

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8306270420 DOC. DATE: 83/06/24 NOTARIZED: YES 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.R. Office of Nuclear Reactor Regulation, Director

SUBJECT: Application for Proposed Change RTS-124, Rev 2, to License
 DPR-49, changing Tech Specs re single recirculation loop
 operation to be consistent w/Cycle 7 reload licensing amend.
 Changes supersede 801017 changes.

DISTRIBUTION CODE: A001S COPIES RECEIVED: LTR 1 ENCL 37 SIZE: 5+41
 TITLE: OR Submittal: General Distribution

NOTES: *Rec'd w/out check*

	RECIPIENT		COPIES			RECIPIENT		COPIES	
	ID	CODE/NAME	LTTR	ENCL		ID	CODE/NAME	LTTR	ENCL
	NRR	ORB2 BC 01	7	7					
INTERNAL:	ELD/HDS2		1	0	NRR/DE/MTEB		1	1	
	NRR/DL DIR		1	1	NRR/DL/ORAB		1	0	
	NRR/DSI/METB		1	1	NRR/DSI/RAB		1	1	
	<u>REG FILE</u>	04	1	1	RGN3		1	1	
EXTERNAL:	ACRS	09	6	6	LPDR	03	1	1	
	NRC PDR	02	1	1	NSIC	05	1	1	
	NTIS		1	1					

TOTAL NUMBER OF COPIES REQUIRED: LTTR 25 ENCL 23

Iowa Electric Light and Power Company

June 24, 1983

NG-83-0671

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

Duane Arnold Energy Center
Docket No: 50-331
Op. License No: DPR-49
Subject: Single Recirculation Loop Operation

Dear Mr. Denton:

In accordance with the requirements of 10 CFR 50.59 and 50.90, we transmitted our proposed technical specification change regarding single recirculation loop operation on October 17, 1980, which was subsequently amended in our December 18, 1981 transmittal. We hereby amend that application and amendment with the enclosed technical specification page changes, which are intended to supersede those previously submitted.

This amendment has been reviewed by the Duane Arnold Energy Center Operations Committee and the Safety Committee. A check for \$4,000 was submitted with our original application and, therefore, no further fee is required.

Three signed and 37 additional copies of this application are transmitted herewith. Pursuant to the requirements of 10 CFR 50.91, a copy of this application and analysis of no significant hazards considerations is being sent to our appointed state official. This application, consisting of the foregoing letter and enclosures, is true and accurate to the best of my knowledge and belief.

IOWA ELECTRIC LIGHT AND POWER COMPANY

BY

Richard W. McGaughy

Richard W. McGaughy
Manager, Nuclear Division

RWM/RAB/dmh*
Attachment

cc: R. Browning
L. Liu
S. Tuthill
F. Apicella
T. Houvenagle
NRC Resident Office

Subscribed and sworn to Before Me on
this 24th day of June, 1983.

Kathleen M. Nerber
Notary Public in and for the State of Iowa

Evaluation of Change
With Respect to 10 CFR 50.92

The enclosed application is judged to involve no significant hazards based upon the following information:

- i) The enclosed application is for permanent licensing of Single Loop Operation (SLO), i.e. operation with one recirculation loop out of service. The NRC, by granting Iowa Electric temporary license amendments in the past for SLO, has determined that such operation does not involve a significant hazards consideration. As the present application follows the guidelines previously established by the NRC for SLO, the enclosed amendment is therefore judged to involve no significant hazards as well.
- ii) The enclosed amendment request is judged to involve no significant hazards based upon the precedent set by the NRC is granting similar requests for other Operating Reactors.
- iii) In the April 6th 1983 Federal Register the NRC published a list of examples of amendments that are not likely to involve a significant hazards concern. Example number four of that list states:

"A relief granted upon demonstration of acceptable operation from an operating restriction that was imposed because acceptable operation was not yet demonstrated. This assumes that the operating restriction and the criteria to be applied to a request for relief have been established in a prior review and that it is justified in the satisfactory way that the criteria have been met."

As the NRC has previously established the criteria for SLO and the enclosed application follows those criteria, the amendment request is judged to fall within the scope of the above example.

