

DEC 20 1973

50-331

Iowa Electric Light and Power Company
ATTN: Mr. C. W. Sandford
Vice President
Cedar Rapids, Iowa

Docket No. ~~331~~

Gentlemen:

Thank you for your letter dated November 19, 1973, which forwarded a report pursuant to 10 CFR 50.55(e). Your report will be reviewed and evaluated and, should we require additional information concerning this matter, we will contact you.

Your cooperation concerning this matter is appreciated.

Sincerely,

John G. Davis, Deputy Director
for Field Operations
Directorate of Regulatory Operations

bcc: PDR
LPDR
NSIC
TIC
RO FILES
DR Central Files
RO:III, J. G. Keppler, w/o encl

OFFICE ▶	RO:FS/EB	RO:FS/EB,C	RO:DD/FO		
SURNAME ▶	SEBryan:das	HDHurg	JGDavis		
DATE ▶	12/18/73	12-19-73	12/18		

CB

FS&EB ACTION CONTROL FORM

- A. Action Code CDR #212 Arnold)
Name of Licensee and Facility Iowa Electric Light & Power Co. (Duane/
Docket No. or License No. 50-331
Title CDR Evaluation and Followup
Origin CDR Date Rec'd _____
- B. FS&EB Branch Coordinator:
Bryan X Dreher _____
Ellis _____ Paulus _____
Completion Requested by _____
- C. Action Requested of:
ADREMP _____ M&PPOB _____ EPB _____ RPB _____ ADCO _____
OB _____ CB _____ TAB _____ OOE _____ Region III
Date Requested 12/18/73 Completion Requested by Normal Handling
Reference Letter, Sanford to Knuth, dated Nov. 19, 1973
- D. Action Requested
In accordance with PI 0600/6, "Construction Deficiency Reporting," the Iowa Electric Light and Power Company's Duane Arnold deficiency report of 11/19/73 covering the overloading of the reactor building crane is being assigned to RO:III for evaluation of the technical adequacy of the corrective action and the final resolution of the deficiency.
- E. Date Action Completed _____
Close-out (Date & Method) _____
Comments: If completion date is not consistent with your work schedule, please let us know.

J. G. Davis
J. G. Davis, Deputy Director
for Field Operations
Directorate of Regulatory Operations

HOG
12-18-73

DR Central File
50' 337

IOWA ELECTRIC LIGHT AND POWER COMPANY

General Office
CEDAR RAPIDS, IOWA

November 19, 1973

C. W. SANDFORD
VICE PRESIDENT

IE-73-1438

Dr. Donald F. Knuth
Directorate of Regulatory Operations
U. S. Atomic Energy Commission
Washington, D. C. 20036

Re: Duane Arnold Energy Center #1
Subject: Reactor Building Crane Overload
File: Q-618

Dear Dr. Knuth:

This report is to provide information regarding the apparent overloading of the DAEC reactor building crane as reported to your Region III office on October 5, 1973.

On September 25, 1973, while attempting to fit an 80 ton reactor well plug into its location in the cavity with the 100 ton hook, the plug became wedged and the hoisting motor overload device tripped. The crane manufacturer was immediately contacted for an evaluation of this occurrence. On October 4, 1973 the crane manufacturer replied that a calculated 182 tons' lift had been attempted for an undetermined number of seconds. This estimate was based on the capacity of the control system and the operating conditions. In the reply the crane manufacturer recommended a complete nondestructive test (NDE) inspection be performed on all main hoist lifting components and structural members. Use of the crane was limited to the 5 ton auxiliary hook until the inspection was completed.

Final inspection of all lifting components was completed October 22, 1973. The NDE inspection was performed by the on-site NDE contractor under the supervision of a crane manufacturer representative. Results were acceptable. The main hoist cable was replaced as a precautionary measure. The inspection operation was monitored by IE personnel.

A full field crane test to 125% of rating was performed satisfactorily on October 22, 1973. This test included crane movement under load as well as load lifting.

The well plug tongs have been modified dimensionally to provide additional clearance and, therefore, the wedging which caused the initial problem cannot reoccur.

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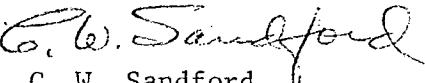
Dr. Donald F. Knuth
November 19, 1973

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The results of the inspection indicated that no damage to lifting components or structural members had resulted from the apparent overload. Therefore, there would have been no safety implication associated with the lift.

An engineering evaluation is being performed on the effect of the calculated 182 ton load on the building structural steel members above the refueling level. Preliminary results indicate that the steel members were not overstressed. The final results of this evaluation will be available by December 1, 1973. Engineering consideration is also being given to equipment devices or administrative procedures which could be employed to reduce the possibility of recurrence.

Yours very truly,


C. W. Sandford
Vice President

CWS:lf

cc: Mr. L. D. Root
Mr. J. A. Wallace
Mr. G. G. Hunt
Mr. J. N. Ward
Mr. G. A. Cook
Mr. J. R. Newman
Mr. J. G. Keppler
Mr. L. E. Rosetta