

# ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

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ACCESSION NBR: 8812210254 DOC. DATE: 88/12/12 NOTARIZED: YES DOCKET #  
 FACIL: 50-397 WPPSS Nuclear Project, Unit 2, Washington Public Powe 05000397  
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SUBJECT: Application for amend to License NPF-21, modifying Table 3.3.7.12-1.

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G02-88-264  
December 12, 1988

Docket No. 50-397

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

Gentlemen:

Subject: NUCLEAR PLANT NO. 2  
OPERATING LICENSE NPF-21, REQUEST FOR AMENDMENT TO  
TECHNICAL SPECIFICATION TABLE 3.3.7.12-1 RADIOACTIVE  
GASEOUS EFFLUENT MONITORING INSTRUMENTATION

In accordance with the Code of Federal Regulations, Title 10, Parts 50.90 and 2.101, the Supply System hereby submits a request for amendment to the WNP-2 Technical Specifications. Specifically, the Supply System is requesting that the subject table be modified, as attached, to allow operation of the main condenser off-gas treatment system with one of the redundant hydrogen monitors inoperable without entering the associated action statement.

Presently the technical specification requires both monitors to be operable. In the event of a failure or the need to perform maintenance necessitating shutdown of one unit, the action statement (111) requires grab samples and analysis on an eight hour basis. With regard to the hydrogen monitor design, the grab sample and analysis consumes manpower resources with no assurance that the required action provides any enhancement to plant operation or safety beyond that already provided by the system design.

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Page Two

NUCLEAR PLANT NO. 2

OPERATING LICENSE NPF-21, REQUEST FOR AMENDMENT TO  
TECHNICAL SPECIFICATION TABLE 3.3.7.12-1 RADIOACTIVE  
GASEOUS EFFLUENT MONITORING INSTRUMENTATION

As described in the WNP-2 FSAR Section 11.3.2.1.8.1, both monitors act in parallel. Both monitor the same point in the off-gas flow and provide redundant signals to a continuous recorder on different pens in the control room. Both monitors are physically located in the same room side by side with remote system alignment and status lights and alarms on the same panel in the control room. The control room recorder and system alignment and status lights are reviewed for value and correct operation at shift turnover and once again during each shift. Should there be a concern that the operating unit has failed, a design feature that confirms operation is an automatic calibration check in which a calibration gas is admitted to the analyzer every four hours. The response to the calibration gas is readily apparent in the control room and provides confirmation that the unit is functioning correctly. Any failed unit would be recognized by a recorded lack of response to the calibration gas on the four hour frequency and the action statement would then be entered. The amount of time a failed monitor would go unnoticed would be less than eight hours (one shift) and more likely approximately four hours (reviewed twice per shift).

With approval of this request, the intent remains to operate both units continuously and expeditiously return any failed monitor to service. However, grab sample and analysis would not be commenced on failure of one of the two operating units. Attention would be focused on returning the failed unit to service, and with their physical locations being side by side in both the control room and the equipment operating space, failure of a second unit would be almost immediately recognized.

Hence, with the units being redundant, in close proximity, and having the self-checking calibration gas function, entry into the action statement upon failure of one of two units is overly conservative. The action statement requires a grab sample and analysis even though hydrogen gas concentration is still available in the control room from a monitor easily verified for correct operation and failure. The presently required action, sample within four hours and analyze within four more hours, only confirms the correct operation of the remaining monitor on an eight hour frequency. Current design with the calibration gas confirms operation on a four hour frequency. Additionally failure of the second monitor, although remote, would be quickly recognized and the grab sample and analysis commenced per the action statement. The possible time frame in which hydrogen concentration might be unknown under the proposed change would not exceed 12 hours. (failure, despite the close observation described above, not being recognized until the four hour calibration gas check followed by the eight hour sample and analysis). After this 12 hour period the

Page Three

NUCLEAR PLANT NO. 2

OPERATING LICENSE NPF-21, REQUEST FOR AMENDMENT TO  
TECHNICAL SPECIFICATION TABLE 3.3.7.12-1 RADIOACTIVE  
GASEOUS EFFLUENT MONITORING INSTRUMENTATION

frequency of sample and analysis would be 8 hours in accordance with the technical specifications. The four hour difference between present requirements and the proposed change is not a significant increase in risk. In all likelihood failure of the second unit would be immediately recognized and the interval would be closer to the eight hours contemplated in the action statement. It should also be noted that the action statement allows 12 hours between sample and analysis under constant recombiner temperature and thermal power conditions.

The requested change, 1 versus 2 channels operable, is similar to that presently required by technical specifications for Limerick, LaSalle, Fermi, and Shoreham.

The Supply System has evaluated this amendment per 10CFR50.59 and 50.92 and determined that it does not represent an unreviewed safety question or a significant hazard because it does not:

- 1) Involve a significant increase in the probability or consequences of an accident previously evaluated because hydrogen concentration in the process flow will continue to be monitored with reliability. A single monitor will continue to have automatic confirmation of operation which, should it fail, will provide approximately the same alert to commence grab sample and analysis as presently provided with two monitors.
- 2) Create the possibility of a new or different kind of accident from any accident previously evaluated because the proposal does not constitute a physical change to the plant. Hence, no new or different kind of accident is possible.
- 3) Involve a significant reduction in a margin of safety because the process flow hydrogen concentration will still be monitored with a high degree of reliability. One versus two monitors operating does not represent a significant reduction in a margin of safety because the automatic calibration check assures that the single monitor is operational on a four hour frequency. Failure of the remaining monitor would be recognized and the subsequent sample and analysis would be performed on a schedule very near to that required by the present technical specifications. Given the probability of a second failure, the automatic calibration check, and the ease of recognizing such a failure, the requested change does not represent a significant reduction in the margin of safety.



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WASHINGTON, D. C. 20535

Page Four

NUCLEAR PLANT NO. 2


OPERATING LICENSE NPF-21, REQUEST FOR AMENDMENT TO  
TECHNICAL SPECIFICATION TABLE 3.3.7.12-1 RADIOACTIVE  
GASEOUS EFFLUENT MONITORING INSTRUMENTATION

As discussed above, the Supply System considers that this change does not involve a significant hazards consideration, nor is there a potential for significant change in the types or significant increase in the amount of any effluents that may be released offsite, nor does it involve a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed change meets the eligibility criteria for categorical exclusion set forth in 10CFR51.22(c)(9) and therefore, per 10CFR51.22(b), an environmental assessment of the change is not required.

This amendment request has been reviewed and approved by the WNP-2 Plant Operations Committee (POC) and the Supply System Corporate Nuclear Safety Review Board (CNSRB).

In accordance with 10CFR170.21, an application fee of one hundred fifty dollars (\$150.00) accompanies this request. In accordance with 10CFR50.91, the State of Washington has been provided a copy of this letter.

Very truly yours,



G. C. Sorensen, Manager  
Regulatory Programs

Enclosure

PLP:lw

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



STATE OF WASHINGTON)  
COUNTY OF BENTON )

Subject: Tables 3.3.7, 12-1

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.

DATE 9 DEC, 1988

G. C. Sorensen  
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 acknowledged that he signed the same as his free act and deed for the uses and purposes herein mentioned.

GIVEN under my hand and seal this 9<sup>th</sup> day of December 1988.

Audrey Ann Jenkins  
Notary Public in and for the STATE  
OF WASHINGTON  
Residing at Richland





