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MCGAUGHY, R. W.

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RECIP NAME

RECIPIENT AFFILIATION

DENTON, H.

Office of Nuclear Reactor Regulation, Director (post 851125

SUBJECT: Forwards Rev 4 to updated FSAR for Duane Arnold Energy Ctr. Rev reflects changes made through 851231. Revised Section

13.1 "Organizational Structure" assumes NRC approval of Tech

Spec change RTS-190.

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TITLE: OR Submittal: Updated FSAR (50.71)

NOTES:

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June 27, 1986 NG-86-2248

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

Subject: Duane Arnold Energy Center

Docket No: 50-331 Op. License No: DPR-49

Revision 4 to Duane Arnold Energy Center Final Safety Analysis Report (DAEC FSAR)

File: A-116

Dear Mr. Denton:

This letter transmits Revision 4 to the Duane Arnold Energy Center Final Safety Analysis Report (DAEC FSAR). With the exception noted below, this revision reflects changes made through December 31, 1985. In accordance with 10 CFR 50.71(e)(2), those changes that were made under the provisions of 10 CFR 50.59 but were not previously submitted to the Commission are identified in Attachment 1.

Please note that revised Section 13.1, Organizational Structure of Iowa Electric, assumes NRC approval of Technical Specification Change RTS-190, dated September 24, 1985. We understand that such approval will be received shortly and we have chosen to include it so that Section 13.1 will be accurate for the longest possible time that Revision 4 is in effect. The DAEC will continue to follow the organizational structure described in Sections 6.1 and 6.2 of the DAEC Technical Specifications until RTS-190 is approved.

	IOWA ELECTRIC LIGHT AND POWER COMPANY
	Richard W. McGaught Manager, Nuclear Division
	Subscribed and sworn to Before Me on 1986
	Notary Public in and for the State of Iowa
2) 13 copies	ation of Changes - DAEC FSAR, Revision 4
cc: S. Reith L. Liu L. Root M. Thadani	B607020073 B60627 PDR ADDCK 05000331 K PDR ADDCK 05000331
NRC Resident Office Commitment Control No	. 86-0137 & 86-0247 Box 351 • Cedar Rapids, Iowa 52406 • 319/398-4411
General Office 1.0.	DUA DUI Coudi Itapiao, iona o-ree de de ree-

IDENTIFICATION OF CHANGES

This FSAR revision includes changes that result from modifications that were completed following the deadline for inclusion in our annual 50.59(b) report submitted February 28, 1986 (NG-86-0207).

The Design Change Packages (DCPs) completed and affected FSAR sections are:

DCP 1	1206,	Appendix R Modifications	•	_	3.7 (Table	3.7-1),
•		Fire Barriers/Electrical			8.3.1.2.1,	9.5.1.2.8

DCP 1207, Appendix R Modifications - 9.4.6.2.3, 9.4.6.3 Fire Barriers, Doors, Walls, Seals and Fire Dampers

DCP 1345, Replacement of C-TIP Isolation Valve - 3.1 (Table 3.1-1)

DCP 1346, Miscellaneous Appendix R - 9.5.1.2.3
Fire Protection Modifications

This revision also includes changes that resulted from NRC Region III Inspections performed at the DAEC.

FSAR Section 5.4.5.3 was revised as a result of Inspection Report 85-003.

FSAR Sections 7.6.1.4, 7.6.1.8, and 7.6.1.9 were revised as a result of Inspection Report 85-035.

UFSAR/DAEC-1 €

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DUANE ARNOLD ENERGY CENTER

UPDATED FINAL SAFETY ANALYSIS REPORT # 860 70200273

Revision 3 Instructions

The following Revision 3 instructions indicate replacement pages and additional pages for the DAEC Updated Final Safety Analysis Report (UFSAR) Remove the existing pages and insert the replacement and additional pages where indicated by these instructions. After this revision has been entered in the UFSAR, record the fact in the Record of Changes section in Volume I.

