

Docket No. 50-331

February 17, 1981

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

Dear Mr. Arnold:

The Commission has issued the enclosed Amendment No. 64 to Facility Operating License No. DPR-49 for the Duane Arnold Energy Center. This amendment consists of changes to the Technical Specifications in response to your application dated September 10, 1980 and subsequent discussions between the NRC staff and your staff.

These changes to the Technical Specifications involve incorporation of certain of the TMI-2 Lessons Learned Category "A" requirements. These requirements concern (1) Emergency Power Supply/Inadequate Core Cooling, (2) Valve Position Indication, (3) Containment Isolation, (4) Shift Technical Advisor, (5) System Integrity Measurements Program, and (6) Improved Iodine Measurements capability.

Copies of the Safety Evaluation and a related Notice of Issuance are also enclosed.

Sincerely,

Original Signed by  
J. A. Ippolito

Thomas A. Ippolito, Chief  
Operating Reactors Branch #2  
Division of Licensing

Enclosures:

1. Amendment No. 64 to DPR-49
2. Safety Evaluation
3. Notice of Issuance

cc w/encls:  
See next page



*Concerns to form  
Review of attached  
Notice of Amendment  
only.*

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SURNAME	SNorris	KEccleston:ms	TAippolito	TMNovak	W.D. Paton		
DATE	2/3/81	2/3/81	2/3/81	2/5/81	2/12/81		



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

Docket No. 50-331

February 17, 1981

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

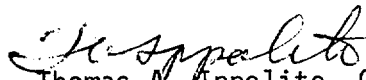
Dear Mr. Arnold:

The Commission has issued the enclosed Amendment No. 64 to Facility Operating License No. DPR-49 for the Duane Arnold Energy Center. This amendment consists of changes to the Technical Specifications in response to your application dated September 10, 1980 and subsequent discussions between the NRC staff and your staff.

These changes to the Technical Specifications involve incorporation of certain of the TMI-2 Lessons Learned Category "A" requirements. These requirements concern (1) Emergency Power Supply/Inadequate Core Cooling, (2) Valve Position Indication, (3) Containment Isolation, (4) Shift Technical Advisor, (5) System Integrity Measurements Program, and (6) Improved Iodine Measurements capability.

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Thomas A. Ippolito, Chief  
Operating Reactors Branch #2  
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Enclosures:

1. Amendment No. 64 to DPR-49
2. Safety Evaluation
3. Notice of Issuance

cc w/encls:  
See next page

Mr. Duane Arnold  
Iowa Electric Light & Power Company - 2 -

cc:

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Office for Planning and Programming  
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Des Moines, Iowa 50319

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

Iowa Electric Light & Power Company  
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Director, Criteria and Standards  
Division  
Office of Radiation Programs (ANR-460)  
U. S. Environmental Protection Agency  
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U. S. Environmental Protection Agency  
Region VII Office  
ATTN: EIS COORDINATOR  
324 East 11th Street  
Kansas City, Missouri 64106

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

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



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

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 64  
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 September 10, 1980, 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:

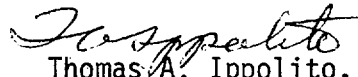
(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 64, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION

  
Thomas A. Ippolito, Chief  
Operating Reactors Branch #2  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: February 17, 1981

ATTACHMENT TO LICENSE AMENDMENT NO. 64

FACILITY OPERATING LICENSE NO. DPR-49

DOCKET NO. 50-331

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

<u>Remove</u>	<u>Replace</u>
3.2-5	3.2-5
3.2-5a	3.2-5a
3.2-6	3.2-6
3.2-7	3.2-7
3.2-19	3.2-19
	3.2-23a
3.2-24	3.2-24
3.2-33	3.2-33
	3.2-34a
3.6-6	3.6-6
6.2-3	6.2-3
6.3-1	6.3-1
6.8-1	6.8-1
6.8-2	6.8-2
	6.8-2a

