AEC DISTRIBUTION FOR PART 50 DOCKET MATERIAL
(TEMPORARY FORM)

CONTROL NO: 12238

FILE:

FROM: Iowa Electric Light & Power Company Cedar Rapids, Iowa C.W. Sandford	DATE OF DOC 11-26-74	DATE REC'D 12-4-74	LTR X	TWX	RPT	OTHER
TO: Mr. E. G. Case	ORIG 3 signed	CC 37	OTHER	SENT AEC PDR XX SENT LOCAL PDR XX		
CLASS UNCLASS XXX	PROP INFO	INPUT XXX	NO CYS REC'D 40	DOCKET NO: 50-331		

DESCRIPTION: Ltr notarized 11-26-74 requesting an Amdt to OL DPR-49 re changes in response to Revison 2 of Reg. Guide 1.16 & trans the following:

ENCLOSURES: Proposed Changes to DAEC Tech Specs with 2 Atachments.....

(40 cys encl rec'd)

ACKNOWLEDGED

Do Not Remove

PLANT NAME: Duane Arnold

FOR ACTION/INFORMATION DHL 12-5-74

BUTLER (L)	SCHWENCER (L)	ZIEMANN (L)	REGAN (E)
W/ Copies	W/ Copies	W/ Copies	W/ Copies
CLARK (L)	STOLZ (L)	DICKER (E)	LEAR (L)
W/ Copies	W/ Copies	W/ Copies	W/ Copies
PARR (L)	VASSALLO (L)	KNIGHTON (E)	
W/ Copies	W/ Copies	W/ Copies	W/ Copies
KNIEL (L)	PURPLE (L)	YOUNGBLOOD (E)	
W/ Copies	W/ Copies	W/ Copies	W/ Copies

INTERNAL DISTRIBUTION

REG FILE	TECH REVIEW	DENTON	LIC ASST	A/T IND
AEC PDR		GRIMES		BRAITMAN
OGC, ROOM P-506A	SCHROEDER	GAMMILL	DIGGS (L)	SALTZMAN
MUNTZING/STAFF	MACCARY	KASTNER	GEARIN (L)	B. HURT
CASE	KNIGHT	BALLARD	GOULBOURNE (L)	
GIAMBUSSO	PAWLICKI	SPANGLER	KREUTZER (E)	PLANS
BOYD	SHAO		LEE (L)	MCDONALD
MOORE (L) (BWR)	STELLO	ENVIRO	MAIGRET (L)	CHAPMAN
DEYOUNG (L) (PWR)	HOUSTON	MULLER	REED (E)	DUBE w/input
SKOVHOLT (L)	NOVAK	DICKER	SERVICE (L)	E. COUPE
GOLLER (L)	ROSS	KNIGHTON	SHEPPARD (L)	
P. COLLINS	IPPOLITO	YOUNGBLOOD	SLATER (E)	D. THOMPSON (2)
DENISE	TEDESCO	REGAN	SMITH (L)	KLECKER
REG OPR	LONG	PROJECT LDR	TEETS (L)	EISENHUT
FILE & REGION (2)	LAINAS	ST. MARY	WILLIAMS (E)	Schemel
MORRIS	BENAROYA	HARLESS	WILSON (L)	
STEELE	VOLLMER			

EXTERNAL DISTRIBUTION

LB

- 1 – LOCAL PDR Cedar Rapids, Iowa
- 1 – TIC (ABERNATHY) (1)(2)(10) – NATIONAL LABS
- 1 – NSIC (BUCHANAN) 1 – ASLBP(E/W Bldg, Rm 529)
- 1 – ASLB 1 – W. PENNINGTON, Rm E-201 GT
- 1 – Newton Anderson 1 – B&M SHINEBROAD, Rm E-201 GT
- 16 – ACRS XXXXXXXXX SENT TO 1 – CONSULTANTS
  LIC. ASST. S. TEETS 12-5-74 NEWMARK/BLUME/AGBABIAN
- 1 – PDR SAN/LA/NY
- 1 – BROOKHAVEN NAT LAB
- 1 – G. ULRIKSON, ORNL
- 1 – AGMED (RUTH GUSSMAN) Rm B-127 GT
- 1 – R. DENISE