		/
Location	Remove Pages	Insert Revision 3 Pages
VOLUME I		
List of Effective Pages	LEP-1/LEP-2 through LEP-39/Blank	LEP-1/LEP-2 through LEP-39/Blank
Chapter 1	1-i/1-ii 1-iii/1-iv	1-i/1-ii 1-iii/1-iv
	1-vii/1-viii 1-ix/Blank	1-vii/1-viii 1-ix/Blank
	1.1-3/1.1-4 1.1-5/1.1-6	1.1-3/1.1-4 1.1-5/1.1-6
	1.2-1/1.2-2	1.2-1/1.2-2
	1.2-7/1.2-8 through 1.2-27/Blank	1.2-7/1.2-8 through 1.2-27/Blank
	Figure 1.2-2 through Figure 1.2-7	Figure 1.2-2 through Figure 1.2-7
	Figure 1.2-11 Figure 1.2-12	Figure 1.2-11 Figure 1.2-12
	Figure 1.2-15	Figure 1.2-15
		Figure 1.2-17
	T1.6-1/T1.6-2 through T1.6-5/Blank	T1.6-1/T1.6-2 through T1.6-5/Blank
		1

Location	Remove Pages	Insert Revision 3 Pages
<u>Chapter 1</u> (Continued)	1.8-11/1.8-12	1.8-11/1.8-12
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	1.8-23/1.8-24	1.8-23/1.8-24
	1.8-31/1.8-32	1.8-31/1.8-32
	1.8-85/1.8-86	1.8-85/1.8-86
	1.8-89/1.8-90 1.8-91/1.8-92	1.8-89/1.8-90 1.8-91/1.8-92
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	2.1-5/2.1-6	2.1-5/2.1-6
	Figure 2.1-1	Figure 2.1-1
	2.3-7/2.3-8 2.3-9/2.3-10	2.3-7/2.3-8 2.3-9/2.3-10
	T2.3-1/T2.3-2 T2.3-3/Blank	T2.3-1/T2.3-2 through T2.3-5/T2.3-6
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	3.1-57/3.1-58	3.1-57/3.1-58
	3.3-1/3.3-2	3.3-1/3.3-2
	Figure 3.5-3	Figure 3.5-3
	Figure 3.5-6	Figure 3.5-6
	3.6-1/3.6-2	3.6-1/3.6-2
•	Figure 3.6-17	Figure 3.6-17

Location	Remove Pages	Insert Revision 3 Pages	
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	T3.8-1/T3.8-2	T3.8-1/T3.8-2	
	Figure 3.8-2	Figure 3.8-2	
	3.9-51/3.9-52 3.9-53/Blank	3.9-51/3.9-52 3.9-53/Blank	
	Figure 3.9-5 Sheet 1 Sheet 2	Figure 3.9-5 Sheet 1 Sheet 2	
	3.11-1/3.11-2	3.11-1/3.11-2	
*	3.11-21/Blank	3.11-21/Blank	
	T3.11-1/T3.11-2	T3.11-1/T3.11-2	
Chapter 4	4.1-3/4.1-4	4.1-3/4.1-4	
•	4.2-7/4.2-8	4.2-7/4.2-8	
	4.3-3/4.3-4	4.3-3/4.3-4	
	T4.3-1/Blank	T4.3-1/Blank	
	4.4-3/4.4-4	4.4-3/4.4-4	
	4.4-7/Blank	4.4-7/Blank	
	Figure 4.4-1	Figure 4.4-1	
VOLUME V			
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	5.2-9/5.2-10	5.2-9/5.2-10	
	5.2-27/5.2-28	5.2-27/5.2-28	

Location	Remove Pages	Insert <u>Revision 3 Pages</u>
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	5.3-17/5.3-18 5.3-19/5.3-20	5.3-17/5.3-18 5.3-19/5.3-20
	5.4-5/5.4-6 through 5.4-9/5.4-10	5.4-5/5.4-6 through 5.4-9/5.4-10
	5.4-35/5.4-36	5.4-35/5.4-36
	5.4-67/Blank	5.4-67/Blank
	Figure 5.4-4	Figure 5.4-4
	Figure 5.4-12 Sheet 1	Figure 5.4-12 Sheet 1
VOLUME VI		
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	T6.2-3/T6.2-4 through T6.2-7/T6.2-8	T6.2-3/T6.2-4 through T6.2-7/T6.2-8
	Figure 6.2-2 Figure 6.2-3	Figure 6.2-2 Figure 6.2-3
	Figure 6.2-44	Figure 6.2-44
•	Figure 6.2-60	Figure 6.2-60
	6.3-11/6.3-12 6.3-12a/Blank	6.3-11/6.3-12 6.3-12a/Blank

