

APR 18 1977

DISTRIBUTION:

Docket TBAbernathy
 NRC PDR JRBUchanan
 Local PDR File
 ORB#3 Rdg Xtra Copies
 VStello
 KRGo1ler
 CParrish
 JWetmore
 OELD
 OI&E (5)
 BJones (4)
 BScharf (15)
 JMCgough
 DEisenhut
 ACRS (16)
 CMiles
 DRoss

Docket No. 50-331

Iowa Electric Light & Power Company
 ATTN: Mr. Duane Arnold, President
 P. O. Box 351
 Cedar Rapids, Iowa 52406

Gentlemen:

The Commission has issued the enclosed Amendment No. 32 to Facility License No. DPR-49 for the Duane Arnold Energy Center. This amendment consists of changes to the Technical Specifications and is in response to your application dated December 15, 1975.

This amendment will (1) add surveillance requirements for the reactor pressure vessel stabilizers, (2) correct portions of the administrative controls section, and (3) correct typographical errors.

Copies of the related Safety Evaluation and the Federal Register Notice are also enclosed.

Sincerely,

George Lear, Chief
 Operating Reactors Branch #3
 Division of Operating Reactors

Enclosures:

1. Amendment No. 32
2. Safety Evaluation
3. Federal Register Notice

cc: See next page

Correct. 1
GD

*SEE PREVIOUS YELLOW FOR CONCURRENCES

OFFICE >	ORB#3	ORB#3	OELD	ORB#3		
SURNAME >	*CParrish	JWetmore:acr*	*WDPaton	GLear <i>GL</i>		
DATE >	4/ 177	4/ 177	4/ 177	4/ 18 177		

DISTRIBUTION:

Docket TBAbernathy
 NRC PDR JRBuchanan
 Local PDR File
 ORB#3 Rdg Xtra Copies
 VStello
 KRGoller
 CParrish
 JWetmore
 OELD
 OI&E (5)
 BJones (4)
 BScharf (15)
 JMcGough
 DEisenhut
 ACRS (16)
 CMiles
 DRoss

Docket No. 50-331

Iowa Electric Light & Power Company
 ATTN: Mr. Duane Arnold, President
 Security Building
 P. O. Box 351
 Cedar Rapids, Iowa 52406

Gentlemen:

The Commission has issued the enclosed Amendment No. to Facility License No. DPR-49 for the Duane Arnold Energy Center. This amendment consists of changes to the Technical Specifications and is in response to your application dated December 15, 1975.

This amendment will (1) add surveillance requirements for the reactor pressure vessel stabilizers, (2) correct portions of the administrative controls section, and (3) correct typographical errors.

Copies of the related Safety Evaluation and the Federal Register Notice are also enclosed.

Sincerely,

George Lear, Chief
 Operating Reactors Branch #3
 Division of Operating Reactors

Enclosures:

1. Amendment No.
2. Safety Evaluation
3. Federal Register Notice

cc: See next page

OFFICE >	ORB#3	ORB#3	OELD	ORB#3		
SURNAME >	CParrish <i>cp</i>	JWetmore <i>acr</i>	<i>W.D. Patton</i>	GLear		
DATE >	4/ 6 /77	4/ 6 /77	4/ 13 /77	4/ /77		

Iowa Electric Light & Power Company - 2 -

cc:

Mr. Robert Lowenstein, 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: Ellery L. Hammond
P. O. Box 351
Cedar Rapids, Iowa 52406

Chief, Energy Systems Analysis Branch (AW-459)
Office of Radiation Programs
U. S. Environmental Protection Agency
Room 645, East Tower
401 M Street, S. W.
Washington, D. C. 20460

U. S. Environmental Protection Agency
Region VII
ATTN: EIS COORDINATOR
1735 Baltimore Avenue
Kansas City, Missouri 64108

Cedar Rapids Public Library
426 Third Avenue, S. E.
Cedar Rapids, Iowa 52401



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

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

DOCKET NO. 50-331

DUANE ARNOLD ENERGY CENTER

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 32
License No. DPR-49

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Iowa Electric Light and Power Company, Central Iowa Power Cooperative, and Corn Belt Power Cooperative (the licensees) dated December 15, 1975, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and 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.
-

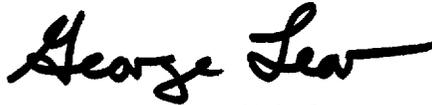
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-49 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 32, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION



George Lear, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 18, 1977

ATTACHMENT TO LICENSE AMENDMENT NO. 32
TO THE TECHNICAL SPECIFICATIONS
FACILITY OPERATING LICENSE NO. DPR-49
DOCKET NO. 50-331

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed page. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change. Add page 3.6-10c.