IOWA ELECTRIC LIGHT AND POWER COMPANY

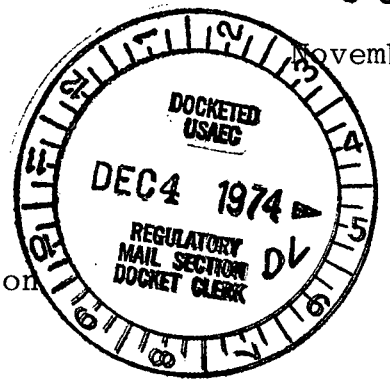
General Office

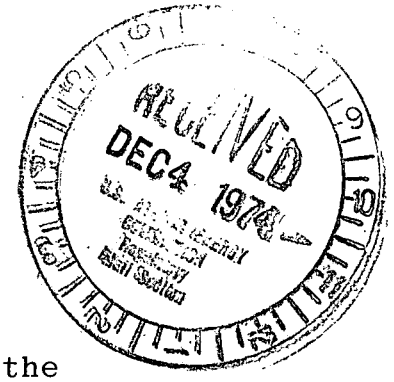
CEDAR RAPIDS, IOWA

50-331

CHARLES W. SANDFORD
EXECUTIVE VICE PRESIDENT

November 26, 1974





Mr. E. G. Case
Acting Director of Licensing
U. S. Atomic Energy Commission
Washington, D.C. 20545

Dear Mr. Case:

Transmitted herewith, in accordance with the requirements of 10 CFR 50.59 and 50.90, is an application for amendment of DPR-49 to incorporate the proposed changes in technical specifications for the Duane Arnold Energy Center (DAEC), described in the enclosures hereto. These changes are in response to Revision 2 of Regulatory Guide 1.16.

The proposed changes have been reviewed and approved by the DAEC Operations Committee and the DAEC Safety Committee and do not involve a significant hazards consideration.

Three originals and forty copies of this application are transmitted herewith. This application, consisting of the foregoing letter and enclosures hereto, is true and accurate to the best of my knowledge and belief.

Iowa Electric Light & Power Company

By C. W. Sandford
C. W. Sandford
Executive Vice President

cc: W/enclosures
D. Arnold
G. Owsley
J. Keppler
J. Newman

Sworn and subscribed to before me this 26th day of November, 1974.

Marjorie E. McDonald
Notary Public in and for the State of Iowa.

Marjorie E. McDonald
NOTARY PUBLIC
State of Iowa
Commission Expires
September 30, 1976

12238

Regulatory File Cy.

PROPOSED CHANGES TO DAEC TECHNICAL SPECIFICATIONS

Received w/Ltr Dated 11-26-74

I. Proposed Changes in Technical Specifications

The licensees of DPR-49 propose the following changes in the technical specifications:

Delete the present Specification 1.0.4, "Abnormal Occurrence", and replace with proposed Specification 1.0.4, "Abnormal Occurrence" (Attachment 1).

Delete the present Specification 6.11, "Plant Reporting Requirements" and replace with proposed Specification 6.11, "Plant Reporting Requirements" (Attachment 2).

II. Justification for Proposed Changes

These proposed changes are being submitted in accordance with a letter from the Atomic Energy Commission (Letter, G. Lear, Chief Operating Reactors Branch No. 3, Directorate of Licensing to D. Arnold, President, Iowa Electric Light and Power Company, dated October 22, 1974) requesting DAEC to revise its plant reporting requirements in accordance with Revision 2 of Regulatory Guide 1.16.

The only significant deviation from Regulatory Guide 1.16 concerns paragraph C.2.a (5), Reactivity Anomalies. This section provides three distinct definitions of reactivity anomaly related abnormal occurrences, the first of which is "Discovery of disagreement with predicted value of reactivity balance greater than or equal to $1.00."

The present DAEC Technical Specifications (Specification 1.0.4.f and 3.3.D) define the analogous reactivity balance limit as being 1% Δ k/k rather than $1.00. Iowa Electric Light and Power Company has initiated a study to determine the consequences of using the more restrictive value of $1.00 in the technical specifications, and proposes to defer implementing the change prior to completion of the study. In addition, it would be difficult to implement such a change at this time because current routine operation of DAEC as a load following plant inherently reduces the accuracy of routine reactivity balance checks. Licensee therefore proposes to retain the present value of reactivity balance in the technical specifications of "1% Δ k/k". For the reasons stated above it is also proposed to use "0.5% Δ k/k" in lieu of "50¢" in implementing C.2.a (5) (c) of the subject guide. These changes are reflected in the DAEC proposed abnormal occurrence definitions (Specification 1.0.4.d (1) and 1.0.4.d (3) of Attachment 1).

III. Review Procedures

These proposed changes have been reviewed by the DAEC Operations Committee and Safety Committee which have found that these proposed changes do not involve a significant hazards consideration.

