1-MJ-016

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JUL 1 0 1981

Docket Nos. 50-338 and 50-339

> Mr. R. H. Leasburg Vice President - Nuclear Operations Virginia Electric and Power Company Post Office Box 26666 Richmond, Virginia 23261

Dear Mr. Leasburg:

The Commission has issued the enclosed Order confirming your commitments for TMI related requirements for the North Anna Power Station, Units No. 1 and No. 2. This Order is based on your letters dated December 15, and December 31, 1980, February 27, May 29, and July 6, 1981, and the references stated therein to implement those requirements set forth in NUREG-0737 for which the staff requested completion before June 30, 1981. Explicit statements of these requirements are set forth in the Attachment to the Order.

DISTRIBUTION:

Docket File

ORB#3 Rdg

DEisenhut

J01shinski

PKreutzer (3)

Project Manager

NRC PDR

L PDR

NSIC

TERA

It is the Commission's intent in issuing this Order to encourage completion of items consistent with the staff's recommended schedule. However, certain of your proposed schedule exceptions are acceptable. Therefore, you should proceed with implementation of these items in accordance with your proposed schedule. Your proposed technical and schedule exceptions for other items contained in NUREG-0737 will be the subject of future correspondence.

A copy of this Order is being filed with the Office of the Federal Register for publication.

Sincerely,

Original signed by

Robert A. Clark

Robert A. Clark, Chief **Operating Reactors Branch #3 Division of Licensing** 

Enclosure: Order

cc w/enclosure: See next page

JUL 28 1981

|        | *See attached                   | d page for pre         | evious concuri       | rence.    | 1. chov                       | Ya                   |         |
|--------|---------------------------------|------------------------|----------------------|-----------|-------------------------------|----------------------|---------|
|        | ORB <b>#3:DL*</b><br>PMKreutzer | ORB#3:DL*<br>LEngle/pn | ORB#3:DL*<br>RAClark | AD:OR:DL* | Ulshinski<br>7/ <b>10</b> /81 | OELD Y Cy<br>7//0/81 | RPurple |
| DATE 🌢 | 6/22/81                         | 6/23/81                | 6/23/81              | q 10 81   | ///0/81                       | 7770701              | ///0/01 |

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USGPO: 1981-335-960

Docket Nos. 50-338 and 50-339 DISTRIBUTION: Docket File NRC PDR L PDR NSIC TERA ORB#3 Rdg DEisenhut JOlshinski PKreutzer (3) Project Manager

RAClark OELD I&E (3) ACRS (10) GDeegan (4) CMiles, OPA SECY RDiggs JHeltemes Gray File

Executive Vice President - Power Virginia Electric and Power Company Post Office Box 26666 Richmond, Virginia 23261

Dear Mr. Ferguson:

Mr. J. H. Ferguson

The Commission has issued the enclosed Order for the North Anna Power Station, Units No. 1 and No. 2. The Order confirms your commitments on TMI related requirements . This Order is based on your letters dated December 15, 1980, December 31, 1980, February 27, 1981 and May 29, 1981 to implement those requirements set forth in NUREG-0737 for which the staff requested completion before June 30, 1981. Explicit statements of these requirements are set forth in the Attachment to the Order.

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Sincerely,

Robert A. Clark, Chief Operating Reactors Branch #3 Division of Licensing

Enclosure: Orders

cc: See next page

|         | 1 318 (10/80) NRCM | 9240             | OFFICIAL | RECORD C   |              | <u> </u> | * USGPO: 1980-329-824 |
|---------|--------------------|------------------|----------|------------|--------------|----------|-----------------------|
| ĐATE    | 6/22/81            | 6/ <b>23</b> /81 | 6/23/81  | 67.481     | 6/ /81       | 6/ /81   | 6/ /81                |
| SURNAME | PMRreutzer         | LEngle/Kn        | RAC Tark | .TMN ovak  | .JO.Ishinski |          | DEisenhut             |
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#### UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

