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ACCESSION NBR: 8604080247 DOC. DATE: 86/03/28 NOTARIZED: YES DOCKET #
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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, extending time period for Reg Guide 1.97, Rev 2 implementation to prior to startup following second refueling outage. Fee paid.

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	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
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REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

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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,extending time period for Reg Guide 1.97,Rev 2 implementation to prior to startup following second refueling outage.Fee paid.

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	BWR PD3 PD	01	5	5	[illegible]		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
	RGN3		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				

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

P.O. Box 968 • 3000 George Washington Way • Richland, Washington 99352

Docket No. 50-397

March 28, 1986
G02-86-282

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 OPERATING LICENSE, LICENSE CONDITION 16,
ATTACHMENT 2, ITEM 3(a)

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. This proposed amendment, if approved, will modify the subject license condition to extend the time period when Regulatory Guide 1.97, Revision 2 is required to be implemented from prior to startup following the first refueling outage to prior to startup following the second refueling outage for the items identified below.

The Supply System has been unable to demonstrate that the installed suppression pool level monitoring system is able to meet the accuracy requirements as originally specified in our design specifications. This has required us to pursue alternative designs. The selection process requires extended lead time for material procurement (up to 52 weeks) which does not provide sufficient time to replace the existing system on the present schedule. The installed system will remain in service until the new system is installed.

Additionally, there are six (6) PSR valves in the Post Accident Sampling System (PASS) that theoretically will fail when exposed to post accident environmental conditions when added to service conditions resulting from heat tracing and insulating these valves in order to prevent condensing of the containment air sample. A reanalysis effort and inspection program is underway to verify that the predicted temperatures are higher than those actually experienced to date and that the valves have suffered no degradation to date. This may demonstrate that the valves are acceptable at least until the next refueling outage (R2).

A001
1/1

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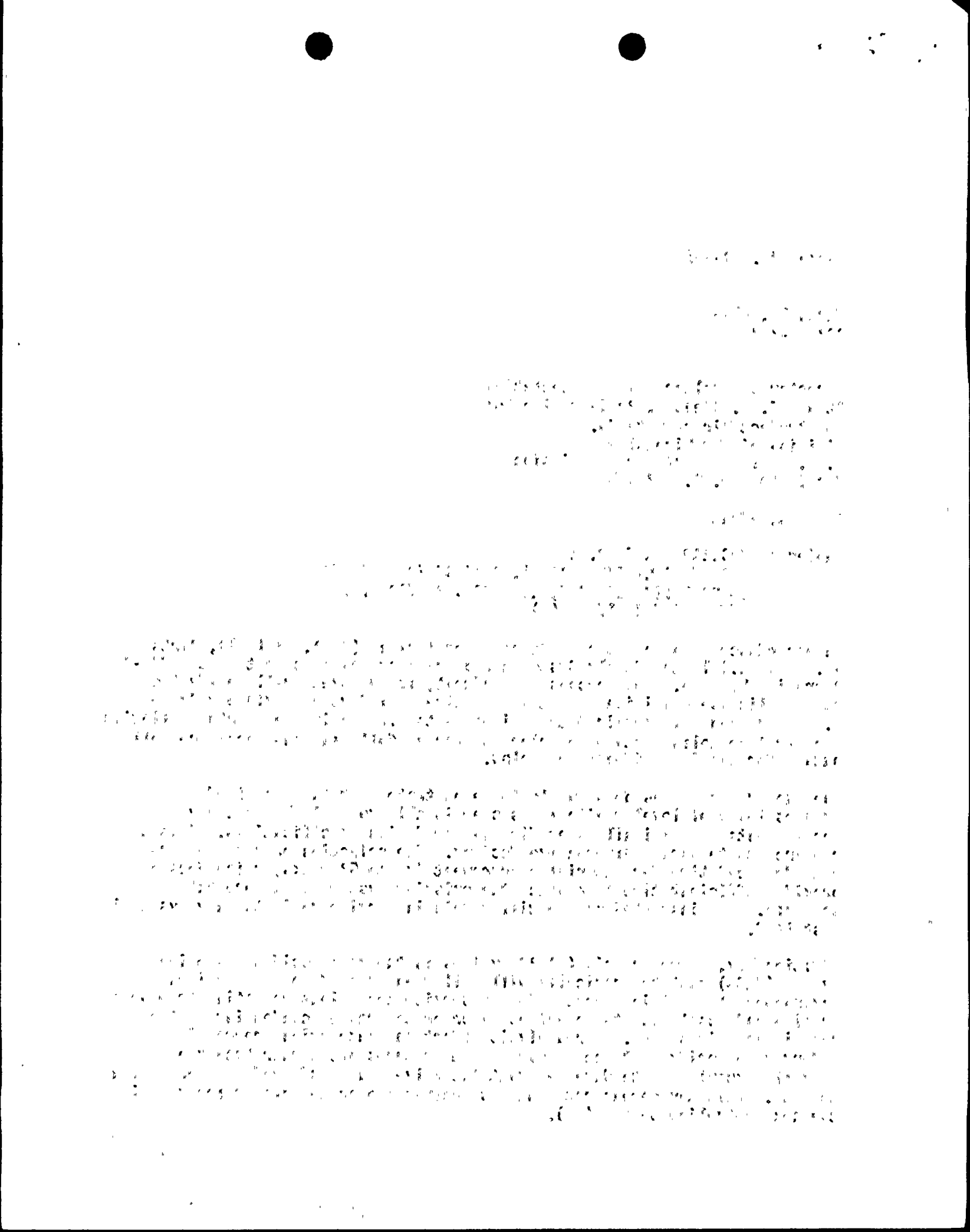

This amendment will allow a more orderly processing of our redesign efforts and will result in a more reliable system which meets all design criteria.