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	Valve Groups Operated by Signal	Action (2)
2 (6)	Reactor Low Water Level	$\geq +12$ " Indicated Level (3)	4	2,3,4,5 (Sec. Cont., 3)	A E)
1	Reactor Low Pressure (Shutdown Cooling Isolation)	$\leq 135$ psig	2	4	C
2	Reactor Low-Low-Water Level	At or above -38.5" indicated level (4)	4	1, 8	A
2 (6)	High Drywell Pressure	$\leq 2.0$ psig	4	2,3,4,8,9* (Sec. Cont., 3)	A E)
2	High Radiation Main Stem Line Tunnel	$\leq 3$ X Normal Rated Power Background	4	1	B
2	Low Pressure Main Steam Line	$\geq 880$ psig (7)	4	1	B
2 (5)	High Flow Main Steam Line	$\leq 140\%$ of Rated Steam Flow	4	1	B
2	Main Steam Line Tunnel/Turbine Bldg. High Temperature	$\leq 200$ deg. F	4	1	B
1	Reactor Cleanup System High Diff. Flow	$\leq 40$ gpm	2	5	D

\*Group 9 valves isolate on high drywell pressure combined with reactor steam supply low pressure

TABLE 3.2-A

## INSTRUMENTATION THAT INITIATES PRIMARY CONTAINMENT ISOLATION (Continued)

Minimum No. of Operable Instrument Channels Per Trip System (1)	Instrument	Trip Level Setting	Number of Instrument Channels Provided by Design	Valve Groups Operated by Signal	Action (2)
1	Reactor Cleanup Area Ambient High Temp.	130°F	3	5	D
1	Reactor Cleanup Area Differential High Temp.	$\Delta 14^{\circ}\text{F}$	3	5	D
2	Loss of Main Condensor Vacuum	$\leq 10$ in Hg Vacuum	4	1	B

Amendment No. 64

3.2-5.a

DAEC-1



DAEC-1

NOTES FOR TABLE 3.2-A

1. Whenever Primary Containment integrity is required by Subsection 3.7, there shall be two operable or tripped trip systems for each function.
2. If the first column cannot be met for one of the trip systems, that trip system shall be tripped or the appropriate action listed below shall be taken.

ACTION A - Be in at least HOT SHUTDOWN within 6 hours and in COLD SHUTDOWN within the next 30 hours.

ACTION B - Be in at least STARTUP with the associated isolation valves closed within 6 hours or be in at least HOT SHUTDOWN within 6 hours and in COLD SHUTDOWN within the next 30 hours.

ACTION C - Close the affected system isolation valves within one hour and declare the affected system inoperable.

ACTION D - Be in at least STARTUP within 6 hours.

ACTION E - Isolate secondary containment and start the standby gas treatment system.

3. Instrument setpoint corresponds to 170" above top of active fuel.\*
4. Instrument setpoint corresponds to 119.5" above top of active fuel.\*

\* Top of the active fuel zone is defined to be 344.5 inches above vessel zero (see Bases 3.2).

DAEC-1

5. Two required for each steam line.
6. These signals also start SBGTS and initiate secondary containment isolation.
7. Only required in Run Mode (interlocked with Mode Switch).

TABLE 3.2-D

## RADIATION MONITORING SYSTEMS THAT INITIATE AND/OR ISOLATE SYSTEMS

Minimum No. of Operable Instrument Channels	Trip Function	Trip Level Setting	Number of Instrument Channels Provided by Design	Valve Groups Operated by Signal	Action (1)
1	Refuel Area Exhaust Monitor	Upscale, < 9 mr/hr	2 Inst. Channels	3	A or B
1	Reactor Building Area Exhaust Monitors	Upscale, < 11 mr/hr	2 Inst. Channels	3	B
1	Offgas Radiation Monitors	Note 2	2 Inst. Channels	Note 2	C

NOTES FOR TABLE 3.2-D1. Action

- A. Cease operation of the refueling equipment.
- B. Isolate secondary containment and start the standby gas treatment system.
- C. Refer to Subsection 3.2.D.1

