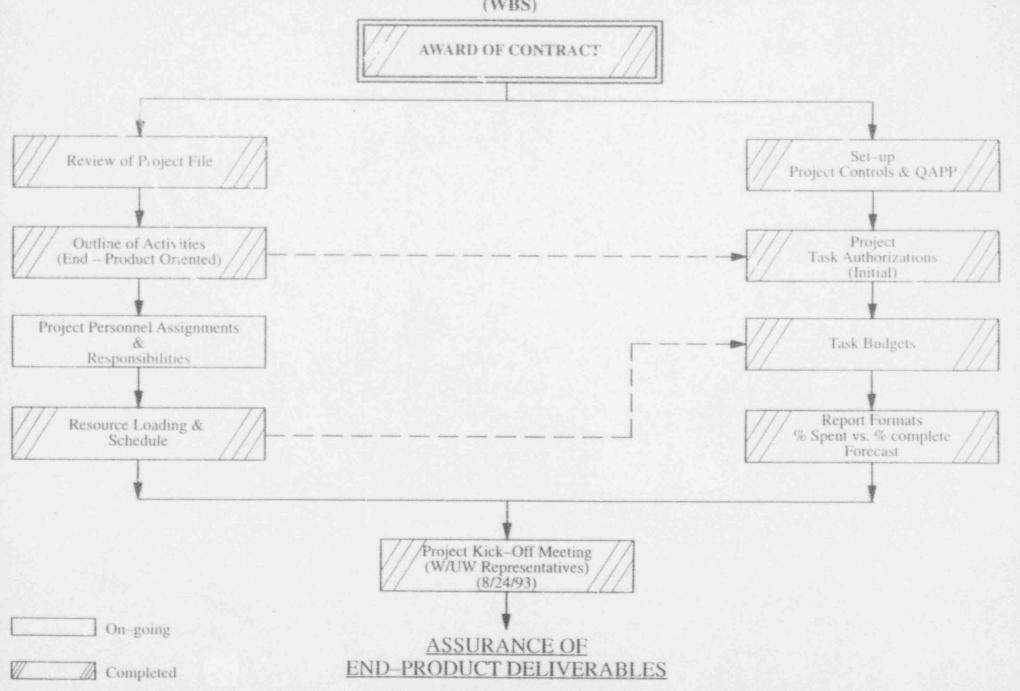
UNIVERSITY OF WASHINGTON
RESEARCH REACTOR DECOMMISSIONING
PROJECT

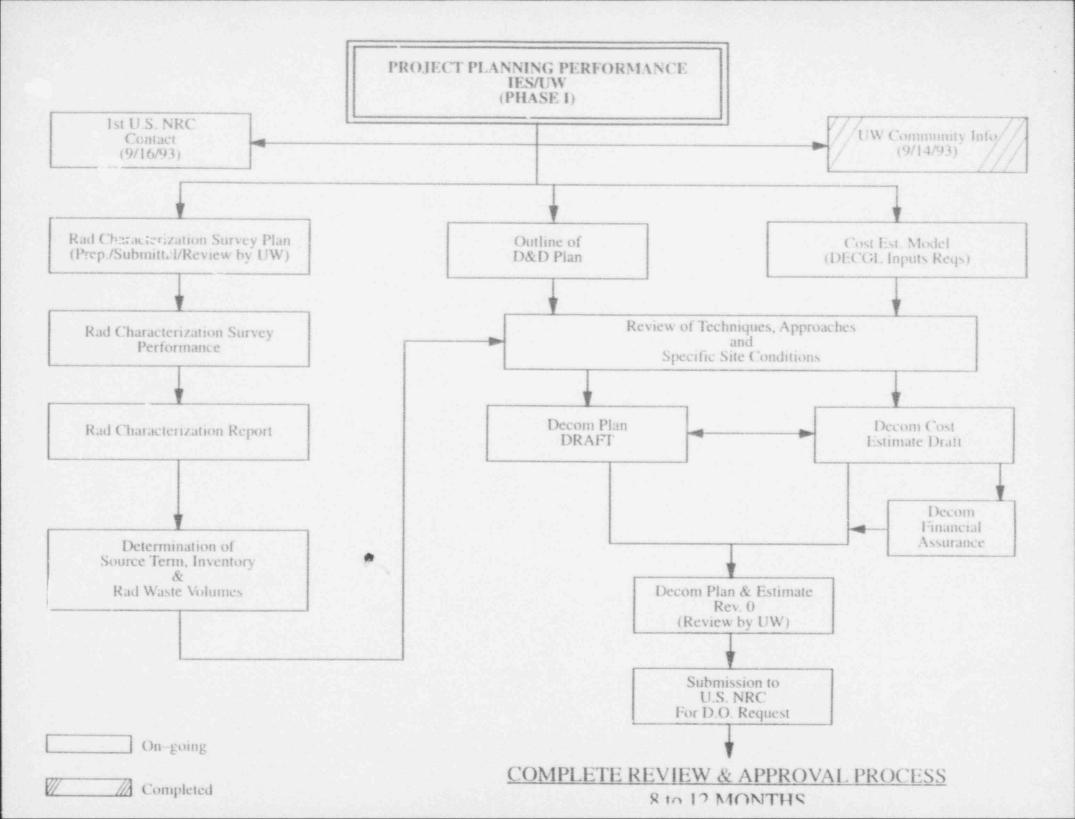
PROPOSED PROJECT PERFORMANCE SUMMARY

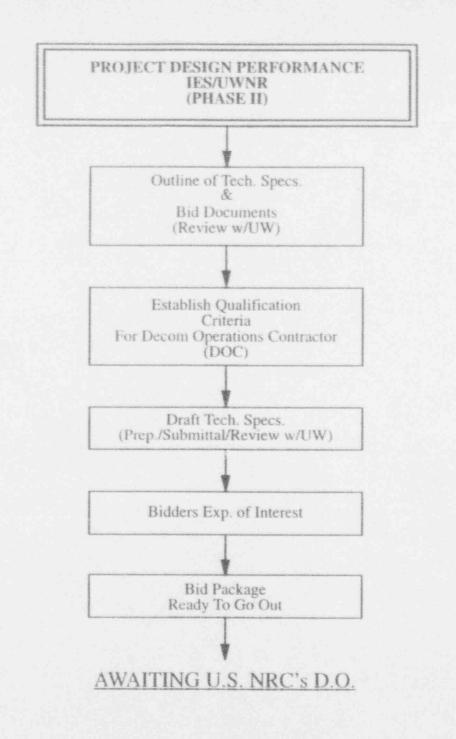