Suppression Pool Water Level Monitoring System

The WNP-2 Operating License requires upgrade or installation of most RG 1.97 equipment prior to startup following the first refueling outage. As required by R.G. 1.97, Rev. 2, the Supply System installed a suppression pool level monitoring system that employed two pressure transducers measuring in a differential mode.

The level monitoring system was installed prior to initial plant startup to satisfy the R.G. 1.97 Type C variable category 1 requirement for determination of a gross breach of containment barrier. A justification for interim operation was submitted to and approved by the NRC. The Supply System then initiated a test program to verify the design accuracy capability of the system. During the program, excessive instrument drift was noted while conducting temperature cycling tests. Two separate tests were conducted to resolve the drift problem with the equipment, however this proved unsuccessful. The test program was recently terminated when it was determined that the instrumentation could not meet the accuracy requirements.

The Supply System then embarked on an evaluation program to design a level monitoring system that would satisfy the R.G. 1.97 requirements. The finalization of system design is proceeding on an expedited basis, however, the manufacturing lead time is beyond our control, and impacts the overall installation schedule putting it beyond our present restart schedule. This necessitates an installation delay until the second refueling outage (R2). Additionally, the new system will utilize signal cabling and containment piping currently used for the existing system. Completion of design, procurement of materials, and completion of installation of the new system cannot be met within the present refueling outage schedule.

The Supply System has evaluated this amendment per 10CFR 50.92 and determined that the requested amendement does not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated because the instruments perform no automatic mitigating function. The parameter sensed however is relied upon to mitigate the consequences of an accident and is relied upon in the plant emergency procedures to determine actions necessary to maintain primary containment integrity. Other methods of determining suppression pool level are available and will be proceduralized prior to startup from R1; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated because the alternate methods to be employed are considered sufficiently accurate and reliable to adequately direct actions necessary to respond as required by the emergency procedures; or (3) involve a significant reduction in a margin of safety because no protective functions are affected.

PSR Valves

The PSR valves have two functions: (1) provide containment isolation; and (2) open to allow sampling of the containment atmosphere. The ability to provide containment isolation has been established. In addition, R.G. 1.97 requires the position indication to be qualified. The containment sampling function of these valves is a R.G. 1.97 category 3 requirement, which is not required to be qualified.

It has been necessary for the valves to be heat traced and insulated to prevent condensing of the air sample. Heat transfer analysis indicates the electrical internal valve parts cannot withstand the predicted temperatures for long term accident conditions, so the "fix" for one problem has created a new one.

The Supply System is presently undertaking an effort to actually measure the temperatures of the valves while heat traced and energized in the plant. This data will then be compared with the calculated expected temperatures and further analysis performed. A physical inspection of the valves will also be performed to ascertain their present condition.

The Supply System is attempting to expedite procurement of replacement parts. The manufacturer's lead times, which are beyond our control, are excessive and will not support installation during the R1 outage (estimated delivery is 52 weeks). As an alternative, the Supply System is attempting to locate replacement valves. However, it is not expected that this will be successful.

The Supply system has evaluated this change per 10CFR 50.92 and determined that it does not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated because these valves have no accident mitigation function; or (2) create the possibility of a new or different kind of accident from an accident previously evaluated because no system modifcations are involved, only replacement (upgrading) of existing items; or (3) involve a significant reduction in a margin of safety because the valves will function in their current condition as a primary containment isolation valve and otherwise provide no direct mitigating function.

Based on the above, we request that the subject license condition be revised to read as follows:

3. Regulatory Guide 1.97, Revision 2 Compliance

Revise (a) The licensee shall implement (installation or upgrade) requirements of R.G. 1.97, Rev 2 with the exception of items (b) and (c) below prior to startup following the first refueling outage.

Add (c) The licensee shall implement (installation or upgrade) requirements of R.G. 1.97, Rev 2 for suppression pool level monitoring system and PSR valves in the PASS system prior to startup following the second refueling outage.

In order for plant startup to not be delayed, it will be necessary for any forthcoming approvals to be in place prior to startup, presently scheduled for June 1, 1986.

This change has been reviewed and approved by the WNP-2 Plant Operations Committee and the Supply System Corporate Nuclear Safety Review Board.

The Supply System has evaluated this request in accordance with the criteria contained in 10CFR 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).

In accordance with 10CFR 50.91, the State of Washington has been provided a copy of this letter. Should you have any questions regarding this matter, please contact Mr. P. L. Powell, Manager, WNP-2 Licensing.

Very truly yours,

R B Skousen

for G. C. Sorensen, Manager
Regulatory Programs

Attachments

cc: JO Bradfute/NRC
C. Eschels/EFSEC
JB Martin/Region V
E Revell/BPA
NS Reynolds/BLCP&R
NRC Site Inspector

STATE OF WASHINGTON)
)
County of Benton)

Subject: amend. Request WNP-2 NPF-21 License Condition 11e attachment 2 Item 3(a)

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. The foregoing contains safeguards information which is to be withheld from public disclosure and protected in accordance with 10CFR73.21.

DATE 3-28, 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 28 day of March, 1986.

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

Residing at Richland, Wa 99352