

DEC 29 1980

Docket No. 50-339

RECEIVED DISTRIBUTION SERVICES UNIT

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Mr. J. H. Ferguson
Executive Vice President - Power
Virginia Electric and Power Company
Post Office Box 2666
Richmond, Virginia 23261

Dear Mr. Ferguson:

SUBJECT: ISSUANCE OF AMENDMENT NO. 2 TO FACILITY OPERATING LICENSE NPF-7
NORTH ANNA POWER STATION, UNIT NO. 2

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 2 to Facility Operating License NPF-7.

In accordance with your requests of November 20, 1980, December 15 and 18, 1980, this amendment changes the required implementation dates for certain post-TMI requirements identified in the conditions specified in the North Anna Power Station, Unit No. 2 Facility Operating License. It also revises the condition in the operating license related to the implementation of modifications associated with IE Bulletin 79-27. The changes of the implementation dates are described in the enclosed Safety Evaluation supporting Amendment No. 2 to NPF-7.

With respect to your request regarding the implementation date related to Condition 2.C.(21) Item j, we were orally advised by your representatives that this matter is still under consideration and that the implementation date for meeting the requirements in this condition need not be changed at this time. Therefore, no action has been taken on this item.

With the approval of the requested implementation dates, we believe there is reasonable assurance that implementation of these items can be completed on the approved schedules. Thus, any subsequent relief from these implementation dates will require substantial justification.

A copy of a related notice which has been forwarded to the Office of the Federal Register for publication is enclosed for your information and use.

Sincerely,

15/

B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing

Enclosures:

- 1. Amendment No. 2 to NPF-7 *SEE PREVIOUS CONCURRENCE
- 2. Federal Register Notice
- 3. Safety Evaluation

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cc w/enclosures:
See next page

DEC 29 1980

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Executive Vice President - Power
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Sincerely,

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B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing

Enclosures:

1. Amendment No. 2 to NPF-7
2. Federal Register Notice
3. Safety Evaluation

cc w/enclosures:

Final review of amendment and Fed. Reg. notice only

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DEC 29 1980

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VIRGINIA ELECTRIC AND POWER COMPANY

DOCKET NO. 50-³³⁹399

NORTH ANNA POWER STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

License No. NPF-7
Amendment No. 2

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Virginia Electric and Power Company (VEPCO), dated November 20, 1980, and supplemented by letters, dated December 15 and 18, 1980, for the North Anna Power Station, Unit No. 2 license complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the license, as amended, the provisions of the Act and the regulations of the Commission,
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changing the following conditions contained in paragraph 2.C of Facility Operating License NPF-7 to read:

(12) VEPCO shall implement the following modifications related to IE Bulletin 79-27 "Loss of Non-Class IE Instrumentation and Control Power System Bus During Operation" as specified in VEPCO's letters, dated May 30 and July 9, 1980 on the following schedule:

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(a) Prior to startup following the November 1, 1980 outage for Fire Protection Modifications:

Item 2 - Alternate Feed for Annunciators

Items 3, 4, 7 and 8: Alternate Power Supply for Vital SOV and Vital Instrument Panels.

Items 9 and 10: Loss of Voltage for Semi-Vital Buses

(b) Within six months from date of issuance of this license:

Item 6: Alternate Power to Galectronics

Items 11, 12, 13 and 14: Change to Voltage Indication - 125 VDC Buses

(c) Prior to startup following the first refueling outage:

Items 1 and 5: Diverse Power Supply for T_h and T_c

(20) TMI Action Plan Conditions

Each of the following conditions references the appropriate section of Supplement No. 11 to the Safety Evaluation Report (NUREG-0053) for the North Anna Power Station, Unit 2, dated August 1980.

(a) Control Room Design Review (Section 22.2 Item I.D.1)

Within the schedule requirements of NUREG-0737, VEPCO shall submit an evaluation of the benefits of installing data recording and logging equipment in the control room to correct deficiencies associated with the trending of important parameters on strip chart recorders in use at most nuclear power plants, as part of their one-year control room design review.