- 2. For trip setting and valves isolated, see Specification 3.2.D.1.a

TABLE 3.2-H  
ACCIDENT MONITORING INSTRUMENTATION

Instrument	Total No. of Channels	Minimum Channels Operable
Safety/Relief Valve Position Indicator (Primary Detector)	1/Valve (1)	1/Valve (2)
Safety Relief Valve Position Indicator (Backup-Thermocouple)	1/Valve	0
Safety Valve Position Indicator (Primary Detector)	1/Valve (1)	1/Valve (2)
Safety Valve Position Indicator (Backup-Thermocouple)	1/Valve	0

NOTES FOR TABLE 3.2-H

1. Each channel is comprised of three instruments (pressure switches) which are arranged in a "two out of three" logic connected to a relay.
2. From and after the date that a channel is inoperable, the torus temperature will be monitored at least once per shift to observe any unexplained temperature increase which might be indicative of an open SRV; continued reactor operation is permissible only during the succeeding 30 days, unless such channel is sooner made operable.

TABLE 4.2-A

## MINIMUM TEST AND CALIBRATION FREQUENCY FOR PCIS

<u>Instrument Channel (5)</u>	<u>Instrument Functional Test (9)</u>	<u>Calibration Frequency (9)</u>	<u>Instrument Check</u>
1) Reactor Low Pressure (Shutdown Cooling Permissive)	(1)	Once/3 months	None
2) Reactor Low-Low Water Level	(1)	Once/3 months	Once/shift
3) Main Steam High Temp.	(1)	Once/operating cycle	Once/day
4) Reactor Low Water Level	(1)	Once/operating cycle	Once/shift
5) Main Steam High Flow	(1)	Once/3 months	Once/shift
6) Main Steam Low Pressure	(1)	Once/3 months	None
7) Reactor Water Cleanup High Flow (7)	(1)	Once/3 months	Once/day
8) High Drywell Pressure	(1)	Once/3 months	None
9) Reactor Cleanup Area High Temp. (8)	(1)	Once/operating cycle	None
10) High Radiation Main Steam Line Tunnel	(1)	Once/operating cycle	Once/shift
11) Loss of Main Condenser Vacuum	(1)	Once/operating cycle	None
<u>Logic System Functional Test (4) (6)</u>			
1) Main Steam Line Isolation Valves Main Steam Line Drain Valves Reactor Water Sample Valves		Once/6 months	
2) RHR - Isolation Valve Control Shutdown Cooling Valves Head Spray		Once/6 months	
3) Reactor Water Cleanup Isolation		Once/6 months	

These instrument channels will be calibrated using simulated electrical signals.

4. Simulated automatic actuation shall be performed once each operating cycle. Where possible, all logic system functional tests will be performed using the test jacks.

5. Reactor low water level, high drywell pressure and high radiation main steam line tunnel are also included on Table 4.1-2.

6. The logic system functional tests shall include a calibration of time delay relays and timers necessary for proper functioning of the trip systems.

7. These signals are not PCIS trip signals but isolate the Reactor Water Cleanup system only.

8. This instrumentation is excepted from the functional test definition. The functional test will consist of comparing the analog signal of the active thermocouple element feeding the isolation logic to a redundant thermocouple element.

9. Functional tests and calibrations are not required on the part of the system that is not required to be operable or is tripped. Functional tests shall be performed prior to returning the system to an operable status with a frequency not less than once per month. Calibrations shall be performed prior to returning the system to an operable status with a frequency not less than those defined in the applicable table. However, if maintenance has been performed on those components, functional tests and calibration shall be performed prior to returning to service.

TABLE 4.2-H

## ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>Instrument</u>	<u>Calibration Frequency</u>	<u>Instrument Check<sup>(2)</sup></u>
Safety/Relief Valve Position (1)(2) Indicator (Primary)	Once/Operating Cycle	Once/month
Safety/Relief Valve Position Indicator (Backup-Thermocouple)	Once/Operating Cycle	Once/month
Safety Valve Position Indicator (1)(2) (Primary)	Once/Operating Cycle	Once/month
Safety Valve Position Indicator (Backup-Thermocouple)	Once/Operating Cycle	Once/month

NOTES FOR TABLE 4.2-H

1. Functional test of the relay is done once/3 months.
2. Instrument check shall consist of the qualitative assessment of channel behavior during operation by observation. This determination shall include, where possible, comparison of the channel indication and/or status with other indications and/or status derived from independent instrument channels (e.g. backup thermocouple) measuring the same parameter.

