REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8603310267 DOC. DATE: 86/03/21 NOTARIZED: YES DOCKET #
FACIL: 50-397 WPPSS Nuclear Project, Unit 2, Washington Public Powe 05000397
AUTH. NAME AUTHOR AFFILIATION
SORENSEN, G. C. Washington Public Power Supply System
RECIP. NAME RECIPIENT AFFILIATION
ADENSAM, E. G. BWR Project Directorate 3

SUBJECT: Application for amend to License NPF-21, changing Tech Spec 3.7.1.3 re UHS to allow reliance on single spray pond for DHR during operational condition mode "star." Fee paid.

DISTRIBUTION CODE: A001D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 5+5
TITLE: OR Submittal: General Distribution

NOTES:

	RECIPIENT ID CODE/NAME		COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME		COPIES LTTR	COPIES ENCL
	BWR ADTS		1	0	BWR EB		1	1
	BWR EICSB		2	2	BWR FOB		1	1
	BWR PD3 PD	01	5	5	BRADFUTE, J		1	1
	BWR PSB		1	1	BWR RSB		1	1
INTERNAL:	ACRS	09	6	6	ADM/LFMB		1	0
	ELD/HDS2		1	0	NRR/DHFT/TSCB		1	1
	NRR/ORAS		1	0	REG FILE	04	1	1
	RGN5		1	1				
EXTERNAL:	24X		1	1	EG&G BRUSKE, S		1	1
	LPDR	03	1	1	NRC PDR	02	1	1
	NSIC	05	1	1				

Rec'd w/check
$150.00

TOTAL NUMBER OF COPIES REQUIRED: LTTR 30 ENCL 26

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

March 21, 1986
G02-86-243

Docket No. 50-397

Director of Nuclear Reactor Regulation
Attn: E. G. Adensam, Project Director
BWR Project Directorate No. 3
Division of BWR Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Ms. Adensam:

Subject: NUCLEAR PLANT NO. 2
OPERATING LICENSE NPF-21, REQUEST FOR
AMENDMENT TO LICENSE - (ULTIMATE HEAT SINK)

In accordance with the Code of Federal Regulations (CFR), Title 10, Parts 50.90 and 2.101, the Supply System hereby requests an amendment to the WNP-2 Operating License. Specifically, a change to Technical Specification 3.7.1.3 (Ultimate Heat Sink) is being requested to allow reliance on a single spray pond for decay heat removal during operational condition mode "star" only. We are requesting this amendment as required by 10 CFR 50.59(c); a change in the facility described in the Safety Analysis Report which involves an unreviewed safety question.

It is the objective of this request to present for your review and concurrence our safety assessment of a proposed modification to the WNP-2 Standby Service Water System (SW). We have determined that the modification described below constitutes an unreviewed safety question per 10 CFR 50.59. We have performed the evaluation described in Attachment I to provide the technical support necessary to implement the design change. We request your concurrence with our position that modification implementation is acceptable and preserves the health and safety of the public.

The SW system relies on the Ultimate Heat Sink (UHS) spray ponds for cooling water. The piping associated with the spray headers in the ponds is supported by a steel structure from the concrete bottom and side walls of the pond. Some repairs are needed to various bolting and coating materials due to corrosion and coating failure. In order to do the needed infrequent inspections and repairs that are expected during the life of the plant, especially coating work, a provision is needed to enable the draining of a single pond. The first of these repairs is planned for our upcoming refueling outage.

Rec'd w/ check
$150.00

A001
1/1

The present design of the SW system uses both spray ponds for the operation of each SW division. In one division operation, the flow path of cooling water is from one pond to the plant and back to the other pond. The water returns to the pond from which suction was taken via a 30 inch siphon between ponds. In order to drain one pond, we propose to install a cross connection between the two divisionalized spray return headers and block the siphon to allow cooling water to return to the same pond (See Attachment II). The cross connection is a removable spool piece that normally is not installed and will be administratively controlled to ensure the original system lineup is preserved during power operation. The cross connection will only be installed while the plant is in refueling mode (operational condition "star"), as draining of one pond will necessitate declaring one division of SW inoperable.