(21) TMI Action Plan Dated Conditions

Each of the following conditions references the appropriate section of Supplement No. 11 to the Safety Evaluation Report (NUREG-0053) for the North Anna Power Station, dated August 1980, and shall be completed to the satisfaction of the NRC.

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(c) Reactor Coolant System Vents (Section 22.2 Item II.B.1)

VEPCO shall submit procedural guidelines and analytical bases for the reactor coolant system vents. The reactor coolant system vents shall be installed no later than the implementation schedule of NUREG-0737.

(d) Plant Shielding (Section 22.3 Item II.B.2)

VEPCO shall complete modifications to assure adequate access to vital areas and protection of safety equipment following an accident resulting in a degraded core no later than the implementation schedule of NUREG-0737.

(e) Post-Accident Sampling (Section 22.3 Item II.B.3)

VEPCO shall complete corrective actions needed to provide the capability to promptly obtain and perform radioisotopic and chemical analysis of reactor coolant and containment atmosphere samples under degraded core conditions without excessive exposure no later than the implementation schedule of NUREG-0737.

(f) Relief and Safety Valve Test Requirements (Section 22.3 Item II.D.1)

VEPCO shall complete tests to qualify the reactor coolant system relief and safety valves under expected operating conditions for design basis transients and accidents no later than the implementation schedule of NUREG-0737.

(h) Containment Dedicated Penetrations (Section 22.3 Item II.E.4.1)

VEPCO shall install redundant remote actuated valves in series to isolate the containment vacuum pumps from the combustible gas control system. VEPCO shall also convert the manual valves in the hydrogen recombiner piping to remote manual actuation no later than the implementation schedule of NUREG-0737.

(i) Additional Accident Monitoring Instrumentation (Section 22.3 Item II.F.1)

VEPCO shall install and demonstrate the operability of instruments for continuous indication in the control room of the following variables. Each item shall be completed by the specified date in the condition:

- (i) Containment pressure from 0 psia to three times the design pressure of the containment no later than the implementation schedule of NUREG-0737;
- (ii) Containment water level from (1) the bottom to the top of the containment sump, and (2) the bottom of the containment to a level equivalent to 600,000 gallons of water no later than the implementation schedule of NUREG-0737.
- (iii) Containment atmosphere hydrogen concentration from 0 to 10 volume percent shall be installed no later than the implementation schedule of NUREG-0737; and the hydrogen sampling system to be used in the interim will be installed no later than January 1, 1981;
- (iv) Containment radiation up to 10^7 R/hr. no later than the implementation schedule of NUREG-0737; and
- (v) Noble gas effluent from each potential release point from normal concentrations to 10^5 μ Ci/cc (Xe-133) no later than the implementation schedule of NUREG-0737.

VEPCO shall also provide capability for continuous sampling and for onsite analysis of the radioiodine and particulate effluent samples no later than the implementation schedule of NUREG-0737.

Until the above installation is completed, VEPCO shall use interim monitoring procedures and equipment.

3. This license amendment is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

151

Darrell G. Eisenhut, Director
Division of Licensing

Date of Issuance:
December 29, 1980

Local review of amendment and Fed. Reg. notice only

OFFICE	DL/LB#1	DL/LB#1	OELD	DL/LB#1	DL/AD/L	RD/DL	Director, DL
SURN	MRushbrook	ADremer	D. SWANSON	BJYoungblood	RTedesco	RPurple	DEisenhut
DATE	12/19/80	12/19/80	12/19/80	12/19/80	12/13/80	12/1/80	12/2/80

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-339

VIRGINIA ELECTRIC AND POWER COMPANY

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 2 to the Facility Operating License No. NPF-7, issued to Virginia Electric and Power Company for the North Anna Power Station, Unit No. 2, which changes certain conditions in the license. The amendment is effective as of its date of issuance.