LIMITING CONDITIONS FOR OPERATION

SURVEILLANCE REQUIREMENTS

- 2.
- a. From and after the date that the safety valve function of one relief valve is made or found to be inoperable, continued reactor operation is permissible only during the succeeding thirty days unless such valve function is sooner made operable.
- b. From and after the date that the safety valve function of two relief valves is made or found to be inoperable, continued reactor operation is permissible only during the succeeding seven days unless such valve function is sooner made operable.
- 3. If Specification 3.6.D.1 is not met, an orderly shutdown shall be initiated and the reactor coolant pressure shall be reduced to atmospheric within 24 hours.
- E. Jet Pumps
- 1. Whenever the reactor is in the startup or run modes, all jet pumps shall be operable. If it is determined that a jet pump is inoperable, an orderly shutdown shall be initiated and the reactor shall be in a Cold Shutdown Condition within 24 hours.

- 2. At least one of the relief valves shall be disassembled and inspected each refueling outage.
- 3. With the reactor pressure  $\geq$  100 psig and turbine bypass flow to the main condenser, each relief valve shall be manually opened and verified open by turbine bypass valve position decrease and pressure switches and thermocouple readings downstream of the relief valve to indicate steam flow from the valve once per operating cycle.
- E. Jet Pumps
- 1. Whenever there is recirculation flow with the reactor in the startup or run modes, jet pump operability shall be checked daily by verifying that the following conditions do not occur simultaneously:
  - a. The two recirculation loops have a flow imbalance of 15% or more when the pumps are operated at the same speed.



TABLE 6.2-1

MINIMUM SHIFT CREW PERSONNEL AND LICENSE REQUIREMENTS

DAEC Job Title	Reactor Mode	
	Other Than Cold Shutdown	Cold Shutdown
Shift Supervising Engineer	1 - SLO	1 - SLO
Nuclear Station Operating Engineer	1 - LO	1 - LO
Assistant Nuclear Station Operating Engineer	1 - LO	
Second Assistant Nuclear Station Operating Engineer	1	1
Nuclear Station Auxiliaries Engineer	1	
Shift Technical Advisor	1	None Required
Minimum Total Personnel	<u>6</u>	<u>3</u>

DAEC-1

SLO - Senior Licensed Operator

LO - Licensed Operator

Substitutions - without changing minimum total personnel requirements:

- a. Individuals with senior operator license may substitute for licensed operator or nonlicensed position.
- b. Individuals with operator license may, if otherwise qualified, substitute for nonlicensed position.

6.3 PLANT STAFF QUALIFICATIONS

6.3.1 The qualifications of individual members on the plant staff will meet or exceed qualifications referenced for comparable positions in ANSI N18.1-1971.

6.3.2 The Radiation Protection Engineer shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975.

6.3.3 The Shift Technical Advisor shall have a Bachelor's Degree or equivalent in a scientific or engineering discipline with specific training in plant design, and response and analysis of the plant for transients and accidents (effective 1/1/81).

6.8 PLANT OPERATING PROCEDURES

6.8.1 Detailed written procedures involving nuclear safety, including applicable check-off lists and instructions, covering areas listed below shall be prepared, and approved as specified in Subsection 6.8.2. All procedures shall be adhered to:

1. Normal startup, operation, and shutdown of systems and components of the facility.
2. Refueling operations.
3. Actions to be taken to correct specific and foreseen potential malfunctions of systems or components, including responses to alarms, suspected primary leaks, and abnormal reactivity changes.
4. Emergency and off-normal condition procedures.
5. Preventive and corrective maintenance operations which could have an effect on the nuclear safety of the facility.
6. Surveillance and testing requirements.