Remove

3.2-5
3.6-10a
3.6-10b

3.8-6
6.1-1
6.6-1
6.7-1

Insert

3.2-5
3.6-10a
3.6-10b
3.6-10c
3.8-6
6.1-1
6.6-1
6.7-1

TABLE 3.2-A

INSTRUMENTATION THAT INITIATES PRIMARY CONTAINMENT ISOLATION

Minimum No. of Operable Instrument Channels Per Trip System (1)	Instrument	Trip Level Setting	Number of Instrument Channels Provided by Design	Action(2)
2 (6)	Reactor Low Water Level	$\geq +12"$ Indicated Level (3)	4 Inst. Channels	A
1	Reactor Low Pressure (Shutdown Cooling Isolation)	≤ 135 psig	2 Inst. Channels	C
2	Reactor Low-Low-Water Level	At or above $-38.5"$ indicated level (4)	4 Inst. Channels	A
2 (6)	High Drywell Pressure	≤ 2.0 psig	4 Inst. Channels	A
2	High Radiation Main Steam Line Tunnel	≤ 3 X Normal Rated Power Background (8)	4 Inst. Channels	B
2	Low Pressure Main Steam Line	≥ 880 psig (7)	4 Inst. Channels	B
2 (5)	High Flow Main Steam Line	$\leq 140\%$ of Rated Steam Flow	4 Inst. Channels	B
2	Main Steam Line Tunnel/Turbine Bldg. High Temperature	≤ 200 deg. F	4 Inst. Channels	B
1	Reactor Cleanup System High Diff. Flow	≤ 40 gpm	2 Inst. Channel	D
1	Reactor Cleanup System High-High Temperature	$\leq 140^{\circ}$ F	1 Inst. Channel	D

LIMITING CONDITIONS FOR OPERATION

SURVEILLANCE REQUIREMENTS

H. Shock Suppressors (Snubbers)

1. During all modes of operation, except Cold Shutdown and Refuel, all safety related snubber listed in Tables 4.6-3 and 4.6-4 shall be operable, except as noted in 3.6.H.2 through 3.6.H.4 below.

7. During each plant refueling outage all eight RPV Seismic Stabilizer assemblies and attachments will be inspected as follows:
 - a. Visually inspect stabilizer assembly parts for deformation and cracking.
 - b. Verify that all clevis pin retainers are in place.
 - c. Verify that all drawbar set screws are in place.
 - d. Visually inspect stabilizer gusset plate welds.
 - e. Visually inspect stabilizer support-to-PRV welds such that all four welds are inspected during the regular 10-year inservice inspection interval.
8. At the end of each 10-year inspection interval, a report shall be submitted to the NRC that defines which of the following examination categories, if any, could not be completed:
 - a. Class 1 components - Categories N, L-2, and M-2.
 - b. Class 2 components - Category C-H.

H. Shock Suppressors (Snubbers)

The following surveillance requirements apply to all hydraulic snubbers listed in Tables 4.6-3 and 4.6-4:

1. All hydraulic snubbers whose seal material has been demonstrated by operating experience, lab testing or

LIMITING CONDITIONS FOR OPERATION

SURVEILLANCE REQUIREMENTS

2. From and after the time that a snubber is determined to be inoperable, continued reactor operation is permissible only during the succeeding 72 hours unless the snubber is sooner made operable or replaced.
3. If the requirements of 3.6.H.1 and 3.6.H.2 cannot be met, an orderly shutdown shall be initiated and the reactor shall be in a cold shutdown condition within 36 hours.
4. If a snubber is determined to be inoperable while the reactor is in the shutdown or refuel mode, the snubber shall be made operable or replaced prior to reactor startup.
5. Snubbers may be added to safety related systems without prior License Amendment to Tables 4.6-3 or 4.6-4 provided that a revision to Table 4.6-3 or 4.6-4 is included with the next License Amendment request.