The amendment changes the required implementation dates for certain post-TMI requirements. It also changes the required implementation date regarding the implementation of modifications associated with IE Bulletin 79-27, "Loss of Non-Class IE Instrumentation and Control Power System Bus During Operation."

The application for the license complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations. The Commission has made appropriate findings as required by the Act and the Commission's regulations in 10 CFR Chapter I, which are set forth in the license. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.(d)(4) an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

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For further details with respect to this action, see (1) Virginia Electric and Power Company letters dated November 20, 1980, December 15, 1980 and December 18, 1980, (2) Amendment No. 2 to Facility Operating License No. NPF-7, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D. C. 20555 and at the Board of Supervisor's Office, Louisa County Courthouse, Louisa, Virginia 23093 and at the Alderman Library, Manuscripts Department, University of Virginia, Charlottesville, Virginia 22901. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland this 29th day of December, 1980.

FOR THE NUCLEAR REGULATORY COMMISSION

151

E. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing

For typed revision of amendment and Reg. Notice only

[Signature]

OFFICE	DL:LB#1	DL:LB#1	OELD	DL:LB#1			
SURNAME	MR. [Signature]	SAD [Signature]	D. SWANSON	B. J. Youngblood			
DATE	12/18/80	12/19/80	12/19/80	12/18/80			

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION IN SUPPORT OF
CHANGES OF IMPLEMENTATION DATES IDENTIFIED IN CERTAIN LICENSE CONDITIONS
SPECIFIED IN OPERATING LICENSE NPF-7, NORTH ANNA POWER STATION, UNIT NO. 2

1.0 INTRODUCTION

In a letter dated November 20, 1980, the Virginia Electric and Power Company (VEPCO) requested an amendment of Operating License NPF-7 for North Anna Power Station, Unit No. 2. In letters dated December 15 and 18, 1980 VEPCO provided additional information regarding their request.

The first proposed change is to revise the required implementation dates for certain post-TMI requirements identified in the North Anna Unit No. 2 operating license to correspond to the implementation date requirements set forth for operating plants and applicants for operating licenses in NUREG-0737, "Clarification of TMI Action Plan Requirements." These items are:

<u>ITEM</u>	<u>TITLE</u>	<u>LICENSE CONDITION DATE</u>	<u>PROPOSED* DATE</u>
I.D.1	Control Room Design Review	August 21, 1981	complete review, using NRC Guidelines (NUREG-0700) to be issued in 1981, on a schedule that will be determined upon issuance of guidelines
II.B.1	Reactor Coolant System VENTS	December 31, 1981	July 1, 1982
II.B.2	Plant Shielding	January 1, 1981	Plant modifications January 1, 1982 Equipment Qualifications June 30, 1982
II.B.3	Post-Accident Sampling	April 1, 1981	January 1, 1982
II.D.1	Relief and Safety Valve Test Requirements	July 1, 1981	July 1, 1981
II.E.4.1	Containment Dedicated Penetrations	January 1, 1981	July 1, 1981
II.F.1 Item (i)	Containment Pressure Monitor	January 1, 1981	January 1, 1982

*Proposed date in accordance with NUREG-0737

<u>ITEM</u>	<u>TITLE</u>	<u>LICENSE CONDITION DATE</u>	<u>PROPOSED* DATE</u>
II.F.1 Item (ii)	Containment Water Level Monitoring	January 1, 1981	January 1, 1982
II.F.1 Item (iii)	Containment Hydrogen Concentration Monitoring	April 1, 1981	January 1, 1982
II.F.1 Item (iv)	Containment Radiation Monitor	January 1, 1981	January 1, 1982
II.F.1 Item (v)	NOBLE Gas Monitor and Iodine Particulate Sampling	July 31, 1981	January 1, 1982

The changes in implementation dates is related to Conditions 2.C.(20) Item a, and 2.C.(21) Items c, d, e, f, h and i of Operating License NPF-7. The implementation dates presently stated in the operating license reflect the requirements specified at the time of license issuance. The required implementation dates for the identified items from NUREG-0660, "NRC Action Plan Developed as a Result of the TMI-2 Accident," have been changed by NUREG-0737.

