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

SAFETY EVALUATION REPORT OF

THE ISOLATION VALVE SEAL WATER SYSTEM

H. B. ROBINSON UNIT 2

DOCKET NO. 50-261

1.0 INTRODUCTION

The H. B. Robinson Isolation Valve Seal Water (IVSW) system is described in Chapter 5 of the licensee's FSAR and is included in the unit's Technical Specifications. The IVSW system has been used by the licensee to perform Type C tests on valves served by the system. However, in late February 1978, the Office of Inspection and Enforcement with support from staff members of the Office of Nuclear Reactor Regulation briefly reviewed the system as it applied to Appendix J, Type C testing. The staff's finding was that the IVSW system could not be used to meet the specific requirement of paragraph III.C.3.b of Appendix J, and thus could not be used to perform certain Type C tests. This determination was based on the fact that (1) the IVSW system design may not meet the engineered safety feature criteria since no credit is taken for the system operation in the accident analysis, and (2) the long term makeup water is provided at a pressure that is less than that required by Appendix J.

In order to demonstrate the acceptability of the IVSW system so that it can be used to perform certain Type C tests, the licensee proposed certain modifications to the present IVSW system. The proposed IVSW system is presented in the licensee's submittal dated March 15, 1979, as supplemented April 20, 1979. Our evaluation of the proposed system follows.

2.0 EVALUATION

Paragraph III.C.3.b of Appendix J to 10 CFR 50 requires that the installed isolation valve seal water system fluid inventory be sufficient to assure the sealing function for at least 30 days at a pressure of 1.1 Pa. The IVSW system proposed by the licensee can provide seal water at a pressure equal or greater than 1.1 Pa and for a period greater than 30 days. We, therefore, conclude that the proposed IVSW system meets the requirements of Appendix J.

We have also reviewed the system design with respect to the requirements of an engineered safety feature, because the system will be used and relied upon during and following an accident. Based on the information in the licensee's submittal and the FSAR, we find

that the proposed system including associated components, piping, and structures are designed to Class I seismic criteria. In addition, two separate, independent, seismically qualified sources of makeup water are provided for long term operation at a pressure greater than 1.1 Pa. A single failure analysis shows that the failure of any single active component will not prevent fulfilling the design function of the system. We,therefore, conclude that the proposed IVSW system meets the requirements of an engineered safety feature, and can be relied upon to fulfill its design function during and following an accident.

3.0 CONCLUSION

We find, based on the above evaluation, that the proposed IVSW system meets the requirements of an engineered safety feature as well as the Appendix J requirements. Thus it is acceptable to be used to conduct future Type C tests on those valves served by the system.