analysis to be compatible with the operating environment shall be visually inspected. This inspection shall include, but not necessarily be limited to, inspection of the hydraulic fluid reservoir, fluid connections and linkage connections to the piping and anchor to verify snubber operability in accordance with the following schedule:

Number of Snubbers Found Inoperable During Inspection or During Inspection Interval	Next Required Inspection Interval
0	18 months ± 25%
1	12 months ± 25%
2	6 months ± 25%
3, 4	124 days ± 25%
5, 6, 7	62 days ± 25%
≥ 8	31 days ± 25%

The required inspection interval shall not be lengthened more than one step at a time.

Snubbers are categorized in two groups, "accessible and inaccessible" based on their accessibility for inspection during reactor operation. These two groups will be inspected independently according to the above schedule.

2. All hydraulic snubbers whose seal materials are other than ethylene propylene or other material that has been demonstrated to be compatible with the operating environment shall be visually inspected for operability every 31 days.

LIMITING CONDISIONS FOR OPERATION

SURVEILLANCE REQUIREMENTS

3. The initial inspection shall be performed within six months \pm 25% from the date of issuance of these specifications. For the purpose of entering the schedule in Specification 4.6.H.1, it shall be assumed that the facility has been on a 6-month inspection interval.
4. Once each refueling cycle a representative sample of 10 hydraulic snubbers or approximately 10% of the hydraulic snubbers, whichever is less, shall be functionally tested for operability including verification of proper piston movement, lock-up and bleed. For each unit and subsequent unit found inoperable, an additional 10% or ten (10) hydraulic snubbers shall be so tested until not more failures are found or all units per category tested have been tested. Snubbers of rated capacity greater than 50,000 lb. need not be functionally tested.

LIMITING CONDITIONS FOR OPERATION

SURVEILLANCE REQUIREMENTS

C. Emergency Service Water System

1. Except as specified in 3.8.C.2 below, both emergency service water system loops shall be operable whenever irradiated fuel is in the reactor vessel and reactor coolant temperature is greater than 212°F.

2. From and after the date that one of the emergency service water system pumps or loops is made or found to be inoperable for any reason, reactor operation must be limited to seven days unless operability of that system is restored within this period. During such seven days all active components of the other Emergency Service Water System shall be operable, provided the requirements of 3.5.G are met.

3. If the requirements of 3.8.C cannot be met, an orderly shutdown shall be initiated and the reactor shall be in a Cold Shutdown condition within 24 hours.

C. Emergency Service Water System

1. Emergency Service Water Sub-system Testing
 - a. Simulated automatic actuation test. each refueling outage
 - b. Pump and motor operated valve operability once/3 months
 - c. Flow Rate Test

Each emergency service water pump shall deliver at least that flow determined from Figure 4.8.C-1 for the existing river water temperature. after major pump maintenance and every month except weekly during periods of time the river water temperature exceeds 80°F.

2. When one emergency service water system pump or loop becomes inoperable, the operable pump and loop and diesel-generator required for operation of such components shall be demonstrated to be operable immediately and daily thereafter.

6.0 ADMINISTRATIVE CONTROLS

6.1 MANAGEMENT - AUTHORITY AND RESPONSIBILITY

6.1.1 The Chief Engineer has primary responsibility for the safe operation of the DAEC-1 plant, and reports, under the Chairman of the Board and President, to the Vice President-
Generation.

6.6 REPORTABLE OCCURRENCE ACTION

6.6.1 Any reportable occurrence shall be reported immediately to the Chief Engineer and to the Vice President-Generation, and promptly reviewed by the Operations Committee.

6.6.2 The Operations Committee shall prepare a separate report for each reportable occurrence. This report shall include an evaluation of the cause of the occurrence, a record of the corrective action taken, and also recommendations for appropriate action to prevent or reduce the probability of a recurrence.

6.6.3 Copies of all such reports shall be submitted to the Safety Committee for review and to the Vice President-Generation for review and approval of any recommendations.