VEPCO further indicates that the implementation dates have been relaxed in NUREG-0737 for the entire industry due to revised technical requirements, clarifications and equipment qualifications and procurement delays.

The second proposed change is related to Condition 2.C(12) of Operating License NPF-7 and requests that the required implementation dates specified in the license regarding modifications associated with IE Bulletin 79-27 "Loss-of-Non-Class IE Instrumentation and Control Power System Bus During Operation" be revised.

2.0 EVALUATION

2.1 TMI ACTION PLAN CONDITIONS

2.1.1 CONTROL ROOM DESIGN REVIEW (Item I.D.1)

Condition 2.C.(20) Item (a) of the North Anna Unit No. 2 Operating License NPF-7 requires that no later than one year from the date of issuance of

*Proposed date in accordance with NUREG-0737

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the Unit No. 2 operating license, VEPCO shall submit an evaluation of the benefits of installing data recording and logging equipment in the control room. In their letter of November 20, 1980, VEPCO request that the implementation date for the submittal of the evaluation be in accordance with the schedule requirements of NUREG-0737.

In their letter of December 15, 1980, VEPCO indicates that an evaluation of the benefits of installing data recording and logging equipment needs to take into consideration the long term instrument and control upgrade of the control room to be performed in response to Section I.D.1 of NUREG-0737 and the forthcoming NUREG-0700, "Human Engineering Guide to Control Room Evaluation." They further indicated that this was the intent of the present license condition. At the time the condition was imposed, there was no definition of the long term control room review program. A change in the implementation date to be in accordance with NUREG-0737 will permit an appropriate evaluation of the need for data recording equipment in the licensee's detailed control room design review report. The requested change makes the requirement reflect more recent developments in this area.

We have reviewed the information provided by VEPCO, and conclude that the schedule requirements of NUREG-0737 will result in an evaluation which will reflect more recent developments in control room design and therefore the change in the implementation schedule is acceptable.

2.1.2 REACTOR COOLANT SYSTEM VENTS (Item II.B.1)

Condition 2.C.(21) Item (c) of the North Anna Unit 2 Operating License NPF-7 requires that VEPCO submit procedural guidelines and analytical bases for the reactor coolant system (RSC) vents. The reactor coolant vent system shall be installed no later than December 31, 1981. In their

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Letter of November 20, 1980, VEPCO proposes that the reactor coolant system vents shall be installed no later than the implementation schedule of NUREG-0737; i.e., July 1, 1982.

In their letter of December 15, 1980, VEPCO indicates that there have been significant changes to the technical requirements for the reactor coolant systems vents. All available design information on the reactor coolant system vents will be supplied in VEPCO's response to NUREG-0737. NUREG-0737 requires installation by July 1, 1982 but operating procedures are not to be implemented and valves are to be inoperable until NRC approval. Since installation of the RCS Vent connection requires approximately thirty days and removal of the reactor vessel head, VEPCO proposes that this modification be installed at the first refueling outage of North Anna Unit 2 scheduled for the spring of 1982.

Based on the requirements for the RCS vents which existed during the summer of 1980, the NRC staff concluded in Supplement 11 to the Safety Evaluation Report that installation of the vents during the first refueling outage was acceptable. Since this refueling is now scheduled for the spring of 1982, an extension of the installation deadline to the NUREG-0737 schedule is consistent with previous safety evaluations and therefore acceptable.