Revision 2 to Proposed Change RTS-124
to the
Duane Arnold Energy Center
Technical Specifications

The purpose of this change to the previous revision, RTS-124A submitted December 18, 1981, is to update the submittal for permanent licensing of Single Loop Operation (SLO) to be consistent with the Reload Licensing amendment for Cycle 7 (Amendment 88, issued April 25, 1983). The major changes deal with the increased Minimum Critical Power Ratio (MCPR) operating limits for 8 X 8 and P8 X 8R fuel and new Maximum Average Planar Linear Heat Generation Rate (MAPLHGR) curves for the fresh fuel for Cycle 7. Also this revision reflects the new NRC position which allows isolation of the out-of-service recirc. loop by electrically isolating the recirc. pump instead of closing the suction valve, as proposed in the previous submittal. This change allows the temperature in the idle loop to be maintained, reducing the thermal stress on the pipe. Several administrative changes are also included, dealing with updating references and deletion of blank pages. For clarity and conciseness, a list of the affected pages is included which supersedes those previously submitted.

The changes being made are as follows:

- 1) Change the List of Tables on page vi to show that Table 3.12-2 is moved to page 3.12-10.
- 2) Change 1.1.A to include the safety limit MCPR for SLO.
- 3) Add the APRM Flow-Biased Flux Scram and Rod Block Equations for SLO to Sections 2.1.A.1 and 2.1.A.3 respectively as well as Figure 2.1-1 and to Tables 3.1-1 and 3.2-C (pages 1.1-19, 3.1-3 and 3.2-16). Also add the SLO-modified Rod Block Monitor (RBM) equation to Table 3.2-C.
- 4) Add Section 2.1.A.4 detailing APRM Flux noise surveillance requirements for SLO, and add supporting Bases to page 1.1-3.
- 5) Update the bases for Section 1.1.A (page 1.1-5) and 2.1 (page 1.1-9) for SLO.
- 6) Update the References for Section 1.1, 2.1 and 3.12 to include the SLO analysis for DAEC and to show the new title of the GE Reload Fuel Licensing Topical Report.
- 7) Paragraph 4.6.E.b has been moved from page 3.6-7 to page 3.6-6.
- 8) Change Sections 3.3.E and 3.6.F.2 to allow SLO for more than 24 hours and add the necessary Limiting Condition for Operation (LCO).
- 9) Add the core plate ΔP surveillance requirement to Section 4.6.F.2 and supporting bases to page 3.6-34.

- 10) Change the bases for Sections 3.6 and 4.6 to allow SLO and to reference the appropriate supporting analysis. Also, clarify the bases on jet pumps (section 3.6.E) and out-of-service loop isolation (section 3.6.F) for SLO.
- 11) Add the core thermal limits LCO's for SLO to section 3.12.A and 3.12.C.
- 12) Update the bases for Section 3.12 to support SLO and to reference the SLO analysis.
- 13) Consolidate the text on page 3.12-5a onto 3.12-6.
- 14) Update the MCPR limits given in Table 3.12-2 to reflect the increased operating limits for Cycle 7 and to show the comparable limits for SLO.
- 15) Add required reference for SLO to footnote on Figures 3.12-5 through 3.12-9.
- 16) The following pages are renumbered as a result of deleting blank pages:

1.1-6	1.1-18
1.1-7	1.1-19
1.1-8	3.12-6
1.1-9	3.12-8
1.1-10	3.12-9
1.1-11	3.12-10
1.1-12	3.12-12
1.1-13	3.12-13
1.1-14	3.12-14
1.1-15	3.12-15
1.1-16	3.12-16
1.1-17	

Affected Pages

vi	3.2-16
vii	3.3-7
1.1-1	3.6-6
1.1-2	3.6-7
1.1-3	3.6-31
1.1-5	3.6-34
1.1-6	3.12-1
1.1-7	3.12-3
1.1-8	3.12-4
1.1-9	3.12-5a*
1.1-10	3.12-6
1.1-11	3.12-7
1.1-12	3.12-8
1.1-13	3.12-9
1.1-14	3.12-9a*
1.1-15	3.12-10
1.1-16	3.12-11
1.1-17	3.12-12
1.1-18	3.12-13
1.1-19	3.12-14
1.1-20*	3.12-15
1.1-21*	3.12-16
1.1-22*	3.12-17*
1.1-23*	3.12-18*
1.1-24*	3.12-19*
1.2-7	3.12-20*
3.1-3	

*These pages have been deleted.