JUL 1 0 1981

Docket Nos. 50-338 and 50-339

> Mr. R. H. Leasburg Vice President - Nuclear Operations Virginia Electric and Power Company Post Office Box 26666 Richmond, Virginia 23261

Dear Mr. Leasburg:

The Commission has issued the enclosed Order confirming your commitments for TMI related requirements for the North Anna Power Station, Units No. 1 and No. 2. This Order is based on your letters dated December 15, and December 31, 1980, February 27, May 29, and July 6, 1981, and the references stated therein to implement those requirements set forth in NUREG-0737 for which the staff requested completion before June 30, 1981. Explicit statements of these requirements are set forth in the Attachment to the Order.

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Sincerely,

Robert A. Clark, Chief Operating Reactors Branch #3 Division of Licensing

Enclosure: Order

cc w/enclosure: See next page Virginia Electric and Power Company

#### cc: .

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Mr. W. R. Cartwright, Station Manager P. O. Box 402 Mineral, Virginia 23117

Mr. Anthony Gambardella Office of the Attorney General 11 South 12th Street - Room 308 Richmond, Virginia 23219

Mr. Edward Webster Resident Inspector/North Anna c/o U.S.N.R.C. Route 2, Box 78A Mineral, Virginia 23117

Mrs. June Allen North Anna Environmental Coalition 1105-C Olive Street Greensboro, North Carolina 27401 Mr. James Torson 501 Leroy Socorro, New Mexico 87891

Mrs. Margaret Dietrich Route 2, Box 568 Gordonsville, Virginia 22042

Mr. James C. Dunstance State Corporation Commission Commonwealth of Virginia Blandon Building Richmond, Virginia 23209

Director, Criteria and Standards Division Office of Radiation Programs (ANR-460) U.S. Environmental Protection Agency Washington, D. C. 20460

U.S. Environmental Protection Agency Region III Office ATTN: EIS COORDINATOR Curtis Building 6th and Walnut Streets Philadelphia, Pennsylvania 19106

Mr. Paul W. Purdom Environmental Studies Institute Drexel University 32nd and Chestnut Streets Philadelphia, Pennsylvania 19104

Atomic Safety and Licensing Appeal Board Panel U.S. Nuclear Regulatory Commission Washington, D. C. 20555

# UNITED STATES OF AMERICA

7590-01

### NUCLEAR REGULATORY COMMISSION

In the Matter of VIRGINIA ELECTRIC AND POWER COMPANY (North Anna Power Station, Units No. 1 and 2) Docket Nos. 50-338 and 50-339

# ORDER CONFIRMING LICENSEE COMMITMENTS ON POST-TMI RELATED ISSUES

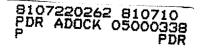
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I.

The Virginia Electric and Power Company (the licensee) is the holder of Facility Operating License Nos. NPF-4 and NPF-7 which authorize the operation of the North Anna Power Station, Units No. 1 and No. 2 (the facilities) at steady-state power levels not in excess of 2775 megawatts thermal. The facilities are pressurized water reactors (PWRs) located at the licensee's site in Louisa County, Virginia.

II.

Following the accident at Three Mile Island Unit No. 2 (TMI-2) on March 28, 1979, the Nuclear Regulatory Commission (NRC) staff developed a number of proposed requirements to be implemented on operating reactors and on plants under construction. These requirements include Operational Safety, Siting and Design, and Emergency Preparedness and are intended to provide substantial additional protection in the operation of nuclear facilities based on the



experience from the accident at TMI-2 and the official studies and investigations of the accident. The staff's proposed requirements and schedule for implementation are set forth in NUREG-0737, "Clarification of TMI Action Plan Requirements." Among these requirements are a number of items, consisting of hardware modifications, administrative procedure implementation and specific information to be submitted by the licensee, scheduled to be completed on or before June 30, 1981 (see the Attachment to this Order). NUREG-0737 was transmitted to each licensee and applicant by NRC letter from my office dated October 31, 1980, which is hereby incorporated by reference. In that letter, it was indicated that although the NRC staff expected each requirement to be implemented in accordance with the schedule set forth in NUREG-0737, the staff would consider licensee requests for relief from staff proposed requirements and their associated implementation dates.