DAEC-1

1.0.4 ABNORMAL OCCURRENCE

An abnormal occurrence means the occurrence of a plant condition that results in any of the conditions described below. Those abnormal occurrences that should be reported as expeditiously as possible are the following:

a. Failure of the reactor protection system to trip, as required, by the time a monitored parameter reaches the setpoint specified as the limiting safety system setting in the technical specifications.

b. Operation of the unit or affected systems when any parameter or operation subject to a limiting condition for operation is less conservative than the least conservative aspect of the limiting condition for operation established in the technical specifications.

c. Abnormal degradation discovered in the fuel cladding, the reactor coolant pressure boundary or the primary containment.

d. Reactivity Anomolies
   (1) Discovery of disagreement with predicted value of reactivity balance greater than or equal to 1% $\Delta k/k$.
   (2) A projection of a reactivity balance that would threaten the ability to attain required shutdown margin.
   (3) Short-term reactivity increases that correspond to a reactor period of less than 5 seconds, or if subcritical, an unplanned reactivity insertion of more than 0.5% $\Delta k/k$.

e. Failure or malfunction of one or more components which prevents or could prevent, by itself, the fulfillment of the functional requirements of systems required to function to cope with accidents analyzed in the FSAR.

f. Personnel error or procedural inadequacy which prevents or could prevent, by itself, the fulfillment of the functional requirements of systems required to function to cope with accidents analyzed in the FSAR.

g. Conditions arising from natural or man-made events that, as a direct result of the event, require plant shutdown, operation of safety systems, or other protective measures required by technical specifications.

h. Errors in the transient or accident analyses or in the methods used for such analyses as described in the safety analysis report or in the bases for the technical specifications that have or could have permitted reactor operation in a manner less conservative than assumed in the analyses.

i. Performance of structures, systems, or components that requires remedial action or corrective measures to prevent operation in a manner less conservative than assumed in the safety analysis report or technical specifications (including bases) or discovery during plant life of conditions not specifically considered in the safety analysis report or technical specifications that require remedial action or corrective measures to prevent the existence or development of an unsafe condition.

Those abnormal occurrences which have lesser immediate importance those those described above are the following:

j. Reactor protection system or engineered safety feature instrument settings which are found to be less conservative than those established by the technical specifications but which do not prevent the fulfillment of the functional requirements of affected systems.

k. Conditions leading to operation between the most conservative and least conservative aspects of a limiting condition for operation.

l. Any release of radioactive material from the site boundary in excess of the reporting levels of proposed Appendix I to 10 CFR Part 50.

m. Observed inadequacies in the implementation of administrative or procedural controls which threaten to cause reduction of degree of redundancy provided in reactor protection systems or engineered safety feature system.

6.11 PLANT REPORTING REQUIREMENTS

The following information shall be submitted to the USAEC to implement the reporting requirements of 10 CFR Parts 20, 40, 50, 70, 73 and reporting requirements imposed by the AEC as license conditions, including those reports required by these Technical Specifications.

6.11.1 Routine Reports

A. Startup Report

A summary report of plant startup and power escalation testing should be submitted following (1) receipt of an operating license, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the plant. The report should address each of the tests conducted and should include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation should also be described.

Startup reports should be submitted within (1) 90 days following completion of the startup test program, (2) 90 days following resumption or commencement of commerical power operation, or (3) 9 months following initial criticality, whichever is earliest. If the Startup Report does not cover all three events (i.e., initial

criticality, completion of startup test program, and resumption or commencement of commercial power operation), supplementary reports should be submitted at least every three months until all three events have been completed.

B. Annual Operating Report.

Routine operating reports covering the operation of the unit during the previous calendar year should be submitted prior to March 1 of each year. The initial report should be submitted prior to March 1 of the year following initial criticality.

The primary purpose of annual operating reports is to permit annual evaluation by the AEC staff of operating and maintenance experience throughout the nuclear power industry. The annual operating reports made by licensees should provide a comprehensive summary of the operating experience gained during the year, even though some repetition of previously reported information may be involved. References in the annual operating report to previously submitted reports should be clear.

Each annual operating report should include, for example:

(1) A narrative summary of operating experience during the report period relating to safe operation of the facility.

(2) For each outage or forced reduction in power of over 20 percent of design power where the reduction extends over four hours;

(a) the proximate cause and the system and major component involved (if the outage or forced reduction in power involved equipment malfunction);

(b) a brief discussion of (or reference to reports of) any abnormal occurrences pertaining to the outage or power reduction;

(c) corrective action taken to reduce the probability of recurrence, if appropriate;

(d) operating time lost as a result of the outage or power reduction (for forced and scheduled outages, use the generator off-line hours; for forced reduction in power, use the approximate duration of operation at reduced power);

(e) a description of major safety-related corrective maintenance performed during the outage or power reduction, including the system and component involved and identification of the critical path activity dictating the length of the outage or power reduction; and

(f) a report of any releases of radioactivity or unusual radiation exposures specifically associated with the outage.

