

Docket No. 331

MAR 14 1983

Mr. Duane Arnold
Chairman of the Board and Chief
Executive Officer
Iowa Electric Light and Power Company
P. O. Box 351
Cedar Rapids, Iowa 52406

Dear Mr. Arnold:

The Commission has issued the enclosed Order confirming your commitments to implement those post-TMI related items set forth in NUREG-0737 for which the staff requested completion on or after July 1, 1981. The Order is based on commitments contained in your letters responding to the NRC's Generic Letters 82-05 and 82-10 dated March 17, 1982 and May 5, 1982, respectively.

The Order references your letters and, in its Attachments, contains lists of the applicable NUREG-0737 items with your schedular commitments. As discussed in the Order, several of the items listed in Generic Letter 82-10 will be handled outside of this Order.

The Commission's intention when it issued NUREG-0737 was that items would be completed in accordance with the staff's recommended schedule. However, our evaluation of your proposed schedule exceptions concludes that the proposed delays are acceptable. Among other things, the Order requires implementation of these items in accordance with your proposed schedule.

Some of the items set forth in the Attachments to the Order are subject to post implementation review and inspection. Our post implementation review and/or the development of Technical Specifications may identify alterations to your method of implementing and maintaining the requirements. Any identified alterations will be the subject of future correspondence.

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SURNAME ▶
DATE ▶

Mr. Duane Arnold

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

Sincerely,

ORIGINAL SIGNED BY

V L Romney for

Domenic B. Vassallo, Chief
Operating Reactors Branch #2
Division of Licensing

Enclosure:
Order

cc w/enclosure:
See next page

Dist:	Docket File	SECY	ELJordan
NRC PDR	NSIC	JHeltemes	JMTaylor
LPDR	ORB#2 Reading	ORAB	DEisenhut
SNorris	Fapicella	OELD	TBarnhart(4)
RDiggs	ASLAB	Extra-5	Gray
ACRS-10	OPA, C. Miles		

OFFICE	DL:ORB#2 SNorris	DL:ORB#2 Fapicella	DL:ORB#2 DVassallo	DL:ORB#2 Graham	DL:ORB#2 DEisenhut	Kdcy 3/3/83	Fapicella O.R.A.B. 3/4/83
SURNAME	SNorris	Fapicella	Vassallo	Graham	Eisenhut	Kdcy	Fapicella
DATE	2/7/82	2/1/82	2/1/82	2/1/82	2/1/82	3/3/83	3/4/83

Mr. Duane Arnold
Iowa Electric Light & Power Company

cc:

Mr. Jack Newman, Esquire
Harold F. Reis, Esquire
Lowenstein, Newman, Reis and Axelrad
1025 Connecticut Avenue, N.W.
Washington, D. C. 20036

Office for Planning and Programming
523 East 12th Street
Des Moines, Iowa 50319

Chairman, Linn County
Board of Supervisors
Cedar Rapids, Iowa 52406

Iowa Electric Light & Power Company
ATTN: D. L. Mineck
P. O. Box 351
Cedar Rapids, Iowa 52406

U.S. Environmental Protection Agency
Region VII Office
Regional Radiation Representative
324 East 11th Street
Kansas City, Missouri 64106

U.S. Nuclear Regulatory Commission
Resident Inspector's Office
Rural Route #1
Palo, Iowa 52324

James G. Keppler
Regional Administrator, Region III
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of

Docket No. 50-331

IOWA ELECTRIC LIGHT AND POWER
COMPANY, CENTRAL IOWA POWER
COOPERATIVE, CORN BELT POWER
COOPERATIVE

(Duane Arnold Energy Center)

ORDER CONFIRMING LICENSEE COMMITMENTS
ON POST-TMI RELATED ISSUES

I.

The Iowa Electric Light and Power Company, et. al, (the licensee) is the holder of Facility Operating License No. DPR-49 which authorizes the operation of the Duane Arnold Energy Center (the facility) at steady-state power levels not in excess of 1658 megawatts thermal. The facility is a boiling water reactor (BWR) located at the licensee's site in Linn County, Iowa.

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

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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 after July 1, 1981. On March 17, 1982, a letter (Generic Letter 82-05) was sent to all licensees of operating power reactors for those items that were scheduled to be implemented from July 1, 1981 through March 1, 1982. Subsequently, on May 5, 1982, a letter (Generic Letter 82-10) was also sent to all licensees of operating power reactors for those items that were scheduled for implementation after March 1, 1982. These letters are hereby incorporated by reference. In these letters each licensee was requested to furnish within 30 days pursuant to 10 CFR 50.54(f) the following information for items which the staff had proposed for completion on or after July 1, 1981:

- (1) For applicable items that have been completed, confirmation of completion and the date of completion,
- (2) For items that have not been completed, a specific schedule for implementation, which the licensee committed to meet, and
- (3) Justification for delay, demonstration of need for the proposed schedule, and a description of the interim compensatory measures being taken.

