

Radiation Center



Corvallis, Oregon 97331 (503) 754-2341

July 19, 1983

Standardization & Special
Projects Branch
Division of Licensing
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Attention: Mr. R. Carter, Project Manager

Reference: Oregon State University TRIGA Reactor (OSTR)

License No. R-106, Docket No. 50-243

Subject: Requested Amendments to Section 4 of the OSTR Technical
Specifications

Gentlemen:

Pursuant to a telephone conversation between Professor A. G. Johnson and Mr. R. Carter, we would like to submit an application for amendments to Section 4 of our Technical Specifications, which deals with "Surveillance Requirements". The requested changes are detailed in the attachment along with their specific justifications. For clarity, we have also included a copy of the affected pages from our existing Technical Specifications with the requested changes written in.

All of the changes relate to the frequency and time intervals associated with the various surveillance requirements in the Technical Specifications. During a recent detailed examination of Section 4 of the Technical Specifications, it became apparent to us that there were a number of inconsistencies in the specific wording relating to surveillance intervals. Of the eleven items with a required frequency of six months or greater, nine have a two month allowance on the interval, while two have no allowance at all. Similarly, none of the items with a frequency of one month or less have any allowance on the time interval. The amendment requested would make all of the surveillance intervals consistent with the ANS/ANSI 15.1-1982 Standard: "Technical Specifications for Research Reactors", and would thereby keep our Technical Specifications consistent with the most current guidance on time intervals for surveillance.

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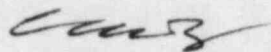
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July 19, 1983

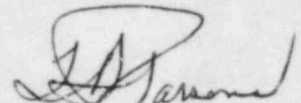
It is to be emphasized as the basic justification for all of these changes that it is our intent to perform the surveillance requirements at the minimum stated frequencies, and that the maximum intervals requested are to enable us to manage our resources and personnel more effectively, and to provide needed operational flexibility. The new changes will not be used to intentionally reduce surveillance frequency.

We thank you for your assistance, and of course offer to provide any additional information you may need.

Sincerely yours,



C. H. Wang
Director &
Reactor Administrator



T. D. Parsons
Vice President for
Administration

CHW/pc

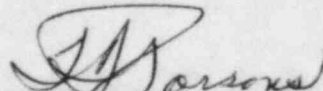
cc: USNRC, Document Management Branch, Washington, DC
USNRC, Region V, Walnut Creek, CA
Director, Oregon Department of Energy, Salem, OR
T.V. Anderson, Reactor Supervisor, OSTR
S.E. Binney, Chairman, Reactor Operations Committee, OSTR
B. Dodd, Asst. Reactor Administrator, OSTR
A.G. Johnson, Assistant Director, Radiation Center, OSU

STATE OF OREGON)
)ss
COUNTY OF BENTON)

C. H. Wang and T. D. Parsons, being first duly sworn on oath, depose and say that they have affixed their signatures to the letter above in their official capacities as Reactor Administrator and Vice President for Administration of Oregon State University, respectively, that they have signed this letter supplying information in support of the application for an amendment to the OSTR Operating License No. R-106; that in accordance with the provisions of Part 50, Chapter 1, Title 10 of the Code of Federal Regulations, they are attaching this affidavit, that the facts set forth in the within letter and attachment are true to their best information and belief.

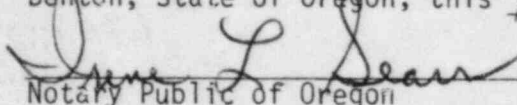
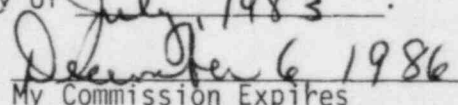


C. H. Wang
Reactor Administrator



T. D. Parsons
Vice President for Administration

Subscribed and sworn to before me, a Notary Public, in and for the County of Benton, State of Oregon, this 19th day of July, 1983.