## III.

The licensee's submittals dated December 15, 1980, December 31, 1980, and February 27, May 29 and July 6, 1981, committed to complete each of the actions specified in the Attachment. The licensee's submittal included a modified schedule for submittal of certain information. The staff has reviewed the licensee's submittals and determined that the licensee's modified schedule is acceptable based on the following:

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The licensee's schedule for submittal of information in some instances does not meet the staff's specified submittal dates. Most of the information requested by the staff describes how the licensee is meeting the guidance of NUREG-0737. Therefore, this deferral of the licensee submittal will not alter the implementation of plant modifications. Therefore, plant safety is not affected by this modification in schedule for the submittal of information.

I have determined that these commitments are required in the interest of public health and safety, and therefore, should be confirmed by ORDER.

## IV.

Accordingly, pursuant to Sections 103, 161i, 161o, and 182 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Parts 2 and 50, IT IS HEREBY ORDERED EFFECTIVE IMMEDIATELY THAT the licensee shall comply with the following conditions:

The licensee shall satisfy the specific requirements described in the Attachment to this Order (as appropriate to the licensee's facility) as early as practicable but no later than 60 days after the effective date of the ORDER.

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Any person who has an interest affected by this Order may request a hearing within 20 days of the date of publication of this Order in the <u>Federal Register</u>. Any request for a hearing shall be addressed to the Director, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. A copy shall also be sent to the Executive Legal Director at the same address. If a hearing is requested by a person other than the licensee, that person shall describe, in accordance with 10 CFR 2.714(a)(2), the nature of the person's interest and the manner in which the interest is affected by this Order. A REQUEST FOR HEARING SHALL NOT STAY THE IMMEDIATE EFFECTIVENESS OF THIS ORDER.

If a hearing is requested by the licensee or other persons who have an interest affected by this Order, the Commission will issue an Order designating the time and place of any such hearing.

If a hearing is held concerning this Order, the issue to be considered at the hearing shall be whether, on the basis of the information set forth in Sections II and III of this Order, the licensee should comply with the conditions set forth in Section IV of this Order. - 5 -

This request for information was approved by OMB under clearance number 3150-0065 which expires June 30, 1983. Comments on burden and duplication may be directed to the Office of Management and Budget, Reports Management, Room 3208, New Executive Office Building, Washington, D. C.

This Order is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Robert A. Purple, Deputy Director Division of Licensing Office of Nuclear Reactor Regulation

Dated at Bethesda, Maryland this 10th day of July 1981

Attachment: NUREG-0737 Requirements

ATTACHMENT

# NUREG 0737 REQUIREMENTS

| Item    | Title                                       | Applicability | Specific Requirement Subm   | Impl/Doc<br>Due Dates |
|---------|---|---------------|---|-----------------------|
| I.4.1.1 | STA   | ALL           | <ul> <li>(a) Provide STA coverage by<br/>degreed individuals</li> <li>(or equivalent), trained<br/>to licensee's program.</li> </ul>  | 1/1/81                |
|         |   |               | (b) Submit description of<br>current training program<br>and demonstrate compliance<br>with 10-30-79 letter.  | 1/1/81                |
|         |   |               | (c) Submit description of long<br>term training program.  | 1/1/81                |
| I.A.2.1 | Reactor Operator<br>Qualification           | ALL           | Submit description of and imple-<br>ment Upgraded Training Program.   | 8/1/80                |
| I.C.1   | Accident Procedures                         | ALL           | <ul> <li>(a) Submit reanalyses of inade-<br/>quate core cooling and<br/>propose guidelines for<br/>emergency procedures, OR<br/>propose schedule and justify<br/>delays.</li> </ul> | 1/1/81                |
|         | · · · · · ·                                 |               | (b) Submit reanalysis of<br>transients and accidents<br>for emergency procedures, OR<br>propose schedule and justify<br>delays.   | 1/1/81                |
| I.C.5   | Feedback of<br>Operating Experience         | ALL           | Implement procedures for<br>feedback of operating experience<br>(no documentation submittal is<br>required).  | 1/1/81                |
| I.C.6   | Correct Performance<br>or Operating Activit | ALL<br>ies    | Implement procedures to verify<br>correct performance of operating<br>activities (no documentation<br>submittal is required).   | 1/1/81                |

