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 AUTH. NAME: SORENSEN, G.C. AUTHOR AFFILIATION: Washington Public Power Supply System
 RECIP. NAME: BUTLER, W.R. RECIPIENT AFFILIATION: Licensing Branch 2

SUBJECT: Application for amend to License NPF-21, adding new Tech Spec, "Neutron FLUX Monitoring Instrumentation." Amend allows for single loop operation at higher power subj to add core monitoring.

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Figure 1: Schematic representation of the experimental design. The figure is divided into two main parts: 'A' and 'B'. Part A shows a sequence of events: 'Stimulus presentation' (a box with a question mark), 'Response' (a box with a question mark), and 'Feedback' (a box with a question mark). Part B shows a sequence of events: 'Stimulus presentation' (a box with a question mark), 'Response' (a box with a question mark), and 'Feedback' (a box with a question mark). The sequence is repeated for multiple trials.

[illegible]

Figure 1. The effect of the concentration of the *Agrobacterium* suspension on the transformation efficiency of *Agrobacterium* strains. The *Agrobacterium* strains were grown in the YEA medium for 24 h at 28 °C. The cell concentration of the strains was adjusted to 1.0 × 10⁸ cells/ml. The cell suspension was mixed with the plant tissue and the transformation efficiency was determined. The results were expressed as the mean ± SD of three independent experiments. The asterisks indicate the significant difference between the strains at the same concentration of the cell suspension.

The diagram illustrates a 3D coordinate system with axes labeled x , y , and z . The x -axis is horizontal, the y -axis is vertical, and the z -axis is diagonal. Various symbols (dots, lines, and letters) are placed at different coordinates to represent data points or parameters. The diagram is divided into several regions by dashed lines, and some regions are labeled with letters like 'A', 'B', 'C', 'D', 'E', 'F', 'G', 'H', 'I', 'J', 'K', 'L', 'M', 'N', 'O', 'P', 'Q', 'R', 'S', 'T', 'U', 'V', 'W', 'X', 'Y', 'Z'.

Washington Public Power Supply System

3000 George Washington Way P.O. Box 968 Richland, Washington 99352-0968 (509)372-5000

July 17, 1985
G02-85-381

Docket No. 50-397

Director of Nuclear Reactor Regulation
Attention: Mr. W. R. Butler, Chief
Licensing Branch No. 2
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Butler:

Subject: NUCLEAR PLANT NO. 2
OPERATING LICENSE NPF-21, REQUEST FOR TECHNICAL
SPECIFICATION AMENDMENT UNDER EMERGENCY CIRCUMSTANCES

Reference: GE Service Information Letter (SIL) No. 380,
Revision 1, dated February 10, 1984

Pursuant to 10 CFR 2.101, 50.90 and 50.91(a)(5), the Washington Public Power Supply System hereby submits an amendment to the plant Technical Specifications for WNP-2. The amendment would add a new Technical Specification Section 3/4.3.10, entitled Neutron Flux Monitoring Instrumentation, and supporting licensing bases and would modify Technical Specification Section 3/4.4.1 (Recirculation Loops) adopting the BWR Owners' Group Single Loop LCO related to SIL No. 380, Revision 1. This would allow for Single Loop Operation (SLO) at a higher power subject to additional core monitoring.

The referenced document provides an improved means acceptable to the NRC staff for maintaining neutronic-thermal hydraulic stability and recommends that BWR operators monitor the inherent flux signals to avoid or control abnormal neutron flux oscillations. The NRC, in its Safety Evaluation of GE Topical Report NEDE-24011, Amendment 8, has indicated that "Detect and Suppress" Technical Specifications is an acceptable method for controlling abnormal oscillations. Such Technical Specifications are requested in this amendment.

With the addition of "Detect and Suppress" Technical Specifications, the fifty percent limit on Rated Thermal Power during SLO is in our view no longer necessary. Accordingly, the appropriate modification of Technical Specification Section 3/4.4.1 is being requested. This amendment would permit WNP-2 to operate at a higher power level during SLO than is currently authorized while adding the additional monitoring requirements needed to ensure safe operation.

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REQUEST FOR TECH. SPEC. AMENDMENT UNDER EMERGENCY CIRCUMSTANCES

The NRC published guidance in the Federal Register (48 Fed. Reg. 14870, April 6, 1983) concerning examples of amendments that are not likely to involve significant hazards consideration. The addition of "Detect and Suppress" Technical Specifications is similar to example (ii), "a change that constitutes an additional limitation, restriction, or control not presently included in the technical specifications...", and does not in our view involve a significant hazards consideration. Removal of the fifty percent limit on Rated Thermal Power while in SLO is, we believe, similar to example (vi), "a change which either may result in some increase to the probability or consequences of a previously analyzed accident or may reduce in some way a safety margin, but where the results of the change are clearly within all acceptable criteria". Therefore, removal of the fifty percent limitation does not involve a significant hazards consideration. Similar technical specification changes have previously been approved for the Duane Arnold Power Station.