2.1.3 PLANT SHIELDING (Item 11.B.2)

Condition 2.C.(21) Item (d) of the North Anna Unit 2 Operating License NPF-7 requires that VEPCO shall complete modifications to assure adequate access to vital areas and protection of safety equipment following an accident resulting in a degraded core no later than January 1, 1981. In their letter of November 20, 1980, VEPCO requests that modifications regarding the above be in accordance with the implementation schedule of

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NUREG-0737, i.e., Plant modifications, January 1, 1982, Equipment qualification June 30, 1982.

In their letter of December 15, 1980, VEPCO states that engineering related to plant shielding is approximately 80 percent complete and equipment replacement modifications are approximately 10 percent complete.

There have been some changes in scope regarding the design of plant shielding since the original requirements. Additional equipment modifications may be required by the NUREG-0737 required inclusion of High Energy Line Breaks in the shielding review. This review and subsequent modifications will be complete by the NUREG-0737 required implementation date. The limiting material items for implementation of the remaining outage related shielding modifications are as follows:

<u>ITEM</u>	<u>DATE PURCHASE ORDER PLACED</u>	<u>PROMISED DELIVERY</u>	<u>EXPECTED DELIVERY</u>
Direct Acting Solenoid Valves	4/22/80	By 12/31/80	1/19/81
Air Operated Valves	5/1/80	10/1/80	12/31/80
Air & Fire Dampers	11/11/80	3/1/81	3/1/81

Based on the original scope for the shielding review, VEPCO indicated that necessary modifications could be complete prior to January 1, 1981, depending on timely delivery of valves. As shown above, delivery of some valves will not be made in time to support the previous schedule.

Replacement of these valves will be made at the first outage of sufficient duration following delivery. Since these modifications are an enhancement

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of plant capabilities following a postulated accident, we conclude that a short delay in installation, consistent with current NRC requirements for all operating reactors is acceptable.

2.1.4 POST-ACCIDENT SAMPLING (Item II.B.3)

Condition 2.C.(21) Item (e) of the North Anna Unit 2 Operating License NPF-7 requires that VEPCO shall complete corrective actions needed to provide the capability to promptly obtain and perform radioisotopic and chemical analysis of reactor coolant and containment atmosphere samples under degraded core conditions without excessive exposure no later than April 1, 1981. In their letter of November 20, 1980, VEPCO requests that the implementation of the corrective actions related to the above be in accordance with the implementation schedule of NUREG-0737, i.e., January 1, 1982.

In their letter of December 15, 1980, VEPCO indicates that engineering of the post-accident sampling system is approximately 95 percent complete. Construction is in progress and is expected to be completed in the summer of 1981. The schedule is based on delays in major equipment delivery as follows:

<u>EQUIPMENT</u>	<u>PROMISED DELIVERY</u>	<u>EXPECTED DELIVERY</u>
(1) Liquid Sample Panel	10/1/80	12/15/80
(2) Chemical Analysis Panels	12/1/80	2/1/81
(3) Chemical Analysis Control Panels	12/1/80	2/1/81
(4) Process Control Panels	12/1/80	1/15/81
(5) Containment Air Sample Control Panels	12/1/80	3/15/81
(6) Metal Bellows Pumps	12/1/80	12/12/80

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Upon completion of the construction, the system will be tested, and operators will be trained in order to obtain and analyze samples taken from reactor coolant and containment atmosphere. The system checkout and training is expected to take until January 1, 1982. This system will meet the revised requirements and clarifications included in NUREG-0737.

The new post-accident sampling system will enhance the current capability of the station for sampling and analysis. The short term post-accident sampling facility will continue to be used in the interim and until the improved system can be installed. VEPCO will continue to use the interim procedure discussed in Section 22.2, Item II.B.3 of Supplement 11 of the Safety Evaluation Report for sampling and analysis. On this basis, we conclude that a delay in installation of the sampling system to be shared with Unit 1 is acceptable and is consistent with current NRC requirements for all operating reactors.