(3) A tabulation (supplementing the requirements of paragraph 20.407 of 10 CFR Part 20) of the number of personnel receiving exposures greater than 100 mrem in the reporting period according to duty function, e.g., routine plant maintenance, special plant maintenance (describe maintenance), routine fueling operation, special refueling operation (describe operation), and other job-related exposures. Small exposures (< 20% of the total dose) need not be individually accounted for; however, at least 80% of the total body dose shall be reported according to duty function. See Regulatory Guide 1.16, Rev. 2, for a suggested format for providing this information.

(4) A report on fuel performance containing all findings from failed fuel examinations, including results of eddy current tests, ultrasonic tests, or visual examinations completed during the report period.

C. Monthly Operating Report

Routine reports of operating statistics and shutdown experience should be submitted on a monthly basis. The report formats set forth in Appendices C, D and E of Regulatory Guide 1.16, Rev. 2

should be completed in accordance with the instructions provided. The completed forms should be sent to the Director of Regulatory Operations, U.S. Atomic Energy Commission, Washington, D.C. 20545, with a copy to the appropriate Regulatory Operations Regional Office, to arrive no later than the tenth of each month following the calendar month covered by the report.

6.11.2 Abnormal Occurrences

Licensees are required to investigate and evaluate the significance of abnormal occurrences and implement corrective actions to prevent recurrence, in accordance with provisions of technical specifications and the program for quality assurance during the operation phase of plant life. In addition, abnormal occurrences should be reported to the AEC as described below.

In general, the importance of an occurrence with respect to safety significance determines the immediacy of reporting required. In some cases, however, the significance of an event may not be obvious at the time of its occurrence. In such cases, the AEC should be informed promptly of an increased significance in the licensee's assessment of the event. Corrected reports should be submitted as expeditiously as possible whenever changes occur.

A. Prompt Notification With Written Followup

The types of events listed in Specification 1.0.4.a through 1.0.4.i should be reported as expeditiously as possible, but within 24 hours, by telephone and confirmed by telegraph, mailgram, or facsimile transmission to the Director of the appropriate Regulatory Operations Regional Office, or his designate, with a written followup report

within two weeks. The written report should include, as a minimum, a completed copy of the transcription sheet (see Appendix A to Regulatory Guide 1.16, Rev. 2) used for entering data into the AEC's computer-based file of information concerning abnormal occurrences. Information provided on the transciption sheet should be supplemented, as needed, by additional narrative material to provide complete explanation of the circumstances surrounding the event.

B. Thirty Day Written Reports

The abnormal occurrences listed in Specification 1.0.4.j through 1.0.4.m have lesser immediate importance than those described under 6.11.2.A above. Such events should be the subject of a written report (transcription sheets - see Appendix A to Regulatory Guide 1.16, Rev. 2) to the Director of the appropriate Regulatory Operations Regional Office no later than the tenth of the calendar month following the month in which the events occurred. Abnormal occurrence reports submitted in accordance with this section may be complied for each calendar month and submitted within ten days after the end of the month covered.

6.11.3 Unique Reporting Requirements

A. Events Requiring Prompt Notification Only

The types of events identified below are generally of high public interest, although they may not be subject to the reporting guidelines of Specification 6.11.2. The Director of the appropriate AEC Regulatory Operations Regional Office, or his designate, should be

notified of such events, for information purposes only, as expeditiously as possible but within 24 hours.

(1) An event that causes property damage to the plant in excess of $10,000, exclusive of labor costs or costs of purchased power.

(2) Radiation exposure to licensee personnel or members of the public in excess of applicable exposure limits set forth in 10 CFR Part 20.

(3) Natural or man-made conditions that may require action but which need not be reported under Specification 6.11.2.

(4) Significant radiological event offsite occurring during transport of material for which the licensee was either shipper or intended receiver.

(5) Unscheduled shutdowns expected to last for more than one week, regardless of cause.

(6) Unusual low-level releases of radioactive material from the site boundary which need not be reported under Specification 6.11.2.

(7) Failure of or damage to safety-related equipment which need not be reported under Specification 6.11.2, if the time for repair is likely to exceed the time allowed by the technical specifications.

B. Special Report

Special reports shall be submitted to the Director of the Regulatory Operations Regional Office within the time period specified for each report. These reports shall be submitted covering the activities identified below pursuant to the requirements of the applicable reference specification.

a. Reactor Vessel base, weld and heat affected zone metal test specimens (Specification 4.6.A.2).

b. I-131 dose equivalent exceeding 50% of Equilibrium value (Specification 4.6.B.1.h).

c. Inservice inspection (Specification 4.6.G).

d. Reactor Containment Integrated Leakage Rate Test (Specification 4.7.A.2.f).

e. Auxiliary Electrical System - Operation with Inoperable Components (Specification 3.8.B.4).

f. Core Thermal Limits (Specification 3.12.D).