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 AUTH. NAME AUTHOR AFFILIATION
 SORESENSEN, G.C. Washington Public Power Supply System
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SUBJECT: Discusses 891109 telcon re unreviewed safety question re
 standby gas treatment sys.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

November 30, 1989
G02-89-216

Docket No. 50-397

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

Gentlemen:

Subject: NUCLEAR PLANT NO. 2, OPERATING LICENSE NPF-21
UNREVIEWED SAFETY QUESTION REGARDING
STANDBY GAS TREATMENT (SGT) SYSTEM

Reference: Letter, G02-89-176, GC Sorensen (SS) to NRC,
same subject, dated September 29, 1989

On November 9, 1989 a telephone conference call was held with the NRC staff (R. Samworth and J. Kudrick) concerning the Supply System's justification for continued operation (JCO) pending the reanalysis of the secondary containment transients and attendant dose calculations. As a result of that conference call, the Supply System agreed to provide further information on the following two issues:

- 1) In the reference letter, the Supply System provided a JCO but did not describe a plan for final resolution of the identified issue. The Supply System was requested to address this plan in further detail.
- 2) The Supply System was asked to provide further information to document leak tightness of secondary containment and assure that major repairs have not been required to meet leak test criteria.

The purpose of this letter is to address these items.

Regarding the first issue, WNP-2 is currently evaluating possible long-term solutions to resolve the USQ identified in the referenced letter. Engineering analyses are ongoing to determine suitable modeling techniques and assumptions (e.g. wind, temperature, SGTS flow and secondary containment leakage) that will be used to establish a revised design basis to provide assurance the 10CFR 100 and General Design Criterion 19 guidelines and criteria are satisfied.

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Page Two
UNREVIEWED SAFETY QUESTION REGARDING
STANDBY GAS TREATMENT (SGT) SYSTEM

WNP-2 plans to have outlined the necessary information to justify assumptions and design bases by January 15, 1990. As discussed, WNP-2 will then seek to meet with NRC personnel to discuss the acceptability of these assumptions and potential long-term solutions. Our goal for this meeting would be to obtain preliminary NRC concurrence with our long-term solution path prior to committing extensive resources toward developing a revised design basis and resolution of this USQ.

The following subject areas are expected to be a part of the long term solution:

- Suppression pool scrubbing credit per SRP 6.5.5 Rev. 0
- SGT rated flow rate
- Allowable secondary containment leakage
- Meteorological probabilities of temperature and wind
- SGT post accident (credit for iodine removal)
- Compliance to Reg. Guide 1.52
- Service water temperature effects
- Post-LOCA heat load effects
- Potential revised high energy line break (HELB) design basis
- Control room habitability criteria
- Offsite dose criteria
- Technical Specification changes

Regarding the second issue, secondary containment leakage has been verified each year since plant startup. The test procedure acceptance criteria are based on Technical Specification parameters and do not require recording of actual values. Three data points are available to evaluate in-leakage of secondary containment following the reactor building roof rupture event. In all surveillances to date, the Technical Specification criteria were met.

WNP-2 has not had to make repairs in order to maintain secondary containment leakage values. Normal maintenance programs and penetration surveillances have identified only three minor leakage deficiencies, and each repair subsequently reduced secondary containment in-leakage. Thus, secondary containment leakage rate appears to be stable and improving.

Page Three
UNREVIEWED SAFETY QUESTION REGARDING
STANDBY GAS TREATMENT (SGT) SYSTEM

The following chronologically lists the results of tests where test data were recorded and identifies dates when repairs were made that reduced leakage. All other values were taken during execution of the Standby Gas Treatment Functional Test procedures by the system engineer.

- June 1985 - Leakage recorded at 1800 CFM @ $-.30''\text{wg}$
- May 1988 - Reactor Building roof event
- May 1988 - Leakage at $< 2240 \text{ CFM @ } -.37''\text{wg}$. Surveillance verified secondary containment integrity.
- Sept. 1988 - Two (2), four (4) inch penetrations were identified and sealed.
- Dec. 1988 - Leakage recorded at 2183 CFM @ $-.37''\text{wg}$ (1475 CFM standardized)
- June 1989 - Seals replaced on all Reactor Building HVAC intake and exhaust valves.
- Sept. 1989 - Leakage recorded at 2185 CFM @ $-.44''\text{wg}$ (1228 CFM standardized)

These data indicate that secondary containment integrity has been improved since 1985 due to the repair efforts listed. The data indicate that performance of the secondary containment boundary has been stable. The in-leakage stated in the JCO is based upon current data. Changing of surveillance frequency is typically based upon test failures. Test failures have not been experienced and data are insufficient to conclude a frequency change is necessary. The repairs mentioned above can be expected to result in stable in-leakage for at least five years based upon the qualified life of the REA/ROA valve seals. R-5 outage will occur approximately nine months after the September 1989 test. The current Technical Specification test frequency is 18 months. The Supply System does not believe that any additional increase in the testing frequency is necessary.

Very truly yours,

R. Latone

for G. C. Sorensen, Manager
Regulatory Programs

HLA/bk

cc: JB Martin - NRC RV
NS Reynolds - BCP&R
RB Samworth - NRC
DL Williams - BPA/399
NRC Site Inspector - 901A