

September 17, 2009

U.S. NRC Public Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Attention: Mr. Duane Hardesty,
Program Manager

Subject: Minor Wording Change for License R-110, Revision #7.

Dear Mr. Hardesty:

Attached is a minor wording change to Table 3 of the Technical Specification to Facility License R-110, as previously discussed. Revision #7 request, dated September 4, 2008, was submitted to account for a change in the instrument readout for the start-up Channel #1. That channel reads in Percent of Full Scale on the present (old, original) control console, and in Counts per Second on the new console. The two readings are equivalent in detector response, and otherwise the two consoles use the same detectors, same instruments, and the same readings on the console, as well as have the same connections to the reactor. By modifying the wording of Table 3 of the Technical Specifications, as shown on the attachment, this will allow use of either console.

The planned console transition, though appearing simple and straightforward, cannot be guaranteed to be accomplished in one action which would be expected to occur on the day that the NRC would date the license revision letter. Therefore, the minor change requested in Table 3 will allow us the option of returning to the original console while correcting any issue that might be discovered when the new console is initially connected.

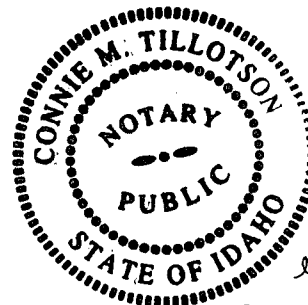
Should you have any questions, please refer them to the Reactor Administrator, Dr. Jay Kunze, at 208-282-4147..

Sincerely,

Pamela L. Crowell, Ph.D.
Vice President of Research

Affirmation:

I certify that the foregoing is true and correct:



Executed on 9-21-09 September, 2009. Signature

c:Mr. Duane Hardesty, Project Manager US NRC, w/attachment, Mail Stop O-12-D 03
Mr. Greg Schoenebeck, NRC Inspector, w/ attachment, Mail Stop O-12 D-03

Office of Research

921 South 8th Avenue,
Stop 8130
Pocatello, Idaho
83209-8130

Physical Address:
1010 South 5th St.
Bldg 11, Room 205

Phone: (208) 282-2714
Fax: (208) 282-4529
www.isu.edu/research

Table 3.1 Reactor control and safety systems set-point specifications.

<u>SAFETY CHANNEL</u>	<u>SET POINT</u>	<u>FUNCTION</u>
Nuclear Safety Channel No. 1 (Startup Count Rate Channel) Low Power	Unit A) 5% of Full Scale OR Unit B) 0.5 counts/second	Scram at levels below the set points
Nuclear Safety Channel No. 2 (Log Power Channel) High Power	6 Watts (120% of licensed power)	Scram at power > 6 watts
Nuclear Safety Channel No. 2 (Log Power Channel) Low Power	3.0×10^{-13} amps	Scram at source levels > 3×10^{-13} amps
Reactor Period	5 seconds	Scram at periods < 5 seconds
Nuclear Safety Channel No. 3 (Linear Power Channel) High Power	6 Watts (120% of licensed power)	Scram at power > 6 Watts
Nuclear Safety Channel No. 3 (Linear Power Channel) Lower Power	5% of Full Scale Setting	Scram at levels <5% of full scale setting
Manual Scram	_____	Scram at operator option
Area Radiation Monitor	≤ 10 mR/hour	Alarm at or below level set to meet requirements of 10 CFR 20

Unit A is the original console, made and assembled about 1960.

Unit B is the new (2009) all solid state electronic control console.

One or the other of these units will be in service any time the reactor is operating.

3.3 Limitations of Experiments

Applicability

This specification applies to experiments installed in the reactor and its experimental facilities.

Objective

To prevent damage to the reactor or excessive release of radioactive materials in the even of an experiment failure.

Specification

- a. Experiments containing materials corrosive to the reactor components or which contain liquid or gaseous, fissionable materials shall be doubly encapsulated.