2.1.5 RELIEF AND SAFETY VALVE TEST REQUIREMENTS (Item II.D.1)

Condition 2.C.(21) Item (f) of the North Anna Unit 2 Operating License NPF-7 requires that VEPCO shall complete tests to qualify the reactor coolant system relief and safety valves under expected operating conditions for design basis transients and accidents no later than July 1, 1981. In their letter of November 20, 1980, VEPCO requests that completion of tests to qualify the reactor coolant system relief and safety valves be in accordance with the implementation schedule of NUREG-0737, i.e., July 1, 1981. As stated in Section 22.3 Item II.D.1 of Supplement No. 11 to the Safety Evaluation Report, VEPCO is actively pursuing a joint effort with other members of the utility industry which would develop requirements for a generic test facility and program for reactor coolant system relief and safety valve prototypical testing.

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In their letter of December 15, 1980, VEPCO indicates that the LPRI testing programs in progress are attempting to meet the NUREG-0737 requirement dates which is the same as in Operating License NPF-7. Therefore, the requested change is intended only to recognize the generic nature of these tests and is consistent with NRC requirements for operating reactors and is acceptable.

2.1.6 CONTAINMENT DEDICATED PENETRATIONS (Item 11.E.4.1)

Condition 2.C.(21) Item (h) of the North Anna Unit 2 Operating License NPF-7 requires that VEPCO shall install redundant remote manual actuated valves in series to isolate the containment vacuum pumps from the combustible gas control system. VEPCO shall also convert the manual valves in the hydrogen recombiner piping to remote manual actuation no later than January 1, 1981. In their letter of November 20, 1980, VEPCO requests that the implementation of the above be in accordance with the implementation schedule of NUREG-0737, i.e., July 1, 1981.

In their letter of December 15, 1980, VEPCO indicates that engineering regarding the above is approximately 90 percent complete and construction is scheduled for a spring outage. However, a study is underway to determine if any work can be accomplished pre-outage. The final design package is expected to be issued in early January 1981. There have been no significant changes in scope since the original requirements. The limiting material items for implementation of the containment dedicated penetration modifications are as follows:

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<u>ITEM</u>	<u>DATE PURCHASE ORDER PLACED</u>	<u>PROMISED DELIVERY</u>	<u>EXPECTED DELIVERY</u>
Direct Acting Solenoid Valves	4/22/80	By 12/31/80	1/19/81
Air Operated Valves	5/1/80	10/1/80	12/31/80

In addition the dedicated penetration modifications must be complete for Unit 1 and the Post-Accident Monitoring and Control Panels installed (scheduled for spring 1981) to allow final implementation and testing. This modification will be completed by the NUREG-0737 required implementation date.

The existing license requirement was based on the expectation that all necessary hardware would be delivered during December 1980. However, VEPCO's July 25, 1980 letter indicated that if delivery was late, installation would be delayed into 1981. The staff recognized this possibility in Supplement 11 to the Safety Evaluation Report. Since the modification is designed to further enhance station capabilities following a postulated accident, a delay in completion of implementation, consistent with current NRC requirements for all operating reactors is acceptable.

2.1.7 ADDITIONAL ACCIDENT MONITORING INSTRUMENTATION (Item II.F.1)

Condition 2.C.(21) Item (i) of the North Anna Unit 2 Operating License NPF-7 requires that VEPCO shall install and demonstrate the operability of instruments for continuous indication in the control room of the following variables. Each item shall be completed by the specified date in the condition:

- (i) Containment pressure from 0 psia to three times the design pressure of the containment no later than January 1, 1981;

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- (ii) Containment water level from (1) the bottom of the top of the containment sump, and (2) the bottom of the containment to a level equivalent to 600,000 gallons of water no later than January 1, 1981;
- (iii) Containment atmosphere hydrogen concentration from 0 to 10 volume percent shall be installed no later than April 1, 1981; and the hydrogen sampling system to be used in the interim will be installed no later than January 1, 1981;
- (iv) Containment radiation up to 10^7 R/hr. no later than January 1, 1981; and
- (v) Noble gas effluent from each potential release point from normal concentrations to 10^5 μ Ci/cc (Xe-133) no later than July 31, 1981.