7. Procedures required by the Preparedness Plan.
8. Procedures required by the plant Security Plan.
9. Operation of radioactive waste systems.
10. Fire Protection Program implementation.
11. A preventive maintenance and periodic visual examination program to reduce leakage from systems outside containment that would or could contain highly radioactive fluids during a serious transient to as low as practical levels. This program shall also include provisions for performance of periodic systems leak tests of each system no less frequently than at refueling cycle intervals.
12. Program to ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions, including training of personnel, procedures for monitoring and provisions for maintenance of sampling and analysis equipment.

6.8.2 Procedures described in 6.8.1 above, and changes thereto, shall be reviewed by the Operations Committee and approved by the Chief Engineer prior to implementation, except as provided in 6.8.3 below.

6.8.3 Temporary minor changes to procedures described in 6.8.1 above which do not change the intent of the original procedure may be made with the concurrence of two members of the plant management staff, at least one of whom shall hold a senior operator license. Such changes shall be documented and promptly reviewed by the Operations Committee and by the Chief Engineer. Subsequent incorporation, if necessary, as a permanent change, shall be in accord with 6.8.2 above.

6.8.4 Selected drills of emergency procedures shall be conducted quarterly in accordance with the provisions of the Preparedness Plan.

6.8.5 The preventive and corrective maintenance program 6.8.1.11 above shall be implemented as follows:

1. Once per year or no less frequently than once per refueling cycle, a detailed walkdown inspection shall be performed and the results recorded.
2. Additional walkdown inspections shall be performed quarterly to detect any visible leakage.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO.64 TO LICENSE NO. DPR-49

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

DOCKET NO. 50-331

DUANE ARNOLD ENERGY CENTER

1.0 Introduction

By letter dated September 10, 1980, Iowa Electric Light and Power Company (the licensee) requested changes to the Technical Specifications (Appendix A) appended to Facility Operating License No. DPR-49 for the Duane Arnold Energy Center (DAEC). The requested changes would incorporate certain of the TMI-2 Lessons Learned Category "A" requirements into the DAEC Technical Specifications. The licensee's request is in direct response to the NRC Staff's letter of July 2, 1980.

2.0 Background Information

By our letter dated September 13, 1979, we issued to all operating nuclear power plants requirements established as a result of our review of the Three Mile Island Unit 2 accident. Certain of these requirements, designated Lessons Learned Category "A" requirements, were to have been completed by the licensee prior to any operation subsequent to January 1, 1980. Our evaluation of the licensee's compliance with these Category "A" items was attached to our letter to Iowa Electric Light and Power Company dated March 10, 1980.

In order to provide reasonable assurance that operating reactor facilities are maintained within the limits determined acceptable following the implementation of the TMI-2 Lessons Learned Category "A" items, we requested that licensees amend their TSS to incorporate additional Limiting Conditions of Operation and Surveillance Requirements, as appropriate. This request was transmitted to all licensees on July 2, 1980. Included therein were model specifications that we had determined to be acceptable. The licensee's application is in direct response to our request. Each of the issues identified by the NRC staff and the licensee's response is discussed in the Evaluation below.

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### 3.0 Evaluation

#### 1. Emergency Power Supply/Inadequate Core Cooling

We have reviewed the current specifications for DAEC (Table 3.2-F and 4.2-F) and determined that reactor water level instrumentation is included. The specifications provide ACTION statements for inoperable channels. Surveillance requirements for instrument checks and calibration are also included. The frequency of surveillance meets or exceeds our guidelines. Based on this review, we find that no changes are required to satisfy our request.

#### 2. Valve Position Indication

Our requirements for installation of a reliable position indicating system for relief and safety valves was based on the need to provide the operator with a diagnostic aid to reduce the ambiguity between indications that might indicate either an open relief/safety valve or a small line break. Such a system did not need to be safety grade provided that backup methods of determining valve position are available.

