



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. 103
License No. DPR-49

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Iowa Electric Light & Power Company, et al, dated January 27, 1984, 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:

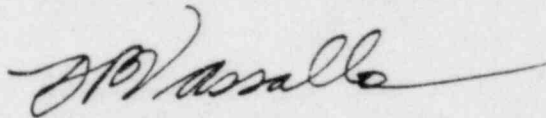
8407250099 840709
PDR ADOCK 05000331
P PDR

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 103, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION



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

Attachment:
Changes to the
Technical Specifications

Date of Issuance: July 9, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 103

FACILITY OPERATING LICENSE NO. DPR-49

DOCKET NO. 50-331

Revise the Appendix A Technical Specifications as indicated below. The revised areas are identified by vertical lines.

Remove

3.2-4
3.2-23a
-
3.2-34a
3.2-45a

Insert

3.2-4
3.2-23a
3.2-23b
3.2-34a
3.2-45a

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
<p>G. <u>Recirculation Pump Trip</u></p> <p>(ATWS)</p> <p>The limiting conditions for operation for the instrumentation that trips the recirculation pumps as a means of limiting the consequences of a failure to scram during an anticipated transient are given in Table 3.2-G.</p> <p>(EOC)</p> <p>The limiting conditions for operation for the instrumentation that trips the recirculation pumps during turbine stop valve or control valve fast closure for transient margin improvement (especially for end of cycle) are given in Table 3.2-G.</p>	<p>G. <u>Recirculation Pump Trip</u></p> <p>Instrumentation and logic shall be functionally tested, calibrated, and response time tested as indicated on Table 4.2-G.</p>
<p>H. <u>Accident Monitoring Instrumentation</u></p> <p>The limiting conditions for operation of accident monitoring instrumentation are given in Table 3.2-H.</p>	<p>H. <u>Accident Monitoring Instrumentation</u></p> <p>Instrumentation shall be calibrated and checked as indicated in Table 4.2-H in all operational modes other than COLD SHUTDOWN or refueling.</p>

TABLE 3.2-H

ACCIDENT MONITORING INSTRUMENTATION

Instrument	Total Number of Channels	Type Indication and Range	Minimum Channels Operable	Action
Safety/Relief Valve Position Indicator (Primary Detector)	1/Valve(1)	NA	1/Valve(2)	
Safety/Relief Valve Position Indicator (Backup-Thermocouple)	1/Valve	NA	0	
Safety Valve Position Indicator (Primary Detector)	1/Valve(1)	NA	1/Valve(2)	
Safety Valve Position Indicator (Backup-Thermocouple)	1/Valve	NA	0	
Extended Range Effluent Radiation Monitors:				
a) Reactor Building Exhaust Stack	3	Recorder, Indicator 5×10^{-2} to $10^5 \mu\text{Ci/cc}$	1	(5)
b) Turbine Building Exhaust Stack	1	Recorder, Indicator 5×10^{-2} to $10^5 \mu\text{Ci/cc}$	1	(5)
c) Offgas Stack	1	Recorder, Indicator 5×10^{-2} to $10^5 \mu\text{Ci/cc}$	1	(5)
Reactor Coolant, Containment Atmosphere, and Torus Water Post-Accident Sampling	2(each)	N/A	1(each)	(3)(4)

NOTES FOR TABLE 3.2-H

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.
- (3) When the ability to obtain a sample has been lost:
 - a. Within 7 days confirm a sample can be obtained within 24 hours of the time a decision is made to sample; and
 - b. Within 90 days, restore the sampling capability.
 - c. If the requirements of notes 6(a) and 6(b) cannot be met, be in at least a HOT SHUTDOWN Condition within the next 24 hours
- (4) When the ability to analyze a sample has been lost:
 - a. Within 7 days, confirm that alternative sample analytical support services can be initiated within 24 hours of the time a decision is made to sample; and
 - b. Within 90 days, restore sample analysis capability.
 - c. If the requirements of notes 7(a) and 7(b) cannot be met, be in at least a HOT SHUTDOWN Condition within the next 24 hours.
- (5) With the number of operable channels (both indicator and recorder inoperable) less than the Minimum Channels Operable Requirement, initiate the preplanned alternate method of monitoring the appropriate parameter(s) within 72 hours, and:
 - a. either restore the inoperable channel(s) to operable status within seven (7) days following the event, or
 - b. prepare and submit a Special Report to the Commission within 14 days following the event describing the action taken, the cause of the inoperability and the plans and schedule for restoring the system to operable status.

TABLE 4.2-H

ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>Instrument</u>	<u>Calibration Frequency</u>	<u>Instrument Check (2)</u>
Safety/Relief Valve Position Indicator (Primary) (1)(2)	Once/operating cycle	Once/month
Safety/Relief Valve Position Indicator (Backup-Thermocouple)	Once/operating cycle	Once/month
Safety Valve Position Indicator (Primary) (1)(2)	Once/operating cycle	Once/month
Safety Valve Position Indicator (Backup-Thermocouple)	Once/operating cycle	Once/month
Extended Range Effluent Radiation Monitors:		
a) Reactor Building Exhaust Stacks	Once/operating cycle (3)	Once/week
b) Turbine Building Exhaust Stack	Once/operating cycle (3)	Once/week
c) Offgas Stack	Once/operating cycle (3)	Once/week
Reactor Coolant and Torus Water Post-Accident Sampling	Once/operating cycle (4)	N/A

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.
3. Accident range effluent monitors shall be calibrated by means of a built-in check source or a known radioactive source.
4. Not a calibration, but demonstration of system operability.

Surveillance tests other than a monthly functional check of the bus power monitors for the RHR, Core Spray, ADS, HPCI and RCIC trip systems are not required since they serve as annunciators for complete loss of power and do not monitor reduction of voltage. The subject functional check consists of opening the appropriate circuit breakers and observing the loss of power annunciator activation.

The accident monitoring instrumentation listed in Table 3.2-H were specifically added to comply with the requirements of NUREG-0737 and Generic Letter 83-36. The instrumentation listed is designed to provide plant status for accidents that exceed the design basis accidents discussed in Chapter 15 of the DAEC UFSAR.