



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 60 TO FACILITY OPERATING LICENSE NO. NPF-21
WASHINGTON PUBLIC POWER SUPPLY SYSTEM
WPPSS NUCLEAR PROJECT NO. 2
DOCKET NO. 50-397

1.0 INTRODUCTION

By letter dated December 23, 1987, Washington Public Power Supply System (WPPSS) submitted a request to extend the implementation date for neutron flux monitoring instrumentation, contained in Operating License Condition 2.C.(16). Operating License Condition 2.C.(16) requires that the licensee shall implement the recommendations of Regulatory Guide (R.G.) 1.97, Revision 2, for neutron flux monitoring prior to startup following the third refueling outage. R.G. 1.97 recommends Category 1 neutron flux monitoring instrumentation to monitor reactivity control. The licensee requested that the deadline for implementation be extended to the end of the fourth refueling outage.

2.0 EVALUATION

The licensee stated that it has installed a neutron flux monitoring system, but has been unsuccessful in qualifying the equipment environmentally. The licensee detailed the technical problems encountered with the environmental qualification attempt. The licensee's neutron flux monitoring instrumentation may require design modifications to become fully qualified. These modifications and subsequent testing make it highly improbable that the equipment will be qualified in sufficient time to meet the present license condition.

The licensee has committed to implement a system that complies with the Category 1 criteria of R.G. 1.97. The licensee has made a good faith effort to install qualified neutron flux monitoring instrumentation. Category 1 neutron flux monitoring systems that meet all the Category 1 criteria of R.G. 1.97 have only recently become available to the industry. Because of the above, we find the licensee's request for an extension to be reasonable. We also find the existing neutron flux monitoring instrumentation is acceptable for interim use, because the existing instrumentation consists of four redundant safety-related channels. Additionally, there are unrelated systems in place to provide operators with sufficient data to assess reactor conditions (e.g., control rod position monitors, reactor vessel level and pressure monitors) in the unlikely event of an accident condition prior to replacement.

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The staff understands that the supplier of the neutron flux monitoring instrumentation (GAMMA-METRICS) that the licensee has installed expects to show the equipment to be fully qualified by the end of the fourth quarter of Fiscal Year 1988. It is the staff's position that the licensee shall provide the staff with quarterly updates on the progress of the neutron flux monitoring instrumentation environmental qualification effort.

Based on the above evaluation, the staff concludes that the existing neutron flux monitoring instrumentation is acceptable for interim use. It is the staff's position that the licensee shall install neutron flux monitoring instrumentation that fully conforms to the recommendations of R.G. 1.97, Revision 2, by startup following the fourth refueling outage. The quarterly updates of the neutron flux monitoring instrumentation environmental qualification effort will provide an opportunity for the staff to monitor the progress in obtaining the qualification.

3.0 ENVIRONMENTAL CONSIDERATION

Pursuant to 10 CFR 51.32, an environmental assessment has been published (53 FR 21743) in the Federal Register on June 9, 1988. Accordingly, the Commission has determined that the issuance of this amendment will not have a significant effect on the quality of the human environment.

4.0 CONTACT WITH STATE OFFICIAL

The State of Washington advised by letter dated February 25, 1988 that they did not have any comment.

5.0 CONCLUSION

We have concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: B. Marcus

Dated: June 10, 1988

