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Docket Nos. 50-317  
50-318

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Mr. A. E. Lundvall, Jr.  
Vice President - Supply  
Baltimore Gas & Electric Company  
P.O. Box 1475  
Baltimore, Maryland 21203

Dear Mr. Lundvall:

The Commission has issued the enclosed Order for confirming your commitments for TMI related requirements for the Calvert Cliffs Nuclear Power Plant, Units No. 1 and 2. This Order is based on your letters dated December 15 and 30, 1980, and January 31, February 11, 20, 25 and 26, 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.

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

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Enclosure:  
Order

cc w/enclosure:  
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SURNAME	PKreutzer	E. Conner	RAClark	JNovak	J01shinski	J.P. Murray	DEisenhut
DATE	4/8/81	4/8/81	4/9/81	4/10/81	4/13/81	6/3/81	4/6/81



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

JUL 1 0 1981

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Vice President - Supply  
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Sincerely,

A handwritten signature in cursive script, appearing to read "Robert A. Clark".

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

Enclosure:  
Order

cc w/enclosure:  
See next page

Baltimore Gas and Electric Company

cc:

James A. Biddison, Jr.  
General Counsel  
Baltimore Gas and Electric Company  
P. O. Box 1475  
Baltimore, MD 21203

George F. Trowbridge, Esquire  
Shaw, Pittman, Potts and Trowbridge  
1800 M Street, N. W.  
Washington, D. C. 20036

Mr. R. C. L. Olson, Principal Engineer  
Nuclear Licensing Analysis Unit  
Baltimore Gas and Electric Company  
Room 922 - G&E Building  
P. O. Box 1475  
Baltimore, MD 21203

Mr. Leon B. Russell  
Plant Superintendent  
Calvert Cliffs Nuclear Power Plant  
Maryland Routes 2 & 4  
Lusby, MD 20657

Bechtel Power Corporation  
Attn: Mr. J. C. Judd  
Chief Nuclear Engineer  
15740 Shady Grove Road  
Gaithersburg, MD 20760

Combustion Engineering, Inc.  
Attn: Mr. P. W. Kruse, Manager  
Engineering Services  
P. O. Box 500  
Windsor, CT 06095

Public Document Room  
Calvert County Library  
Prince Frederick, MD 20678

Director, Department of State Planning  
301 West Preston Street  
Baltimore, MD 21201

Mr. R. M. Douglass, Manager  
Quality Assurance Department  
Fort Smallwood Road Complex  
P. O. Box 1475  
Baltimore, MD 21203

Mr. T. L. Syndor, General Supervisor  
Operations Quality Assurance  
Calvert Cliffs Nuclear Power Plant  
Maryland Routes 2 & 4  
Lusby, MD 20657

Ms. Mary Harrison, President  
Calvert County Board of County Commissioners  
Prince Frederick, MD 20768

U. S. Environmental Protection Agency  
Region III Office  
Attn: EIS Coordinator  
Curtis Building (Sixth Floor)  
Sixth and Walnut Streets  
Philadelphia, PA 19106

Mr. Ralph E. Architzel  
Resident Reactor Inspector  
NRC Inspection and Enforcement  
P. O. Box 437  
Lusby, MD 20657

Mr. Charles B. Brinkman  
Manager - Washington Nuclear Operations  
Combustion Engineering, Inc.  
4853 Cordell Avenue, Suite A-1  
Bethesda, MD 20014

Mr. J. A. Tierman, Manager  
Nuclear Power Department  
Calvert Cliffs Nuclear Power Plant  
Maryland Routes 2 & 4  
Lusby, MD 20657

Mr. W. J. Lippold, Supervisor  
Nuclear Fuel Management  
Baltimore Gas and Electric Company  
Calvert Cliffs Nuclear Power Plant  
P. O. Box 1475  
Baltimore, Maryland 21203

Mr. R. E. Denton, General Supervisor  
Training & Technical Services  
Calvert Cliffs Nuclear Power Plant  
Maryland Routes 2 & 4  
Lusby, MD 20657

Administrator, Power Plant Siting Program  
Energy and Coastal Zone Administration  
Department of Natural Resources  
Tawes State Office Building  
Annapolis, MD 21204



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 an 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 and 30, 1980 and January 31, February 11, 20, 25 and 26, 1981 and the references stated therein, which are incorporated herein by reference, committed to complete each of the actions specified in the Attachment. The licensee's submittals included a modified schedule for submittal of certain information. The staff has reviewed the licensee's submittal 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, 1611, 1610, 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 30 days after the effective date of the ORDER.

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V.

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 Federal Register. 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.

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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



Jarrell G. Eisenhut, 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

<u>Item</u>	<u>Title</u>	<u>Applicability</u>	<u>Specific Requirement</u>	<u>Impl/Doc Subm Due Dates</u>
I.A.1.1	STA	ALL	(a) Provide STA coverage by degreed individuals (or equivalent), trained to licensee's program.	1/1/81
			(b) Submit description of current training program and demonstrate compliance with 10-30-79 letter.	1/1/81
			(c) Submit description of long term training program.	1/1/81
I.A.2.1	Reactor Operator Qualification	ALL	Submit description of and implement Upgraded Training Program.	8/1/80
I.C.1	Accident Procedures	ALL	(a) Submit reanalyses of inadequate core cooling and propose guidelines for emergency procedures, OR propose schedule and justify delays.	1/1/81
			(b) Submit reanalysis of transients and accidents for emergency procedures, OR propose schedule and justify delays.	1/1/81
I.C.5	Feedback of Operating Experience	ALL	Implement procedures for feedback of operating experience (no documentation submittal is required).	1/1/81
I.C.6	Correct Performance or Operating Activities	ALL	Implement procedures to verify correct performance of operating activities (no documentation submittal is required).	1/1/81

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

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

<u>Item</u>	<u>Title</u>	<u>Applicability</u>	<u>Specific Requirement</u>	<u>Impl/Doc Subm Dates</u>
II.K.3.13	Separation of HPCI/RCIC Initiation Levels; Auto Restart of RCIC	BWRs w/HPCI/RCIC	Submit results of evaluation and proposed modification as appropriate.	1/1/81
II.K.3.16	Reduce Challenges to RV's	BWR	Submit report on actions planned to reduce RV challenges.	4/1/81
II.K.3.17	ECCS System Outages	ALL	Submit report on ECCS outages and propose changes to reduce outages.	1/1/81
II.K.3.18	ADS Logic Modifications	BWR	Submit report of feasibility of ADS system logic changes to eliminate need for manual actuation.	4/1/81
II.K.3.21	CSS/CPCI Restart	BWR	Submit report of evaluation, proposed modifications and analysis to satisfy staff 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 for H <sub>2</sub> O Level Instruments	BWR	Implement change and submit documentation of changes.	1/1/81
II.K.3.29	Isolation Condenser 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 Depressurization	BWR	Submit evaluation on other than ADS method for depressurization.	1/1/81

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