

September 29, 1982 (608) 788-4000

In reply, please  
refer to LAC-8629

DOCKET NO. 50-409

Director of Nuclear Reactor Regulation  
ATTN: Mr. Dennis M. Crutchfield, Chief  
Operating Reactors Branch No. 5  
Division of Operating Reactors  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

SUBJECT: DAIRYLAND POWER COOPERATIVE  
LA CROSSE BOILING WATER REACTOR (LACBWR)  
PROVISIONAL OPERATING LICENSE NO. DPR-45  
APPLICATION FOR AMENDMENT TO LICENSE

- REFERENCES: (1) DPC Letter, LAC-5123, Madgett to Reid  
dated January 20, 1977  
(2) Final Report, "Analysis of the Vessel Material Surveillance  
Capsules Withdrawn from La Crosse Boiling Water Reactor  
During the 1980 Refueling", SwRI Project No. 02-6208-001,  
dated October 9, 1981  
(3) DPC Letter, LAC-7970, Linder to Crutchfield,  
dated December 8, 1981

Gentlemen:

In accordance with the provisions of 10 CFR 50.36(a), we are submitting an application to amend Provisional Operating License No. DPR-45 by proposing changes to Technical Specifications for the La Crosse Boiling Water Reactor (LACBWR). The first proposed change deals with the safety valves installed on the reactor coolant system.

A version on proposed changes on safety reliefs was submitted in Reference 1, but the enclosed proposed change supercedes those of Reference 1 in their entirety.

In order to incorporate these proposed changes, the following is necessitated.

Delete Section 2.4.1 Safety Valves. This section is no longer needed, as the enclosed proposed LCO specifies the number and setpoints of the RCS safety valves. The size of valve, as specified in the plant design, determined the steam flow upon lift.

Replace Section 4.2.2.5 with the enclosed proposed LCO of the same number and associated surveillance requirements.

Another proposed change is submitted herein that deals with the reactor vessel nil-ductility transition temperature and associated temperature.

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The third set of reactor vessel surveillance capsules was removed from the LACBWR vessel during the 1980 refueling outage. The neutron flux results and the neutron embrittlement responses of the surveillance materials, although in good agreement with data from previous analyses, did indicate that the rate of embrittlement is less than previously projected. Table 1 shows the results of tests performed to determine the initial  $RT_{NDT}$ . A comparison of the predicted  $RT_{NDT}$  shift, based on fluence and initial copper content, to surveillance capsules analyzed is shown in Figure 1. A detailed report of the test results of the surveillance specimens is contained in Reference 2.

Replace Section 4.2.2.4 a through e with the enclosed proposed LCO 4.2.2.4 and associated surveillance requirements. Figure 5 on Page 30b of present Technical Specifications remains the same, although it is enclosed herein, in a more readable condition as Figure 4.2.2.4-1. Figure 6 on Page 30c is replaced by the enclosed Figure 4.2.2.4-2. This figure is updated, based on Reference 2 data.

Present Section 4.2.2.3 is deleted. That requirement is now included in proposed LCO 4.2.2.4.

Enclosed is a proposed section under Instrumentation, labelled 4/5.3.2, "Post-Accident Radiation Monitoring Instrumentation." This proposed change is to be added to LACBWR Technical Specifications because of the requirements of NUREGs 0737 and 0578. This section fully implements the requirements of these NUREGs.

Proposed Technical Specifications for Emergency Core Cooling Systems is enclosed. The proposal allows the deletion of Sections 2.4.6, 4.2.2.14, 4.2.2.15, 4.2.2.16, 4.2.2.18, and 5.2.7. The proposed section on ECCS is numbered 4/5.2.23 and is to be inserted as full pages.

Our letter (Reference 3) submitted proposed changes to our Technical Specifications. Since that time, however, changes have been made in the LACBWR Facility Organization. A revised Figure 6.2.2-1, "LACBWR Facility Organization", is herewith being submitted and should replace the Figure 6.2.2-1, submitted with our December 8, 1981 letter.

Since a license amendment has not yet been issued for our References 1 and 3 submittals, it is felt that an additional fee will not be required for these revisions.

A license amendment fee is not considered to be required for the Reactor Vessel Material Surveillance issue, as the enclosed proposed LCO is more conservative than the present Technical Specifications, and therefore, is administrative in nature. We have determined that a fee is not required for the Post-Accident Radiation Monitoring and for the High Pressure Core Spray issues because they were requested in NUREG-0737, as the result of post-TMI actions.

Except for the deletions stated above, the proposed changes are enclosed as full page replacements to our present Technical Specifications.

Mr. Dennis M. Crutchfield, Chief  
U. S. Nuclear Regulatory Commission

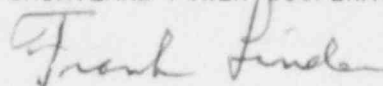
September 29, 1982  
LAC-8629

The information submitted with this application for license amendment has been reviewed by LACBWR committees as prescribed in Technical Specifications.

If there are any questions concerning this submittal, please contact us.

Very truly yours,

DAIRYLAND POWER COOPERATIVE



Frank Linder, General Manager

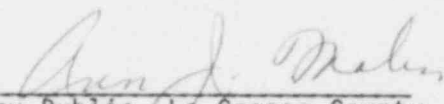
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Enclosure: Proposed Revised Technical Specifications

cc: J. Keppler, Regional Administrator, NRC-DRO III  
M. Branch, NRC Resident Inspector.

STATE OF WISCONSIN )  
COUNTY OF LA CROSSE )

Personally came before me this 30 day of September, 1982, the above named Frank Linder, to me known to be the person who executed the foregoing instrument and acknowledged the same.