Under normal circumstances, this amendment request would be submitted in a routine fashion as contemplated by 10 CFR 50.91(a)(2). However, because of the need to shut down Recirculation Pump B due to a mechanical problem that can not be repaired for several months, plant operation is limited by Technical Specification Section 3/4.4.1 to fifty percent Rated Thermal Power. By granting the requested amendment, plant operation could be increased to approximately seventy-two percent rated power. This difference in power ratings is a partial derating within the meaning of Section 50.91(a)(5) and justifies processing the requested amendments on an emergency basis.

Moreover, as a result of the below average rainfall/snow melt this year in the Pacific Northwest, the Bonneville Power Administration (BPA) has reduced stored water levels to an undesirably low level in order to fulfill its firm power obligations and is relying on the power generated by WNP-2 to satisfy those obligations. As a result of the current Rated Thermal Power limitation on the operation of WNP-2, BPA is required to purchase power to replace that which is not being supplied by WNP-2 but which was anticipated. BPA power requirements are such that a shutdown to repair the pump (estimated to take up to 8 weeks) is not acceptable until late September 1985. As mentioned above, the requested amendment will allow the Supply System to operate in SLO at the higher power level, thereby offsetting some of this deficit.

The Supply System has evaluated this request in accordance with the criteria set forth in 10 CFR 170.21 and has included a warrant for One hundred fifty dollars (\$150.00) as initial payment for this application for amendment.

In accordance with 10 CFR 50.91, the State of Washington has been provided a copy of this letter.

W. R. Butler

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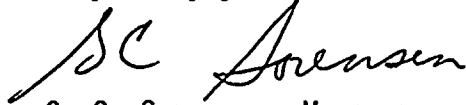
July 17, 1985

REQUEST FOR TECH. SPEC. AMENDMENT UNDER EMERGENCY CIRCUMSTANCES

The Supply System has reviewed this change per 10 CFR 50.59 and determined that no unreviewed safety questions will result from this amendment.

The requested Technical Specification changes have been reviewed and approved by the WNP-2 Plant Operations Committee (POC) and the Supply System Corporate Nuclear Safety Review Board (CNSRB). Should you have any questions, please contact Mr. P. L. Powell, Manager, WNP-2 Licensing.

Very truly yours,



G. C. Sorensen, Manager
Regulatory Programs

HLA/tmh
Attachments

cc: JO Bradfute - NRC
WS Chin - BPA
C Eschels - EFSEC
JB Martin - NRC RV
E Revell - BPA
NS Reynolds - BLCP&R
AD Toth - NRC Site


REQUEST FOR TECHNICAL
SPECIFICATION AMENDMENT
UNDER EMERGENCY CIRCUMSTANCES

STATE OF WASHINGTON }
County of Benton }

Subject: _____

I, G. C. SORENSEN, being duly sworn, subscribe to and say that I am the Manager, Regulatory Programs for the WASHINGTON PUBLIC POWER SUPPLY SYSTEM, the applicant herein; that I have full authority to execute this oath; that I have reviewed the foregoing; and that to the best of my knowledge, information and belief the statements made in it are true.

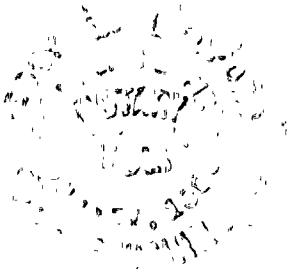
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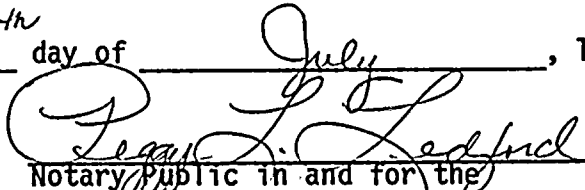


G. C. Sorensen, Manager
Regulatory Programs

On this day personally appeared before me G. C. Sorensen to me known to be the individual who executed the foregoing instrument and acknowledge that he signed the same as his free act and deed for the uses and purposes therein mentioned.

GIVEN under my hand and seal this 17th day of July, 1985.





Notary Public in and for the
State of Washington

Residing at Richland, Wa.
Benton Co.