VEPCO shall also provide capability for continuous sampling and for onsite analysis of the radioiodine and particulate effluent samples no later than July 31, 1981.

Until the above installation is completed, VEPCO shall use interim monitoring procedures and equipment.

With respect to monitoring containment pressure, VEPCO in their letter of November 20, 1980, proposes to change the implementation date to be in accordance with the implementation schedule specified in NUREG-0737; i.e., January 1, 1982.

In their letter of December 15, 1980, VEPCO indicated that the modifications related to the monitoring of containment pressure are complete with the exceptions of qualified indicators and recorders. The indicators are scheduled for delivery March 1981 and the recorders the fall of 1981.

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The modifications will be completed by the NUREG-0737 implementation date of January 1, 1982 and will satisfy the revised requirements and clarifications.

The system is fully operational and capable of measuring and indicating containment pressure from 0 to 180 psia. Since the remaining work involves qualification of equipment to monitor plant conditions, we conclude that a short delay in installation of fully qualified equipment, consistent with current NRC requirements for all operating reactors is acceptable.

With respect to the monitoring of containment water level, VEPCO in their letter of December 18, 1980, proposes to change the implementation date to be in accordance with the implementation schedule of NUREG-0737; i.e., January 1, 1982.

In their letter of December 15, 1980, VEPCO, indicates that the modifications related to the monitoring of containment water level are complete with the exception of qualified wide range indicators and recorders. The indicators are scheduled for delivery April 1981 and the recorders the fall of 1981. The modifications will be completed by the NUREG-0737 implementation date of January 1, 1982 and will satisfy the revised requirements and clarifications.

The system is fully operational and capable of measuring and indicating containment water level up to the elevation equivalent to 600,000 gallons. Since the remaining work involves qualification of equipment to monitor plant conditions, we conclude that a delay in installation of fully qualified equipment, consistent with current NRC requirements for all operating reactors is acceptable.

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With respect to the monitoring of containment atmosphere hydrogen concentration, VEPCO in their letter of November 20, 1980, proposes to change the implementation date to be in accordance with the implementation schedule of NUREG-0737; i.e., January 1, 1982.

In their letter of December 15, 1980, VEPCO indicates that the engineering related to the monitoring of containment hydrogen concentration is scheduled to be complete February 1981 and all material is expected to be delivered by June 1981. This material had an original delivery date of late 1980. Installation and testing is scheduled for the fall outage and will be operational by the NUREG-0737 required implementation date of January 1, 1982. The system will satisfy the revised requirements and clarifications of NUREG-0737.

A redundant hydrogen analyzer system that is not fully qualified is operational along with the capability of using a containment gas sample for analysis. Since the parameters are monitored in the interim, a delay in installation consistent with current NRC requirements for all operating reactors is acceptable.

With respect to the monitoring of containment radiation, VEPCO in their letter of November 20, 1980 proposes to change the implementation date to be in accordance with the implementation schedule of NUREG-0737; i.e., January 1, 1982.

In their letter of December 15, 1980, VEPCO indicates that the engineering related to the monitoring of containment radiation is 90 percent complete. Detectors and cable are mounted in the containment but not electrically terminated. The vendor (Victoreen) is still qualifying the electrical termination procedures. All remaining material is scheduled for delivery

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in April 1981. Outside containment work is scheduled to be completed the summer of 1981. The remaining in-containment work could be completed at the first outage allowing five days of containment access after material delivery and procedure qualification. The modifications will be complete by the NUREG-0737 implementation date of January 1, 1982. On this basis, a delay in installation, consistent with current NRC requirements for all operating reactors, is acceptable.