Notary Public, La Crosse County,  
Wisconsin  
My Commission Expires 2/26/84

TABLE 1

## REACTOR VESSEL TOUGHNESS

<u>COMPONENT</u>	<u>COMP CODE</u>	<u>MATERIAL TYPE</u>	<u>CU %</u>	<u>P %</u>	<u>DWNTD F</u>	<u>30 FT-LB F</u>	<u>50 FT-LB F</u>	<u>35 MIL</u>	<u>INITIAL RTNDT F</u>
1. Mid-core	NP 1054	SA 302 Gr B	0.10(a)	0.009	10	-10	-5	-	10(b)
2. Below core	NP 1055	SA 302 Gr B	0.14(a)	0.009	-65	-75	-55	-65	0(c)
3. Above core	NP 1056	SA 302 Gr B	0.11	0.008	50	30	90	55	50(b)
4. Welds	Weld	SA 302 Gr B	0.18	0.016	-10	-30	30	-15	0(c)

(a) Determined from irradiated specimen analysis.

(b)  $RT_{NDT}$  is the higher of (1) DWNTD, (2) 60°F below the 50 ft-lb  $C_V$  TT (increased by 20°F because specimens are longitudinally oriented), and (3) 60°F below the 35 mil LE  $C_V$  TT (increased by 20°F because specimens are longitudinally oriented). (NRC Standard Review Plan, NUREG 75/087, November 24, 1975).

(c) Since DWNTD tests were not run,  $RT_{NDT} = 30$  ft-lb  $C_V$  TT or 0°F, whichever is higher. (NRC Standard Review Plan, NUREG 75/087, November 24, 1975).

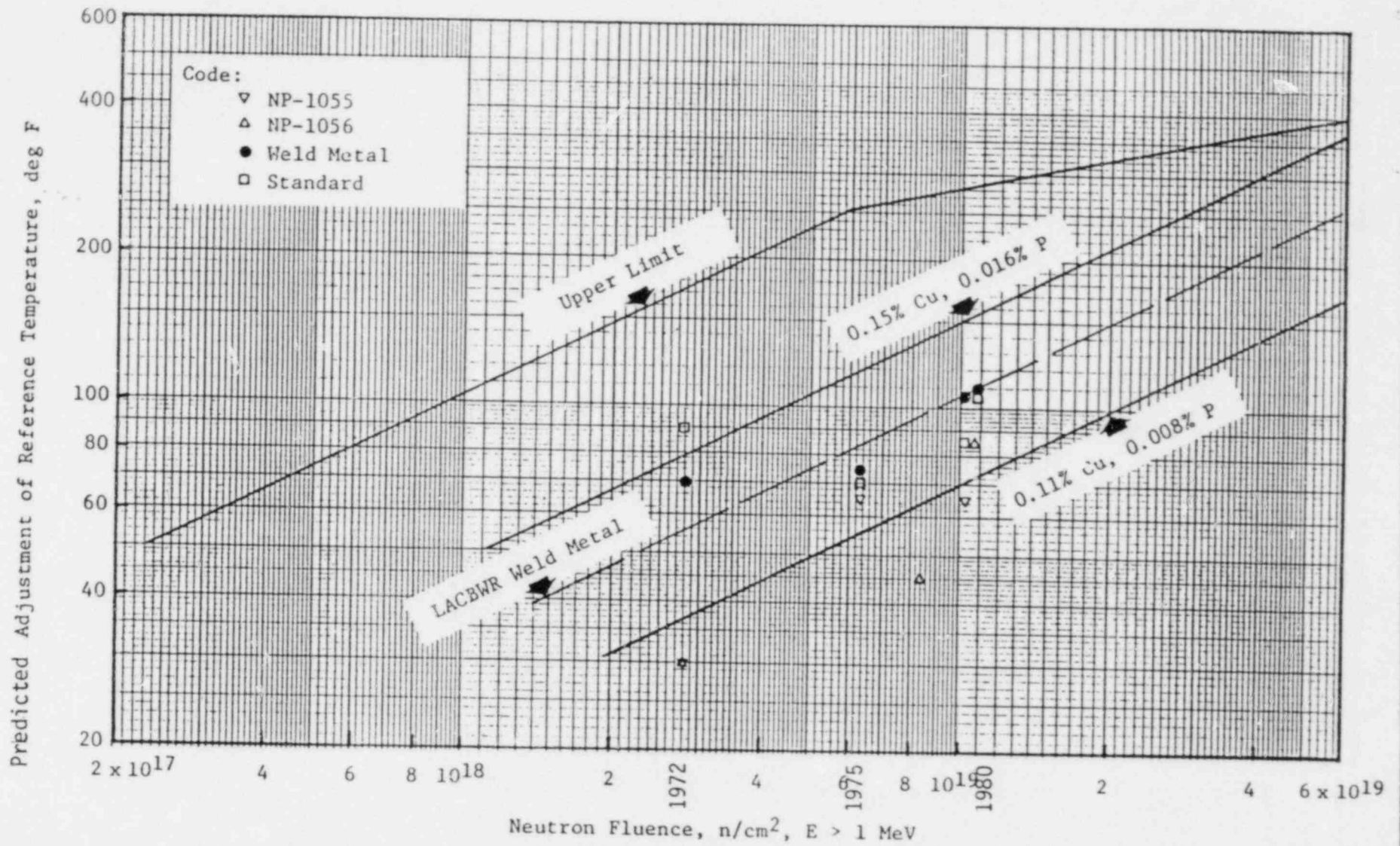


FIGURE 1 EFFECT OF NEUTRON FLUENCE ON REDT OF LACBWR VESSEL SURVEILLANCE MATERIALS