VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

W. L. STEWART
VICE PRESIDENT
NUCLEAR OPERATIONS

February 19, 1987

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Serial No. 86-822
NO/TAH: jmj
Docket No. 50-339
License No. NPF-7

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION UNIT 2
PROPOSED CHANGE TO FACILITY OPERATING LICENSE

Pursuant to 10 CFR 50.90, the Virginia Electric and Power Company requests an amendment, in the form of a change to Facility Operating License No. NPF-7 for North Anna Power Station Unit 2.

The proposed amendment would modify the requirement of Facility Operating License Condition 2.C.(15)(c) to inspect the recirculation spray pumps inside containment every 5 years to permit the second inspection to be performed during the upcoming Unit 2 refueling outage which is scheduled to commence on July 31, 1987. The inspection is currently required to be performed by May 27, 1987 and would require a plant shutdown.

This request has been reviewed and approved by the Station Nuclear Safety and Operating Committee and the Safety Evaluation and Control Staff. It has been determined that this change does not involve a significant hazards consideration as defined in 10 CFR 50.92.

We have evaluated this request in accordance with the criteria of 10 CFR 170.12. The application fee of $150.00 is enclosed.

Very truly yours,

W. L. Stewart

Attachments

A001 w/check $150
1/1

cc: U. S. Nuclear Regulatory Commission
101 Marietta Street, N.W.
Suite 2900
Atlanta, GA 30323

Mr. J. L. Caldwell
NRC Senior Resident Inspector
North Anna Power Station

Mr. Charles Price
Department of Health
109 Governor Street
Richmond, Virginia 23219

COMMONWEALTH OF VIRGINIA)
)
CITY OF RICHMOND)

The foregoing document was acknowledged before me, in and for the City and Commonwealth aforesaid, today by W. L. Stewart who is Vice President - Nuclear Operations, of Virginia Electric and Power Company. He is duly authorized to execute and file the aforegoing document in behalf of that Company, and the statements in the document are true to the best of his knowledge and belief.

Acknowledged before me this 19 day of February, 1987.

My Commission expires: February 25, 1990.

Vicki L. Hull
Notary Public

(SEAL)

ATTACHMENT 1

PROPOSED CHANGE TO THE
FACILITY OPERATING LICENSE

Virginia Electric and Power Company

(15) Prior to resuming power operation following the first refueling outage except as specifically noted in paragraphs (h)(2) and (h)(4) below:

(a) VEPCO shall submit the details of the inspection program for control rod guide thimble tube wall wear for Commission approval;

(b) VEPCO shall install inspection ports in the steam generators;

(c) VEPCO shall remove and inspect the recirculation spray pumps inside containment and replace bearings if necessary. A similar inspection shall be performed at least once every five years thereafter;*

(d) VEPCO shall install leak test connections on the RHR isolation valves;

(e) VEPCO shall demonstrate by test the backup depressurization capability of the PORV's using the same shutdown procedure as described in VEPCO's procedure 2-OP-3.2 dated 07/23/80;

(f) VEPCO shall submit for Commission approval, the results of the tests applicable to North Anna Power Station, Unit 2, of a study concerning mixing of added borated water and cooldown under natural circulation conditions;

(g) VEPCO shall retest all engineered safety features reset control actions to verify proper reset action; and

(h) VEPCO shall implement the following design and procedural modifications with respect to diesel generator reliability:

1) Complete a formal training program for all the mechanical and electrical maintenance and quality control personnel, including supervisors, who are responsible for the maintenance and availability of the diesel generators. The depth and quality of this training program shall be at least equivalent to that of training programs normally conducted by major diesel engine manufacturers;

2) The lube oil system shall be modified to the manufacturer's recommendations for providing continuous lubrication of the lower portions of the engine. The modifications shall further provide for partial filling of the upper lube oil supply header and a lube oil booster/ accumulator system which will force oil into the upper lube oil header during engine startup. The modifications shall be completed no later than the second refueling outage.

*The second inspection shall be performed during the 1987 refueling outage.

ATTACHMENT 2

SAFETY EVALUATION

Virginia Electric and Power Company

DISCUSSION

This amendment will modify Facility Operating License Condition 2.C.(15)(c) which requires the inspection of the recirculation spray pumps inside containment at least once every five years to permit the second inspection to be performed during the upcoming Unit 2 refueling outage which is scheduled to commence on July 31, 1987. The inspection is currently required to be performed on May 27, 1987 and would require a plant shutdown.

Supplement 10 to NUREG 0053 Section 6.3.3 concerns the testing performed on the Inside Recirculation Spray Pumps. Paragraph 3 of Section 6.3.3 states: "We also require that these pumps be removed and inspected at the first planned major outage. The pump bearings should be replaced if necessary." Paragraph 4 adds "... We require a similar inspection of the pumps as least once every five years." and ..."The Technical Specifications will reflect these requirements." By stating that the Technical Specifications will reflect these requirements, Supplement 10 to NUREG 0053 implies that these inspections will be subject to the same requirements regarding time intervals and allowable extensions as specified in Technical Specification 4.0.2.

During the first refueling outage of Unit 2, the Inside Recirculation Spray Pumps were removed and inspected. The inspections revealed no significant degradation of the pump bearings.

Section 6.2.2.5.2 of the Updated Final Safety Analysis Report describes the instrumentation available in the Control Room to monitor system parameters during the operation of the recirculation spray pumps. This includes: pump discharge pressure; containment sump and recirculation pump discharge water temperature; vibration alarms and indication of shaft rotation.

Technical Specification 3.6.2.2 requires that "four separate and independent containment recirculation spray subsystems, each composed of a spray pump, associated heat exchanger and flow path" shall be OPERABLE during MODES 1, 2, 3, and 4.

Station periodic test procedures require that the inside recirculation spray pump be run to determine OPERABILITY every 3 months. This is accomplished by verifying that the pump achieves a speed greater than 100 rpm as indicated by a rotation sensor. No problems related to the bearings have been identified as a result of these periodic tests.

Based upon the satisfactory results of the inspection of the bearings during the first refueling outage, the diverse instrumentation available in the Control Room to detect system degradation during emergency operation, the current Technical Specification requirements for system operability, and the periodic testing of the pumps for OPERABILITY determination, there is adequate assurance that the inside recirculation spray pumps will remain operable during the requested extension to the surveillance interval.

BASIS FOR NO SIGNIFICANT HAZARDS DETERMINATION

The proposed change does not involve a significant hazards consideration because operation of North Anna Unit 2 in accordance with the change would not:

(1) involve a significant increase in the probability or consequence of an accident previously evaluated. The testing requirements will not change but only the required surveillance interval. The requested extension in the surveillance interval is in accordance with the surveillance requirements of the other Technical Specifications. Previous inspections have not shown any significant degradation of the pump bearings and periodic testing of the pumps for OPERABILITY determination have not indicated any problems. The Technical Specifications OPERABILITY requirement for the containment recirculation spray system has not been changed.

(2) create the possibility of a new or different kind of accident from any accident previously identified. The testing requirements will not change but only the required surveillance interval.

(3) involve a significant reduction in a margin of safety. The testing requirements will not change but only the required surveillance interval. The requested extension in the surveillance interval is in accordance with the surveillance requirements of the other Technical Specifications. Previous inspections have not shown any significant degradation of the pump bearings and periodic testing of the pumps for OPERABILITY determination have not indicated any problems. The Technical Specifications OPERABILITY requirement for the containment recirculation spray system has not been changed.

Therefore, pursuant to **10 CFR 50.92,** based on the above consideration, it has been determined that this change does not involve a significant safety hazards consideration.