With respect to the monitoring of noble gas, radioiodine and particulate, VEPCO in their letter of November 20, 1980 proposes to change the implementation date to be in accordance with the implementation schedule of NUREG-0737; i.e., January 1, 1982.

In their letter of December 15, 1980, VEPCO estimates that detailed engineering is approximately 60 percent complete. Construction has not started. It is expected that the system will not be installed and operating until January 1, 1982, because of major equipment availability problems.

VEPCO has placed a purchase order with Kaman Science Corporation, Colorado Springs, Colorado for a vent stack and process vent high range effluent radiation monitoring system including noble gas monitors, iodine monitors and particulate monitors for which required delivery is 36 weeks. It is expected that this system can be delivered no earlier than July 31, 1981. Installation and testing is scheduled for four months. The system will satisfy the revised requirements and clarifications of NUREG-0737.

Until the system is fully operational, existing monitors and interim procedures will be used to monitor releases, as reviewed in Supplement

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10 of the Safety Evaluation Report. Pending complete implementation of the improved monitoring system, we conclude that the interim procedures and equipment are satisfactory. Final installation will be completed on a schedule consistent with current NRC requirements for all operating reactors and therefore, acceptable.

2.2 IE BULLETIN 79-27

Condition 2.C(12) of the North Anna Unit No. 2 Operating License NPF-7 requires that certain modifications associated with IE Bulletin 79-27 must be implemented at the next outage of sufficient duration or within six months of issuance of a full power operating license, whichever comes first. The modifications had been identified by VEPCO as desirable to improve the ability of the operators to evaluate plant status after loss of power to an instrument bus, but were not essential to satisfy the concerns of IE Bulletin 79-27.

By letter dated November 20, 1980, VEPCO has requested an amendment to the operating license to permit a delay in implementing a portion of the modifications identified as desirable pursuant to IE Bulletin 79-27, although most of the modifications were implemented in a timely manner. Specifically, VEPCO proposes delaying the required time for provision of diverse power supplies for the T_{hot} and T_{cold} (T_h and T_c). VEPCO's request states that the NSS supplier, Westinghouse, identified several potential concerns relative to the interface of this modification with the reactor vessel level instrumentation now being designed. The interface concerns cannot be fully resolved in time to procure equipment and implement the modification in advance of the installation schedule for the level instrumentation.

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The modification involving the T_h and T_c instruments was previously determined to be desirable to improve safety but not immediately necessary for safe operation. Several related modifications were in fact implemented within schedular requirements. The original schedule for implementing the modification did not anticipate material procurement delays. There is valid reason for delay to ensure proper interface with the reactor vessel instrumentation.

On the basis of the above, we find the requested delay time to be acceptable. VEPCO has determined that the requested change does not involve an unreviewed safety question, and we conclude that it does not pose a significant hazards consideration. Accordingly, we find that requested change to the license condition, to require that provisions of diverse power supplies for the T_h and T_c instruments be implemented prior to startup from the first refueling outage, to be acceptable.

3.0 ENVIRONMENTAL CONSIDERATIONS

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact, and pursuant to 10 CFR Section 51.1(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

4.0 CONCLUSION

We have concluded, based on the considerations discussed above, that:
(1) because the amendment does not involve a significant increase in the

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probability or consequences of accidents previously considered or a significant decrease in any safety margin, it does not involve a significant hazards consideration; (2) there is reasonable assurance the the health and safety of the public will not be endangered by operation in the proposed manner; and (3) such activities will be conducted in compliance with the Commission's regulations.

Thus, the issuance of this amendment to change the North Anna Power Station, Unit 2 Operating License NPF-7 related to the implementation dates of certain requirements as discussed in Section 2.0 of this report, will not be inimical to the common defense and security or to the health and safety of the public. Also, we reaffirm our conclusions as otherwise stated in our Safety Evaluation Report and its Supplements.

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