

UNITED STATES OF AMERICA

In the Matter of

CONNECTICUT YANKEE ATOMIC POWER COMPANY

(Haddam Neck Plant)

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Docket No. 50-213

ORDER CONFIRMING LICENSEE COMMITMENTS ON  
POST-TMI RELATED ISSUES

## I.

Connecticut Yankee Atomic Power Company (the licensee) is the holder of Facility Operating License No. DPR-61, which authorizes the operation of the Haddam Neck Plant (the facility), at steady-state reactor power levels not in excess of 1825 megawatts thermal. The facility consists of a pressurized water reactor (PWR) located at the licensee's site in Middlesex County, Connecticut.

## 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 for 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 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 31, 1980, which are incorporated herein by reference, committed to implement 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 submittals and determined that they are acceptable based on the following:

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's 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 162 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.

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.

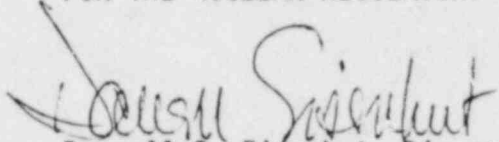
If a hearing is requested by the licensee or other persons who have an interest affected by this Order, the Commission will issue an Order designating the time and place of any such hearing.

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.

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

A handwritten signature in dark ink, appearing to read "Darrell G. Eisenhower", is written over a horizontal line.

Darrell G. Eisenhower, Director  
Division of Licensing  
Office of Nuclear Reactor Regulation

Dated at Bethesda, Maryland  
this seventh 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	<p>a. For noble gas monitor and Iodine/particulate sampling and analysis submit description and justification for deviations from staff requirements.</p> <p>b. Have available the final design information for noble gas monitor and iodine/particulate sampling and analysis.</p>	<p>1/1/81</p> <p>1/1/81</p>
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 LOPW 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 <u>W</u> ). 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 Date</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 Condensor Performance	BWR w/ICs	Submit evaluation of I.C. performance.	4/1/81
II.K.3.30	SE 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- ization	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</u> <u>Subm Due Dates</u>
III.D.3.3	Improved Implant Iodine Monitoring	ALL	Have available means to accurately measure airborne radioiodine implant during an accident.	1/1/81
III.D.3.4	Control Room Habitability	ALL	a. Submit control room habitability evaluation information.  b. Submit modifications necessary to assure CR habitability with a schedule for completion.	1/1/81  1/1/81