III.

The licensee responded to Generic Letters 82-05 and 82-10 by letters dated April 14, 1982 and June 16, 1982, respectively. In these submittals, the licensee confirmed that some of the items identified in the Generic Letters had been completed and made firm commitments to complete the remainder. The attached Tables summarizing the licensee's schedular commitments or status were developed by the staff from the Generic Letters and the licensee-provided information.

Generic Letters 82-05 and 82-10 applied to 16 and 10 items, respectively, for BWRs with jet-pumps. Of the ten items listed in Generic Letter 82-10, six items are not included in this Order. Item I.A.1.3.2 is part of a separate rulemaking; Items I.C.1, III.A.1.2 (2 items), and III.A.2.2 will be handled separately following Commission actions that would proceed as a result of its consideration of SECY 82-111, as amended; and Item II.K.3.30 and II.K.3.31 (one item) is not required until one year after staff approval of the generic model and staff review of these models has not been completed.

Eleven of the 20 items addressed in this Order are considered by the licensee to be completed or to require no modifications. The staff's evaluation of the licensee's delays for the remaining nine items is provided herein:

II.B.2 Plant Shielding

This item will be completed during the next refueling outage scheduled to start in February 1983. This delay was caused by the main steam isolation

valve repairs requiring a six-week shutdown which resulted in extending the current operating fuel cycle into the first quarter of 1983. The only plant shielding remaining to be completed is associated with the post-accident sampling system which is addressed in Item II.B.3 of this Order.

II.B.3 Post-Accident Sampling

This item will be completed during the next refueling outage scheduled to start in February 1983. This delay was caused by failure of the newly installed system to pass the flow test requirements. The licensee states that valve modifications must be made and require the procurement of long lead items. As a compensatory measure the licensee states that an interim post-accident sampling system is available and operational, pending completion of the required modifications.

II.F.1(1-5) Post-Accident Monitoring (5 Items)

These items will be completed during the next refueling outage scheduled to start in February 1983. Items II.F.1(1) and (2) are delayed pending the licensee's resolution of the electrical connectors and debugging of the instrumentation system. For item II.F.1(3) the resolution of the electrical connectors, which is presently in progress, will complete this item. Items II.F.1(4) and (5) are delayed because of instrument calibration problems; and the resolution of the notification of defect (10 CFR 21) concerning the thermal non-repeatability in certain Barton transmitters. As a compensatory measure, the licensee states that

existing procedures and practices post-accident monitoring will remain in force until the modified system is fully implemented in accordance with the requirements of Item II.F.1.

II.K.3.27 Common Reference Level

This item will be completed during the next refueling outage scheduled to start in February 1983. The amount of time that will be required for the retraining of operators and revision of the procedures is the cause of the delay.

III.D.3.4 Control Room Habitability

This item will be completed during the next refueling outage scheduled to start in February 1983. The extension of the present refueling cycle delay of the completion of the installation of the sodium hypochloride system pending plant shutdown in February 1983. The use of the current system is required during operation.

We find, based on the above evaluation, that: 1) the licensee has taken corrective actions regarding the delays and has made a responsible effort to implement the NUREG-0737 requirements noted; and 2) there is good cause for the delays; (unexpected design complexity, interface problems, and equipment delays) and 3) as noted above, interim compensatory measures have been provided.

In view of the foregoing, I have determined that these modifications and actions are required in the interest of public health and safety and, therefore, the licensee's commitment should be confirmed by Order.

IV.

Accordingly, pursuant to Sections 103, 161i, and 161o 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:

Implement and maintain the specific items described in the Attachments to this Order in the manner described in the licensee's submittals noted in Section III herein no later than the dates in the Attachments.

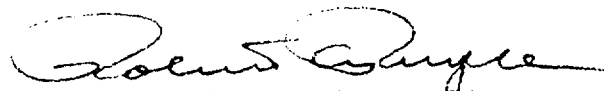
V.

The licensee may request a hearing on this Order within 20 days of the date of publication of this Order in the Federal Register. A 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. A REQUEST FOR HEARING SHALL NOT STAY THE IMMEDIATE EFFECTIVENESS OF THIS ORDER.

If a hearing is requested by the licensee, 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 the licensee should comply with the requirements set forth in Section IV of this Order. 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 14th day of March 1983.