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| Item     | Title_                                 | Applicability | Specific Requirement  | Impl/Doc<br><u>Subm_Due_Dates</u> |
| II.B.2   | Shielding                              | ALL           | <ul> <li>(a) Have available design<br/>details for vital area<br/>modifications.</li> </ul>   | 1/1/81                            |
| -        |  |               | (b) Submit technical<br>deviations to staff<br>positions.   | 1/1/81                            |
| II.B.3   | Post-Accident<br>Sampling              | ALL           | Submit description<br>of deviations from<br>staff positions.  | 1/1/81                            |
| II.B.4   | Training to<br>Mitigate Core<br>Damage | ALL           | <ul> <li>(a) Have available for<br/>review a training<br/>program for mitigating<br/>core damage (no documen-<br/>tation submittal required</li> </ul>      | 1/1/81                            |
|          |  |               | (b) Implement training<br>program (no documentation<br>submittal required).   | 4/1/81                            |
| II.D.1   | Performance<br>Testing of<br>RV/SRV's  | ALL           | <pre>(a) Submit test program   (both BWR/PWR's).</pre>  | 7/1/80 (PWRs)<br>10/1/80 (BWRs)   |
|          |  |               | (b) Submit qualification<br>program for PWR's block<br>valve.   | 1/1/81 (PWRs)                     |
| II.E.1.2 | Aux Feed<br>Initiation<br>and Flow     | PWRs          | <ul> <li>(a) Submit final design and<br/>documentation on safety<br/>grade flow indication.</li> </ul>  | 1/1/81                            |
|          |  |               | (b) Submit final design and<br>documentation on safety<br>grade flow initiation.  | 1/1/81                            |
| II.E.4.2 | Containment<br>Isolation               | ALL           | <ul> <li>(a) Submit documentation<br/>justifying minimum contair<br/>ment pressure setpoint for<br/>isolation of non-essential<br/>penetrations.</li> </ul> | r 🐔                               |
|          |  | :             | (b) Submit statement that<br>purge valves not meeting<br>CSB 6-4 (or interim posi-<br>tion) are sealed and verification is performed every                  | 1/1/81<br>I-                      |
|          |  |               | 31 days.  |                                   |
|          | :                                      |               |   |                                   |
|          |  |               |   |                                   |

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| Item      | Title                                | Applicability               | Specific Requirement  | Impl/Doc<br>Subm Due Dates |
|-----------|--------------------------------------|-----------------------------|---|----------------------------|
| II.F.I    | Post-Accident<br>Monitoring          | ALL                         | <ul> <li>For noble gas monitor<br/>and lodine/particulate<br/>sampling and analysis<br/>submit description<br/>and justification for<br/>deviations from staff<br/>requirements.</li> </ul> | 1/1/81                     |
|           |                                      |                             | b. Have available the<br>final design infor-<br>mation for noble gas<br>monitor and iodine/<br>particulate sampling<br>and analysis.  | 1/1/81<br>•                |
| II.F.2    | Inst. for Inadequa<br>Core Cooling   | te ALL                      | Submit a report detailing the<br>planned instrumentation system<br>for monitoring inadequate core<br>cooling.   |                            |
| II.K.2.10 | Antic. Trip on<br>LOFW and TT        | B&W                         | Submit final design for<br>anticipatory trip as<br>described in NUREG 0737.   | 1/1/81                     |
| II.K.2.13 | Thermal Mechanical<br>Report         | B&W                         | Submit report on effects<br>of Hi Pressure Injection<br>on vessel integrity for<br>SB LOCA with no Aux<br>Feedwater.  | 1/1/81                     |
| II.K.3.2  | PORV/SV Failures                     | PWR                         | Submit report on SB LOCA<br>and probability of failure<br>of PORV/SV/RV.  | 1/1/81                     |
| II.K.3.3  | SRV/SV Failures<br>& Challenges      | ALL                         | Submit report (historical<br>and annually thereafter)<br>of SRV/SV failures and<br>challenges.  | 1/1/81                     |
| II.K.3.7  | PORV Opening<br>Probability          | B&W                         | Submit report on the<br>probability of a PORV<br>opening during an over-<br>pressurization transient.   | 1/1/81                     |
| II.K.3.9  | PID Controller<br>Modification       | Selected <u>W</u><br>plants | Modify the Proportional<br>Integral Derivative Controller<br>(as recommended by <u>W</u> ). Advise<br>NRC when modification is comple   | 12/1/80                    |
| II.K.3.12 | Anticipatory Trip<br>on Turbine Trip | W                           | Submit confirmation of<br>Anticipatory Trip. If not<br>currently implemented, submit<br>modification design and schedul<br>for implementation.  | 1/1/81<br>e                |