Our safety evaluation of the cross connection shows that the SW system is able to fulfill its safety function and that the UHS meets the intent of Regulatory Guide 1.27. Heat dissipation capability of one division remains the same as that in FSAR analyses, but inventory is diminished to about 22 days without makeup. Construction experience shows that a temporary eight inch line can be run from the Columbia River in three days, so long term makeup can be assured even though the normal 30 day inventory is not available.

The Supply System has reviewed this change per 10 CFR 50.92 and determined that it does not:

1) Involve a significant increase in the probability or consequences of an accident previously evaluated because the design bases of the UHS is to enable the plant to be maneuvered and maintained in a safe condition following a DBA LOCA. Removal of a single spray pond from service while in a refueling operational condition does not place the plant in a condition where a DBA LOCA can reasonably occur because the head will be removed and therefore the vessel will not be able to be pressurized and maneuvering to a safe condition is unnecessary given the plant being initially in operational condition "star".

2) Create the possibility of a new or different kind of accident from any accident previously evaluated because the Supply System has performed an analysis that applied the same heat loads and utilized the same methodology as was used in the DBA analyses. It was concluded that approximately 22 days is the time that a single spray pond could serve as a UHS. This amount of time is considered to be sufficient, given the loss of the non-seismically qualified tower makeup (TMU) water system, to meet critical plant heat loads with the single pond while providing ample time and resources to satisfy the 30 day criterion and provide for long term cooling.

3) Involve a significant reduction in a margin of safety because the ability to cross connect both spray pond discharge headers while shut down will actually provide an increase in the margin of safety over that currently provided in the system design, since draining of a single pond now places all SW systems inoperable. Also, technical specifications permit both SW divisions to be inoperable provided the action statements are followed. This new configuration will permit an on-site Diesel Generator and its loads to remain operable given the draining of a single pond. This change will therefore increase system operational flexibility and provide an increase in the margin of safety.

The Supply System has evaluated this request in accordance with the criteria contained 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 under Facility Category A (Power Reactors).

This change has been reviewed and approved by the Plant Operations Committee and the Supply System Corporate Nuclear Safety Review Board. In accordance with 10 CFR 50.91, the State of Washington has been provided a copy of this letter.

Divers have examined the structures within the spray pond and it is this examination upon which the need to drain a pond is based. It is anticipated that with full inspection of the pool there may be some additional rework/repair required. In order to give the repair effort some flexibility to expand to meet this anticipated increase of scope, it is necessary to commence the work 30 days following the beginning of the outage. The Supply System considers that this would provide adequate time to complete the work identified to date and any additional work identified, as a result of better access, and still not extend the outage. Within the last few days, the Bonneville Power Administration (BPA) has directed the Supply System to plan to begin the impending refueling outage approximately two weeks earlier than originally anticipated (April 1, 1986). This impacts the Staff's ability to process this request in a routine manner in order to have this amendment in place within 30 days following the beginning of the outage. Since this is beyond the control of both parties, we request this change be processed in accordance with the regulations, which contemplated

a shortened review cycle under certain conditions. We are prepared to provide the Staff whatever support it requires in order to accomplish this task. Please direct any questions regarding this matter to Mr. P. L. Powell, Manager, WNP-2 Licensing.

Very truly yours,

for R B Glasscock

G. C. Sorensen, Manager
Regulatory Programs

HLA/tmh
Attachments

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

STATE OF WASHINGTON)
)
County of Benton)

Subject: Ultimate Heat Sink Amendments Request

I, R. B. GLASSCOCK, being duly sworn, subscribe to and say that I am the Director, Licensing & Assurance 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.

DATE 3-21, 1986

R B Glasscock
R. B. Glasscock, Director
Licensing & Assurance

On this day personally appeared before me R. B. Glasscock 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 21 day of March, 1986.

S. R. Michaels
Notary Public in and for the
State of Washington

Residing at Richland, Wa
99352