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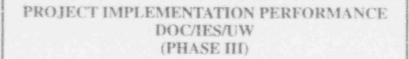


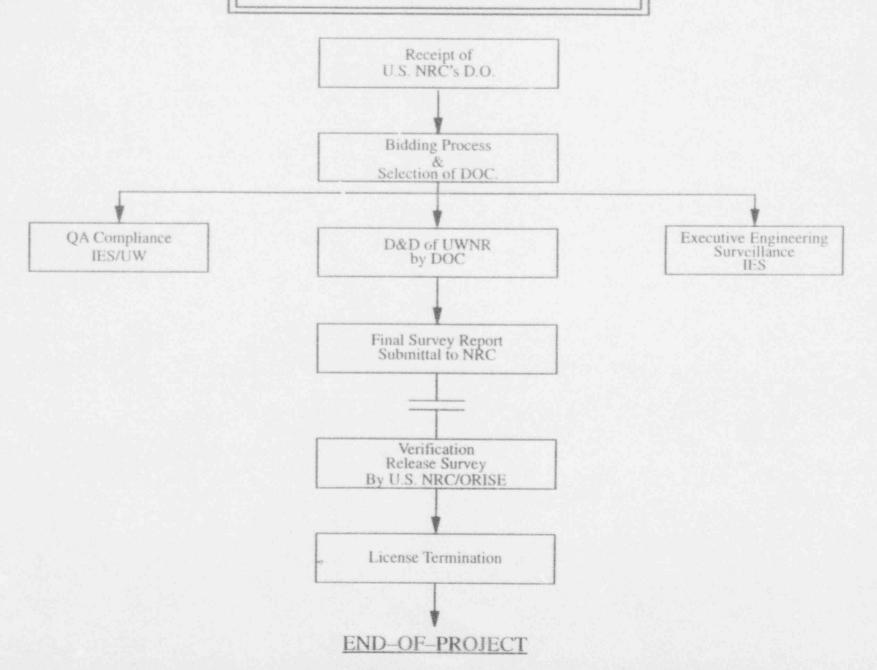
# UW RESEARCH REACTOR DECOMMISSIONING PROJECT APPROACH WORKBREAKDOWN STRUCTURE (WBS)











