

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

September 4, 1979

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
Attn: Mr. O. D. Parr, Chief
Light Water Reactors Branch No. 3
Division of Project Management
U. S. Nuclear Regulatory Commission
Washington, DC 20555

Serial No. 712
LQA/ESG:esh

Docket Nos. 50-338
50-339

Dear Mr. Denton:

Based on recent discussions with Messrs. A. W. Dromerick and J. A. Olshinski of the Staff, we understand that the Staff has concluded that the long-term reliability of the Low Head Safety Injection (LHSI), Outside Recirculation Spray (ORS), and Inside Recirculation Spray (IRS) pumps for North Anna Units 1 and 2 has been demonstrated to be acceptable. The Staff has also requested that certain revisions be made to the periodic testing and inspection programs for the IRS pumps.

We have reviewed these requests and agree to make these revisions. Specifically:

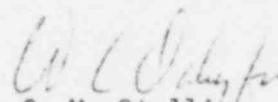
1. We agree that the testing interval for the IRS pumps should be changed from monthly to once every three months. Accordingly, we request that the inservice testing program for Unit 1 ASME Code Class 1, 2, and 3 pumps, as approved by NRC letter dated October 17, 1977, be revised accordingly, as shown in Attachment 1. This request supplements our previous request for revisions to the inservice testing program, dated November 2, 1978 (letter Serial No. 597).
2. Our letter of January 31, 1979 (Serial No. 046) proposed our inservice testing program for Unit 2. We hereby revise our proposed program, as shown in Attachment 2, to reflect the new test interval for the IRS pumps.
3. We agree to remove and inspect the IRS pumps at the first refueling for both Units 1 and 2. Following the inspections, the pump bearings will be replaced if necessary, and the pumps will be optically aligned prior to installation. A similar inspection of the pumps will be conducted at least once every five years thereafter.

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We trust that these revisions to the IRS pump testing and inspection programs will permit you to complete your review of this matter.

Very truly yours,



C. M. Stallings
Vice President-Power Supply
and Production Operations

Attachments

cc: Mr. James P. O'Reilly, Director
Office of Inspection and Enforcement
Region II

ATTACHMENT 1
REVISION TO UNIT 1 PROGRAM

INSIDE RECIRCULATION SPRAY PUMP

Class 2

1-RS-P-1A

1-RS-P-1B

QUANTITIES

P_i - Exception	See below
ΔP - Exception	See below
Q - Exception	See below
V - Exception	See below
Proper Lubricant Level or Pressure - Exception	See below
T_b - Not Required	See IWP-4310

NOTES: Proper Lubricant Pressure or Level cannot be observed since bearings are in the main flow path. Reference is made to IWP-4310 which establishes exception to T_b for bearings within the main flow path.

Pumps will be run dry to verify operational readiness, once per 3 months

This is a design feature of the pump. Each pump is equipped with a sensor to detect rotation.

5. In accordance with Technical Specification 4.7.9.1, measured quantities will be obtained at least every 18 months. These pumps are not Engineered Safety Features pumps. Operability during extended use can be determined by monitoring reactor coolant system temperature. Due to location of Pi instrumentation, meaningful data can only be obtained with the pump in operation.
6. These pumps are run dry once per 3 months to verify operational readiness; therefore, Pi, ΔP , Q and Proper Lubricant Level or Pressure cannot be measured. Each pump is equipped with a sensor to detect pump rotation. In addition, a vibration alarm associated with each pump will alert Control Room personnel to excessive pump vibration.
7. These pumps will be run dry or wet to verify operational readiness. Each will be observed to verify rotation. At least once per 18 months, each will be tested on its recirculation path when flow and discharge pressure will be observed. A vibration alarm associated with each pump will alert Control Room personnel to excessive pump vibration. Due to pump design, it is not possible to measure a suction pressure. Proper lubricant level or pressure is not required since bearings are in the main flow path.
8. These pumps take suction from the RWST for pump performance testing. This tank has a minimum level required by Technical Specifications, which will be observed from the Control Room. This indication is about 4% accurate. Proper lubricant level or pressure cannot be observed since bearings are in the main flow path.
9. The accuracy of flow instrumentation at normal operating flows is about + 8%. This accuracy does not lend itself to satisfying the requirements of Table IWP-2100-2 where the acceptable range is +2% -6%. In addition, varying flow rates interferes with normal plant operation since flows have been balanced to meet heat load requirements. Therefore, the discharge pressure and Q for each pump will be recorded but not compared to reference values for head curve verification. These pumps take suction from the Service Water Reservoir, which has a minimum level required by Technical Specifications. This level indication, which is about 4% accurate, will be observed from the Control Room to establish initial conditions for testing. Proper lubricant level or pressure cannot be observed since bearings are in the main flow path. Motor current will be recorded for comparison purposes.
10. This pump takes suction from the Service Water Reservoir, which has a minimum required level by Technical Specifications. This level indication, which is about 4% accurate, will be observed from the Control Room to establish initial conditions for testings. Proper lubricant level or pressure cannot be observed since bearings are in the main flow path.
11. The flow paths of these pumps are normally dry. At least once per 18 month, each pump will be automatically started in conjunction with a test signal for Containment Depressurization Actuation.
12. The bearing lubrication for these pumps is grease instead of oil. The grease will be checked annually.