The licensee's request would add both the primary indicating system (tail-pipe pressure switches) and the secondary indicating system (downstream thermocouples) to the specifications. Actions have been specified for the condition of an inoperable primary channel and to provide for torus temperature monitoring in this event of an inoperable primary detector channel. Additionally, surveillance requirements have been included which meet or exceed our guidelines. Based on our review, we find the licensee's proposed changes satisfy our guidelines and are acceptable.

#### 3. Diverse Containment Isolation

The licensee has modified the containment isolation system so that diverse parameters will be sensed to insure automatic isolation of nonessential systems under postulated accident conditions. We have reviewed this system in our Lessons Learned Category "A" Safety Evaluation dated March 10, 1980.

The modification is such that it does not result in the automatic loss of containment isolation after the containment isolation signal is reset. Reopening of containment isolation valves would require deliberate operator action. The existing Technical Specifications (Table 3.7-3) and the Technical Specifications submitted by the licensee list the affected valves by isolation group and the diverse signals sensed to initiate containment isolation of each valve group. Table 4.2-A of the DAEC Appendix "A" Technical Specifications has been modified to include surveillance requirements which satisfy our guidelines.

We have reviewed the existing Technical Specifications (Table 3.7-3) and the modifications to Tables 3.2A and 4.2-A of the DAEC Technical Specifications agreed to by the licensee and have determined that these specifications satisfy our requirements and are therefore acceptable.

4. Shift Technical Advisor (STA)

Our request indicated that the Technical Specifications related to minimum shift manning should be revised to reflect the addition of an STA. The STA function includes both accident and operating experience assessment. The licensee proposed the addition of an STA to the minimum shift crew composition and the specific qualifications of this individual.

These qualifications state that the STA shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design, and response and analysis of the plant for transients and accidents. Since our position does not require degreed STAs until January 1, 1981, the licensee requested that the effective date for the STA requirement be delayed until that time.

Based on our review, we find that the licensee's submittal satisfies our requirements and is acceptable.

5. Integrity of Systems Outside Containment

Our letter dated July 2, 1980, indicated that the license should be amended by adding license conditions related to a Systems Integrity Measurements Program. This condition would require the licensee to implement a program to reduce leakage from systems outside containment that would or could contain highly radioactive fluids during a serious transient or accident to as low as practical levels.

The licensee instead incorporated such requirements into Section 6.8 of the DAEC Technical Specifications. This program for leakage reduction includes provisions establishing preventive maintenance and periodic visual inspection requirements and for periodic systems leak test requirements and thus satisfies our requirements.

6. Iodine Monitoring

Our letter dated July 2, 1980 indicated that the license should be amended by adding license conditions related to Improved Iodine Measurements capability. This condition would require the licensee to implement a program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions.



The licensee instead incorporated these requirements into Section 6.8 of the DAEC Technical Specifications. This program includes provisions for training of personnel, procedures for monitoring, and maintenance of sampling and analysis equipment and thus satisfies our requirements.

#### 4.0 Environmental Considerations

We have determined that the amendment does not involve 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 Section 51.5(d)(4) that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of the amendment.

#### 5.0 Conclusions

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does 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 the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: February 17, 1981

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NO. 50-331IOWA ELECTRIC LIGHT AND POWER COMPANY, ET AL.NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY  
OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 64 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 revises the 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 modifies the Technical Specifications to incorporate certain of the TMI-2 Lessons Learned Category "A" requirements. These requirements concern (1) Emergency Power Supply/Inadequate Core Cooling, (2) Valve Position Indication, (3) Containment Isolation, (4) Shift Technical Advisor, (5) System Integrity Measurements Program and (6) Improved Iodine Measurements Capability.

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.

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For further details with respect to this action, see (1) the application for amendment dated September 10, 1980, (2) Amendment No. 64 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, NW., Washington, D. C. and at the Cedar Rapids Public Library, 428 Third Avenue, SE., Cedar Rapids, Iowa 52401. 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 Licensing.

Dated at Bethesda, Maryland this 17th day of February 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Thomas A. Ippolito, Chief  
Operating Reactors Branch #2  
Division of Licensing