Attachments:

1. Licensee's Commitments on Applicable NUREG-0737 Requirements from Generic Letter 82-05
2. Licensee's Commitments on Applicable NUREG-0737 Requirements from Generic Letter 82-10

LICENSEE'S COMMITMENTS ON APPLICABLE NUREG-0737 ITEMS FROM GENERIC LETTER 82-05

Item	Title	NUREG-0737 Schedule	Requirement	Licensee's Completion Schedule (or status)
I.A.3.1	Simulator Exams	10/1/81	Include simulator exams in licensing examinations	Complete
II.B.2	Plant Shielding	1/1/82	Modify facility to provide access to vital areas under accident conditions	Prior to Cycle 7 Start-up
II.B.3	Post-Accident Sampling	1/1/82	Install upgraded post-accident sampling capability	Prior to Cycle 7 Start-up
II.B.4	Training for Mitigating Core Damage	10/1/81	Complete training program	Complete
II.E.4.2	Containment Isolation Dependability	7/1/81	Part 5-lower containment pressure setpoint to level compatible w/normal operation	Complete
		7/1/81	Part 7-isolate purge & vent valves on radiation signal	Complete
II.F.1	Accident Monitoring	1/1/82	(1) Install noble gas effluent monitors	Prior to Cycle 7 Start-up
		1/1/82	(2) Provide capability for effluent monitoring of iodine	Prior to Cycle 7 Start-up
		1/1/82	(3) Install in-containment radiation-level monitors	Prior to Cycle 7 Start-up

LICENSEE'S COMMITMENTS ON APPLICABLE NUREG-0737 ITEMS FROM GENERIC LETTER 82-05

Item	Title	NUREG-0737	Requirement	Licensee's Completion Schedule
II.F.1		1/1/82	(4) Provide continuous indication of containment pressure	Prior to Cycle 7 start-up
		1/1/82	(5) Provide continuous indication of containment water level	Prior to Cycle 7 start-up
		1/1/82	(6) Provide continuous indication of hydrogen concentration in containment	Complete
II.K.3.15	Isolation of HPCI & RCIC Modification	7/1/81	Modify pipe break detection logic to prevent inadvertent isolation	Complete
II.K.3.22	RCIC Suction	1/1/82	Modify design of RCIC suction to provide automatic transfer to torus	Complete
II.K.3.24	Space Cooling for HPCI/RCIC	1/1/82	Confirm the adequacy of space cooling for HPCI/RCIC	Complete
II.K.3.27	Common reference level	7/1/81	Provide common reference level for vessel level instrumentation	Prior to Cycle 7 start-up

LICENSEE'S COMMITMENTS ON APPLICABLE NUREG-0737 ITEMS FROM GENERIC LETTER 82-10

Item	Title	NUREG-0737	Requirement	Licensee's Completion Schedule
1.A.1.3.1	Limit Overtime	10/1/82 per Gen. Ltr. 82-12 dtd 6/15/82	Revise administrative procedures to limit overtime in accordance w/NRC Policy Statement issued by Generic Ltr. No. 82-12, dtd 6/15/82	Complete
1.A.1.3.2	Minimum Shift* Crew	To be superseded by Proposed Rule	To be addressed in the Final Rule on Licensed Operator Staffing at Nuclear Power Units	To be addressed when Final Rule is issued
I.C.1	Revise Emergency* Procedures	Superseded by SECY 82-111	Reference SECY 82-111, Requirements for Emergency Response Capability	To be determined
II.D.1.2	RV and SV Test Programs	7/1/82	Submit plant specific reports or relief and safety valve program	Complete
II.K.3.18	ADS Actuation	9/30/82	Submit revised position on need for modifications	Complete
II.K.3.30 & 31	SBLOCA Analysis*	1 yr. after staff approval of model	Submit plant specific analyses	To be determined following staff approval of model
III.A.1.2	Staffing Levels* for Emergency Situations	Superseded by SECY 82-111	Reference SECY 82-111, Requirements for Emergency Response Capability	To be determined

*Not Part of Confirmatory Order

LICENSEE'S COMMITMENTS ON APPLICABLE NUREG-0737 ITEMS FROM GENERIC LETTER 82-10

Item	Title	NUREG-0737	Requirement	Licensee's Completion Schedule (or status)
III.A.1.2	Upgrade Emergency Support Facilities*	Superseded by SECY 82-111	Reference SECY 82-111, Requirements for Emergency Response Capability	To be determined
III.A.2.2	Meteorological* Data	Superseded by SECY 82-111	Reference SECY 82-111, Requirements for Emergency Response Capability	To be determined
III.D.3.4	Control Room Habitability	To be Determined by licensee	Modify facility as identified by licensee study	Prior to Cycle 7 Start-up

*Not Part of Confirmatory Order