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|---------------|--|----------------|---|------------------------|
| ,<br>,<br>, , | <u> </u>   |                | <ul> <li>✓</li> </ul>   |                        |
|               |  | - 4            | -   |                        |
| Item          | Title  | Applicability  | Specific Requirement  | Imp1/Doc<br>Subm Dates |
| I1.K.3.13     | Separation of<br>HPCI/RCIC<br>Initiation Levels<br>Auto Restart of<br>RCIC |                | Submit results of<br>evaluation and proposed<br>modification as appropriate.                              | 1/1/81                 |
| I1.K.3.16     | Reduce Challenges<br>to RV's   | BWR            | Submit report on actions planned to reduce RV challenges  | 4/1/81                 |
| II.K.3.17     | ECCS System Outage   | es ALL         | Submit report on ECCS<br>outages and propose changes ~<br>to reduce outages.                              | 1/1/81                 |
| II.K.3.18     | ADS Logic<br>Modifications   | BWR            | Submit report of feasibility<br>of ADS system logic changes to<br>eliminate need for manual<br>actuation. | 4/1/81                 |
| II.K.3.21     | CSS/CPCI Restart   | BWR            | Submit report of evaluation,<br>proposed modifications and<br>analysis to satisfy staff<br>positions.     | 1/1/81                 |
| II.K.3.22     | RCIC Suction   | BWR W/RCIC     | Implement procedures and document verification of this change.  | 1/1/81                 |
| II.K.3.27     | Common Reference<br>for H <sub>2</sub> O Level Inst                        | BWR<br>ruments | Implement change and submit documentation of changes.   | 1/1/81                 |
| II.K.3.29     | Isolation<br>Condensor<br>Performance                                      | BWR w/ICs      | Submit evaluation of I.C. performance.  | 4/1/81                 |
| II.K.3.30     | SB LOCA Methods  | ALL            | Submit outline of program for model.  | 11/15/80               |
| II.K.3.44     | Fuel Failure   | BWR            | Submit evaluation to verify no fuel failure.  | 1/1/81                 |
| II.K.3.45     | Manual Depressur-<br>ization   | BWR            | Submit evaluation on other than ADS method for depressurization.  | 1/1/81                 |

| Item      | Title                                 | Applicability | Specific Requirement  | Impl/Doc<br>Subm Due Dates |
|-----------|---------------------------------------|---------------|---|----------------------------|
| III.D.3.3 | Improved Inplant<br>Iodine Monitoring | ALL           | Have available means to<br>accurately measure airborne<br>radioiodine i <b>n</b> plant during<br>an accident. | 1/1/81                     |
| 1II.D.3.4 | Control Room Habit                    | ability ALL   | a. Submit control room<br>habitability evaluation<br>information.   | 1/1/81                     |
|           |                                       |               | b. Submit modifications<br>necessary to assure CR<br>habitability with a<br>schedule for completion.          | 1/1/81                     |

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