6.7 ACTION TO BE TAKEN IF A SAFETY LIMIT IS EXCEEDED

6.7.1 If a safety limit is exceeded, the reactor shall be shut down and reactor operation shall only be resumed when authorized by the NRC.

6.7.2 An immediate report shall be made to the Vice President-Generation and the Safety Committee. The Vice President-Generation shall promptly report the circumstances to the NRC as specified in Subsection 6.12, Plant Reporting Requirements.

6.7.3 A complete analysis of the circumstances leading up to and resulting from the situation together with recommendations to prevent a recurrence shall be prepared by the Operations Committee. This report shall be submitted to the Vice President-Generation and the Safety Committee. Appropriate analyses or reports will be submitted to the NRC by the Vice President-Generation as specified in Subsection 6.12, Plant Reporting Requirements.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 32 TO LICENSE NO. DPR-49

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

DOCKET NO. 50-331

DUANE ARNOLD ENERGY CENTER

Introduction

By letter dated December 15, 1975, Iowa Electric Light and Power Company (IELP) proposed changes to the Technical Specifications appended to Facility Operating License No. DPR-49 for the Duane Arnold Energy Center. The proposed changes would (1) add surveillance requirements for the reactor pressure vessel stabilizer, (2) correct portions of the administrative control section, and (3) correct typographical errors.

Evaluation

Each of the proposed changes is separately evaluated below:

1. Surveillance Requirements for the Reactor Pressure Vessel Stabilizers:

The licensee has proposed to upgrade the current Technical Specification requirements to inspect reactor coolant system components by adding requirements to inspect reactor pressure vessel (RPV) stabilizers during each plant refueling. The existing Technical Specifications do not explicitly require surveillance of these components. Based on our review of the proposed changes, we have concluded that the added requirements represent an increase in scope to the existing requirements to inspect reactor coolant system components, and that they will provide additional assurance that the operability of the RPV stabilizers will be maintained; and thus, are acceptable.

2. Administrative Controls Section:

The existing administrative controls in the Technical Specifications delineate a number of responsibilities for the General Production Manager and the Executive Vice President. IELP has created a new

corporate position of Vice President-Generation who is responsible for all activities previously assigned to the Production Department. IELP has also abolished the position of Executive Vice President. The responsibilities of the Executive Vice President contained in the Technical Specifications have been assumed by the Chairman of the Board and President. Therefore, IELP has requested appropriate changes to the administrative controls section of the Technical Specifications to reflect these changes in corporate structure. These proposed changes are administrative only and have no safety significance; and thus, are acceptable.

3. Typographical Errors:

The licensee has discovered a typographical error in Technical Specification 3.8.C.3 which addresses the emergency service water system and another in Technical Specification Table 3.2-A relative to primary containment isolation. The proposed changes correct these errors and properly reflect the intent of the Technical Specifications, and thus, are acceptable.

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 §1.5(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.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the changes do not involve a significant increase in the probability or consequences of accidents previously considered and do not involve a significant decrease in a safety margin, the changes do not involve a significant hazards consideration, (2) there is reasonable assurance that 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 and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: April 18, 1977

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-331

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

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY
OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 32 to Facility Operating License No. DPR-49 issued to Iowa Electric Light and Power Company, Central Iowa Power Cooperative, and Corn Belt Power Cooperative, which revised Technical Specifications for operation of the Duane Arnold Energy Center, located in Linn County, Iowa. The amendment is effective as of its date of issuance.

The amendment consists of changes to the Technical Specifications which will (1) add surveillance requirements for the reactor pressure vessel stabilizers, (2) correct portions of the administrative controls section, and (3) correct typographical errors.

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

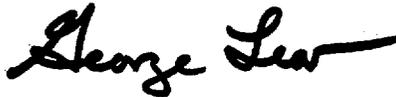
The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant

to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment dated December 15, 1975, (2) Amendment No. 32 to License No. DPR-49, 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. and at the Cedar Rapids Public Library, 426 Third Avenue, S. E., Cedar Rapids, Iowa 52406. 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 Operating Reactors.

Dated at Bethesda, Maryland, this 18 day of April 1977.

FOR THE NUCLEAR REGULATORY COMMISSION



George Lear, Chief
Operating Reactors Branch #3
Division of Operating Reactors