Notary Public of Oregon
My Commission Expires December 6, 1986

ATTACHMENT

Requested Amendments to Section 4 of the OSTR Technical Specifications

Section 4.2 (b)(page 18 of Amendment No. 3)

Delete: 'semiannually but at intervals not to exceed 8 months.'

Insert: 'semi-annually (interval not to exceed seven and one-half months).'

This change results in a slightly shorter interval, and is thus more stringent.

Section 4.2 (c)(page 18 of Amendment No. 3)

Add: '(must be done during the calendar day).'

This change clarifies the meaning of 'daily basis.'

Section 4.3.1 (a)(page 19 of Amendment No. 3)

Delete: 'but at intervals not to exceed 14 months.'

Insert: '(interval not to exceed 15 months).'

Seventeen years of experience has shown that the reactivity worths of the control rods vary little from year to year, and adding one month to the interval will not affect safety.

Section 4.3.1 (c)(page 19 of Amendment No. 3)

Delete: 'at intervals not to exceed 2 years.'

Insert: 'biennially (interval not to exceed two and one-half years).'

Past experience from control rod inspections have shown only slight wear, which progresses at a very low rate over a long period of time. An extra six months will not result in significant differences.

Section 4.3.1 (d)(page 19 of Amendment No. 3)

Delete: 'semiannually, at intervals not to exceed 8 months.'

Insert: 'semi-annually (interval not to exceed seven and one-half months).'

This change results in a slightly shorter interval and is thus more stringent.

Section 4.3.1 (e)(page 19 of Amendment No. 3)

After 'semi-annually', Insert: '(interval not to exceed seven and one half months).'

The reactor has been pulsed about 800 times since it was refuelled with FLIP fuel in 1976. No noticable changes in fuel temperature vs peak power or other core characteristics due to pulsing have been observed in that time. Consequently, there will be no safety implications from extending the surveillance interval by one and one-half months.

Section 4.3.2 (a)(page 20 of Amendment No. 3)

Delete: 'but at intervals not to exceed 14 months.'

Insert: '(interval not to exceed 15 months).'

Scram times measured over the past seventeen years have varied by less than one second, so extending the interval by one month will not affect safety.

Section 4.3.2 (c)(page 20 of Amendment No. 3)

Delete: 'but at intervals not to exceed 14 months'

Insert: '(interval not to exceed 15 months).'

Experience has shown that the power level changes only very slightly over the year and the change expected in one extra month is much less than 1%.

Section 4.3.2 (d)(page 20 of Amendment No. 3)

Delete: 'semiannually, but at intervals not to exceed 8 months.'

Insert: 'semi-annually (interval not to exceed seven and one half months).'

This change results in a slightly shorter interval and is thus more stringent.

Section 4.3.3 (page 20 of Amendment No. 3)

Delete: 'but at intervals not to exceed 14 months'

Insert: '(interval not to exceed 15 months).'

The calibration is virtually identical from year to year and so the extension of one month will not result in measurable errors.

Also

After 'weekly', Add: '(interval not to exceed ten days)'

The set points of these systems just do not change and thus allowing the maximum of ten days will present no hazards.

Section 4.3.4 (page 21 of Amendment No. 3)

Delete: 'semiannually, but at intervals not to exceed 8 months.'

Insert: 'semi-annually (intervals not to exceed seven and one-half months).'

This change results in a slightly shorter interval and is thus more stringent.

Section 4.3.5 (a)(page 21 of Amendment No. 3)

Delete: 'but at intervals not to exceed 14 months,'

Insert: '(intervals not to exceed 15 months).'

Since the water temperature monitoring system was changed to thermocouples, there have been no adjustments required from year to year. Therefore, it is reasonable to expect that one extra month will result in no measurable change.

Section 4.3.5 (b)(page 21 of Amendment No. 3)

After 'monthly', Insert: '(interval not to exceed six weeks).'

The reactor pool water level monitoring system has been very reliable over the past seventeen years and so allowing an extra two week interval carries no safety implications.