

REGULATOR INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8308250058 DOC. DATE: 83/08/22 NOTARIZED: NO DOCKET #
 FACIL: 50-331 Duane Arnold Energy Center, Iowa Electric Light & Pow 05000331
 AUTH. NAME AUTHOR AFFILIATION
 MCGAUGHY, R.W. Iowa Electric Light & Power Co.
 RECIP. NAME RECIPIENT AFFILIATION
 DENTON, H. Office of Nuclear Reactor Regulation, Director

SUBJECT: Forward addl info re conformance to general load handling guidelines of NUREG-0612, "Control of Heavy Loads at Nuclear Power Plants," in response to NRC 830623 request. Crane mod will be completed by 850731.

DISTRIBUTION CODE: A033S COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 4
 TITLE: OR Submittal: USI A-36 Control of Heavy Load Near Spent Fuel-NUREG-06

NOTES:

	RECIPIENT		COPIES			RECIPIENT		COPIES	
	ID CODE/NAME		LTR	ENCL		ID CODE/NAME		LTR	ENCL
	NRR ORB2 BC		7	7		NRR SINGH, A 01		4	4
INTERNAL:	NRR REGUA, G	09	1	1	NRR/DL/ORAB	12	1	1	
	NRR/DSI/AEB		1	1	NRR/DSI/ASI		1	1	
	<u>REG FILE</u>	04	1	1	RGN3		1	1	
EXTERNAL:	ACRS	13	6	6	LPDR	03	1	1	
	NRC PDR	02	1	1	NSIC	06	1	1	
	NTIS		1	1					

50-331

Iowa Electric Light and Power Company

August 22, 1983
NG-83-2940

Mr. Harold Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Denton:

This letter and attachment are provided in response to Mr. Vassallo's letter of June 23, 1983 in which additional information was requested regarding Iowa Electric's conformance to the general load handling guidelines of NUREG-0612, "Control of Heavy Loads at Nuclear Power Plants".

References given in the attachment refer to the open items listed in attachment 3 to Mr. Vassallo's letter and are also referenced to the synopsis provided as attachment 1 to that letter.

Please contact this office if there are additional questions regarding this matter.

Very truly yours,



Richard W. McGaughy
Manager, Nuclear Division

RWM/BWR/rh*

Attachment: Iowa Electric's Response to NRC's 6-23-83 Heavy Loads Letter

cc: B. Reid
L. Liu
S. Tuthill
F. Apicella (NRC)
NRC Resident Office
Commitment Control No: 83-0198

8308250058 830822
PDR ADOCK 05000331
P PDR

A033
11

IOWA ELECTRIC'S RESPONSE TO NRC'S 6-23-83 HEAVY LOADS LETTER

1. OPEN ITEM (Guideline 1)

The Licensee should ensure that safe load paths in the reactor building are clearly marked or that other suitable visual aids are provided.

EVALUATION

Sufficient information has not been provided to determine whether load paths have been appropriately marked or a suitable alternative to permanent markings has been implemented. Alternatives that have previously been found acceptable include use of temporary markings such as tape, rope, or pylons, or use of a crane signalman/supervisor who directs load movement along the predetermined load path and whose duties are clearly delineated in appropriate procedures.

IOWA ELECTRIC'S RESPONSE

The reactor building refuel floor procedures have been modified to include safe load path drawings and specific instructions to follow those paths. The remaining floors will be covered by a general procedure which will contain safe load path drawings that show location, by cross hatching, of all safe shutdown equipment.

Procedures will also be written that require a crane signalman/supervisor who will direct heavy load movement according to the safe load path drawings. This provision will be included in our general crane procedures as well as our refuel floor procedures.

As shown in the Plan for the Integrated Scheduling of Plant Modifications for the Duane Arnold Energy Center (Amendment 91 to our license DPR-49) these procedures will be completed prior to September 22, 1983.

2. OPEN ITEM (Guideline 4)

The licensee should complete its assessment of the design adequacy of all special lifting devices and provide additional information which identifies the proof tests performed on each device.

EVALUATION

See the TER for discussion.

IOWA ELECTRIC'S RESPONSE

Dryer-Separator Sling -

The dryer-separator sling has been reviewed for compliance with specific sections of ANSI N14.6-1978 as outlined in Franklin Research Center's TER-C5257-110/111. This review, which determined compliance with the

above TER, was completed to fulfill requirements of NUREG 0612. The sling has also been proof-tested at 200% of rated capacity and the results have been documented.

Rotor Lifting Beam -

The rotor lifting beam has also been shown to comply with the ANSI standard mentioned above. In accordance with the provisions of Guideline 4, the beam will not be proof-tested for the following reasons:

1. The beam was built in concurrence with GE Specification D50A125 which requires:
 - A. Maximum working load is no greater than one-fifth (1/5) of the minimum breaking strength of the wire rope and fittings used.
 - B. The maximum working stress in lifting beams shall be no greater than one-third (1/3) of the minimum yield strength or one-fifth (1/5) of the minimum tensile strength, whichever is smaller, of the beam structure and its' attachments.
 - C. All welds shall be done by welders qualified by Section IX of ASME Pressure Vessel Code or an equivalent qualifying procedure and then be magnetic particle tested.
2. As previously shown in Appendix A to Iowa Electric's Heavy Loads Report, loads that are carried by the lifting beam do not have unacceptable consequences if dropped.

Vessel Head Strongback -

A design change is in progress to strengthen the strongback. When work is completed, the strongback will be proof-tested at 150% of rated capacity.

3. OPEN ITEM (Interim Measure 1)

The reactor building crane presently is not single-failure proof. The Licensee has committed to upgrading the reactor building crane to comply with the single-failure-proof guidelines of NUREG-0612, Appendix C; however, no timetable has been approved.

EVALUATION

The licensee does not fully conform with Interim Protection Measure 1. The Licensee should implement a technical specification similar to Standard Technical Specification 3.9.7 or equivalent administrative procedures, until the reactor building crane has been upgraded to fulfill single-failure-proof guidelines.

IOWA ELECTRIC'S RESPONSE

As discussed in the Plan for the Integrated Scheduling of Plant Modifications for the Duane Arnold Energy Center (Amendment 91 to our license DPR 49), the design and licensing of the crane modification will be submitted to the NRC by September 22, 1983. Meanwhile to comply with Interim Measure 1, we have changed our control procedures to prohibit movement of heavy loads over the spent fuel pool. Per the Five Year Plan, the crane modification will be completed by July 31, 1985.