1994																							
ID.	Name	Duration	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May		Aug	Sen	Oct	Nov	Dec	Jan	Eeb	Mar	Apr	Ma
1	Initial Planning		季季						**********														
2	Review Existing Information	1 w	D .	and a																			
3	Planning	1 w		***************************************																			
4	Setup Controls	2d																					
5	Kickoff Meeting	3d	TEMP A	120000000																			
6	Characterization	75d	-			-	*																
7	Prepare Plan	3w	1																				
8	Review of Plan	4w																					
9	Perform Characterization	4w		and the same of th																			
0	Remove Floor Tile	2w	114	-		14																	
1	Prepare Report	4w																					
2	Document Preparation	62d				-			and a														
3	Decommissioning Plan	5w																					
4	Cost Estimate	6w	i di																				
5	Review of Decon Pln/UW	10d																					
6	Submit to USNAC	5d		1000					0														

## UNIVERSITY OF WASHINGTON REACTOR DECOMMISSIONING PROJECT

## ORGANIZATION & RESPONSIBILITIES

- U.S. NUCLEAR REGULATORY COMMISSION (USNRC)
  - Licensing Authority
  - Approves Plans and Approach
- UNIVERSITY OF WASHINGTON
  - Licensee
  - Radiation Safety Committee
  - Reviews all Documents Prior to Submittal to USNRC
- NES/IES
  - Technical Support Contractor
  - Perform Planning
  - Executive Engineer
- Decommissioning Operations Contractor
  - To Be Determined
  - Perform Actual Dismantlement of Reactor



### PRESS RELEASE

TO:

DISTRIBUTION

FROM:

Ann Sloane

NES, Inc.

Shelter Rock Road

Danbury, Connecticut, September 3, 1993

Integrated Environmental Services (IES), a division of NES, Inc., was recently awarded a contract with The University of Washington to provide planning and licensing support for the decommissioning of the University reactor. Work on the project began in August of 1993.

NES/IES has established itself as a leader in the decontamination and decommissioning of test, research and training nuclear reactors. Projects successfully completed within the past three years include the decontamination and decommissioning of the University of California at Los Angeles Boelter Reactor and the decommissioning of the University of California Berkeley Research Reactor. Both facilities were released for unrestricted use. NES/IES was contracted by the University of Kansas to prepare a Decommissioning Plan and decommissioning cost estimate for the University of Kansas Training Reactor. The Plan was approved by the NRC without a single question or comment on the first submittal. In addition NES/IES assumed the role of executive engineer for the actual dismantlement of the Kansas reactor.

NES/IES is currently under contract with Argonne National Laboratory in Illinois, providing technical and engineering services for the decommissioning of 18 facilities, four of which are research and training reactors, i.e. the Argonne Thermal Source Reactor, the Chicago Pile 5 Reactor, the Juggernaut Reactor and the JANUS Reactor. Detailed decommissioning cost estimates were prepared for each of these facilities as well as the Long-Range Plan and the Surveillance & Maintenance Plan for Decontamination and Decommissioning.

NES/IES has developed a well thought out end-product-oriented approach for decommissioning research and training nuclear reactors. This approach is based on accumulated experience from the above decontamination and decommissioning projects.

The NES/IES staff is led by President Bill Manion, who was the principal author of ANS Standard, ANS 15.10 entitled, "Decommissioning of Research Reactors," known in the industry as the Decommissioning Handbook.

IES Integrated Environmental Services

A Div. of NES. Inc. 44 Shelter Rock Road Danbury, CT 06810

### ATTACHMENT B

#### CHAPTER 6

## 6. TECHNICAL AND ENVIRONMENTAL SPECIFICATIONS IN PLACE DURING DECOMMISSIONING

The University of Kansas (KU) has previously submitted a letter of application for amendment No. 15 dated September 23, 1986, addressed to the NRC pursuant to 10 CFR 50.90, for changing the status of KU's operating license No. R-78, Docket No. 50-148 to a "possession only" status. The letter included a copy of The University of Kansas proposed changes to their Technical Specifications to support the KU amendment change to a "possession only" status. The "possession only" status in accordance with the KUTR Technical Specifications. Therefore, the same Technical Specifications will be in place and adhered to during the decommissioning activities.