

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
1 White Flint North
11555 Rockville Pike
Rockville MD 20852

Reference: University of California, Davis McClellan Nuclear Radiation Center
(UCD/MNRC), Docket No. 50-607, Facility Operating License No. R-130

Subject: Requested Amendment No. 4 to Facility Operating License No. R-130. McClellan
Nuclear Radiation Center

Gentlemen

It is requested that the attached proposed Revision 11 to the UCD/MNRC Technical Specifications be approved for use. The nature of the changes are explained in Section A of this letter. Also attached are the Safety Analysis Report (SAR) pages that fully describe the proposed new Iodine-125 production loop. It is requested that this experimental facility be approved for operation. The required technical specification changes associated with the operation of the iodine loop (i.e., p. 24 and 25) are included in Revision 11.

The following descriptions provide more information regarding the documents being submitted:

A. Proposed New Technical Specifications

The proposed new Technical Specifications (Revision 11) have been revised throughout and incorporate a number of changes. The vast majority of these changes are simply administrative in nature and designed to support the recent license transfer. However, there are also changes to eliminate previous formatting and typographical errors, changes to assure consistency in terminology throughout the Technical Specifications, changes to assure correct references to related documents (e.g., the Safety Analysis Report), and minor wording changes to enhance clarity. All changes are designed by a vertical bar along the right margin.

One section that is shown as a change in Revision 11 was actually approved previously by the Commission as part of Amendment No. 1 to the Facility Operating License (dated December 9, 1998). However, this change to Technical Specifications Section 3.8.3.a, did not get included into Revision 10 of the Technical Specifications and is therefore shown as a change in Revision 11.

Another Technical Specifications change to Section 3.8.1 was approved by Amendment No. 2 to the Facility Operating License (dated March 1, 1999), and involved the maximum reactivity worth of a moveable experiment. However, the new Revision 11 of the Technical Specifications also incorporates a change to Section 3.8.1, which involves the rewording of subparagraphs a through c and the addition of a new subparagraph d. The Revision 11 changes *do not* introduce any new Technical Specifications, but do use the new terminology adopted for the irradiation facilities in the center region of the reactor core (FSAR Chapter 10, Section 10.4), and do clarify the reactivity limits already approved for experiments placed in specific in-core and in-tank irradiation facilities.

Other changes to Revision 11 of the Technical Specifications which should be identified are as follows:

1. Section 2.1, Basis b: This basis has been expanded to include more detail regarding cladding integrity during pulsing operation.
2. Section 3.3, Table 3.3, Primary Coolant Core Inlet Temperature Monitor: The alarm point temperature (heat exchanger outlet temperature) has been increased from 35 degrees Centigrade to 45 degree Centigrade (FSAR Chapter 4, Table 4-21, and reference 4.40).
3. Section 4.7, Specification 4.7.a(3), 4.7.b(3) and 4.7.d(3): These specifications have all had the channel calibration frequency changed from semiannual to annual. The basis for each of these specifications addresses this change and concludes that the instrumentation will read correctly with an annual calibration.
4. Section 5.3.1: This specification is changed to add the use of 30/20 TRIGA fuel and a new core fuel loading termed a 30B core. The basis for this specification references the applicable sections in Chapter 4 of the FSAR, and FSAR Section 4.5.3 notes the limitations on this core that are subsequently included in the Technical Specifications.
5. Section 6.0: This section has numerous text changes to reflect the new licensee. In addition, there is a new Figure 6.1, Organization for Licensing and Operation, which

incorporates administrative units of the new licensee. Section 6.2 has been changed slightly to reflect the organization and duties of the Nuclear Safety Committee (NSC), and to clarify the Committee's review and audit functions. Subsection 6.6.2 was changed slightly to clarify the NSC's role in the event of a reportable occurrence.

Sincerely



WADE J. RICHARDS, Ph.D.

Director
UCD/MNRC

2 Attachments:

1. UCD/MNRC Tech. Spec. Rev 11 (2 copies)
2. SAR Support Pages

cc: Dr. W. Eresian, USNRC

After being duly sworn, the person known to be Dr. Wade J. Richards, Director, University of California, Davis McClellan Nuclear Radiation Center, signed the above document this 7/11/01 day of July 2001.

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

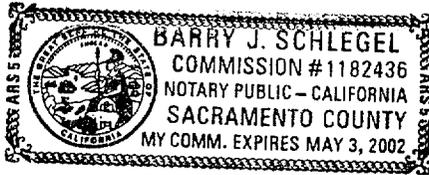
State of California }
County of SACRAMENTO } ss.

On 7-11-01, before me, BARRY J. SCHLEGEL
Date Name and Title of Officer (e.g., "Jane Doe (Notary Public))

personally appeared WADE J RICHARDS
Name(s) of Signer(s)

- personally known to me
- proved to me on the basis of satisfactory evidence

to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



WITNESS my hand and official seal.
[Signature]
Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: Lottery Subj. AMENDMENT 4 TO LICENSE NO R-130

Document Date: 7-11-01 Number of Pages: 3

Signer(s) Other Than Named Above: NONE

Capacity(ies) Claimed by Signer

- Signer's Name: SAME AS ABOVE
- Individual
- Corporate Officer — Title(s): _____
- Partner — Limited General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: _____

Signer Is Representing: SELF