Location	Remove Pages	Insert Revision 3 Pages
Chapter 6 (Continued)	6.3-31/6.3-32 6.3-33/Blank	6.3-31/6.3-32 6.3-33/Blank
	T6.3-5/T6.3-6	T6.3-5/T6.3-6
	Figure 6.3-3 Sheet 1	Figure 6.3-3 Sheet 1
	Figure 6.4-1 Figure 6.4-2	Figure 6.4-1 Figure 6.4-2
VOLUME VII		
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	Figure 7.1-1 Sheet 1 Sheet 4	Figure 7.1-1 Sheet 1 Sheet 4
	7.2-5/7.2-6	7.2-5/7.2-6
	7.2-11/7.2-12	7.2-11/7.2-12
	7.3-25/7.3-26 through 7.3-28a/Blank	7.3-25/7.3-26 7.3-27/7.3-28
	T7.3-23/T7.3-24	T7.3-23/T7.3-24
	Figure 7.3-2 Sheet 1 Sheet 3	Figure 7.3-2 Sheet 1 Sheet 3
	Figure 7.3-3 Sheet 3 Sheet 6	Figure 7.3-3 Sheet 3 Sheet 6
	Figure 7.3-6 Sheet 1	Figure 7.3-6 Sheet 1
	Figure 7.3-11	Figure 7.3-11
	7.4-1/7.4-2	7.4-1/7.4-2
	7.5-3/7.5-4	7.5-3/7.5-4
	7.7-27/7.7-28 through 7.7-35/Blank	7.7-27/7.7-28 through 7.7-35/B1ank

Location	Remove Pages	Insert Revision 3 Pages
VOLUME VIII		
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	8.2-7/8.2-8 through 8.2-25/Blank	8.2-7/8.2-8 through 8.2-25/8.2-26
	T8.2-1/T8.2-2 through T8.2-11/T8.2-12	T8.2-1/T8.2-2 through T8.2-19/T8.2-20
	8.3-1/8.3-2 8.3-3/8.3-4	8.3-1/8.3-2 8.3-3/8.3-4
.•	8.3-15/8.3-16	8.3-15/8.3-16
	Figure 8.3-1 Figure 8.3-2	Figure 8.3-1 Figure 8.3-2
Chapter 9	9-i/9-ii through 9-vii/9-viii	9-i/9-ii through 9-vii/9-viii
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	9.1-7/9.1-8 9.1-9/9.1-10	9.1-7/9.1-8 9.1-9/9.1-10
	9.1-33/9.1-34 through 9.1-39/9.1-40	9.1-33/9.1-34 through 9.1-41/Blank
	Figure 9.1-6	Figure 9.1-6
	9.2-13/9.2-14	9.2-13/9.2-14
	Figure 9.2-1	Figure 9.2-1
	9.3-1/9.3-2 9.3-3/9.3-4	9.3-1/9.3-2 9.3-3/9.3-4
	Figure 9.3-20 Figure 9.3-21	Figure 9.3-20 Figure 9.3-21
	Figure 9.3-27	Figure 9.3-27
•	9.4-7/9.4-8	9.4-7/9.4-8

Location	Remove Pages	Insert Revision 3 Pages
Chapter 9 (Continued)	9.4-13/9.4-14	9.4-13/9.4-14 9.4-15/Blank
	Figure 9.4-1	Figure 9.4-1
	Figure 9.4-3	Figure 9.4-3
	Figure 9.4-7 Figure 9.4-8	Figure 9.4-7 Figure 9.4-8
	9.5-1/9.5-2 through 9.5-27/Blank	9.5-1/9.5-2 through 9.5-29/Blank
	Figure 9.5-1 Figure 9.5-2 Figure 9.5-3	Figure 9.5-1 Figure 9.5-2 Figure 9.5-3
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	Figure 10.3-1	Figure 10.3-1
	10.4-11/Blank	10.4-11/Blank
	Figure 10.4-2	Figure 10.4-2
	Figure 10.4-4 Sheet 1	Figure 10.4-4 Sheet 1
Chapter 11	11-i/11-ii through 11-v/11-vi	11-i/11-ii through 11-v/11-vi
	11.1-1/11.1-2 through 11.1-7/Blank	11.1-1/11.1-2 through 11.1-7/Blank
	11.2-7/11.2-8	11.2-7/11.2-8
	Figure 11.2-2	Figure 11.2-2
	Figure 11.2-5	Figure 11.2-5
•	Figure 11.2-7	Figure 11.2-7

Location	Remove Pages	Insert Revision 3 Pages
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	Figure 11.3-2	Figure 11.3-2
	11.4-1/11.4-2 through 11.4-5/Blank	11.4-1/11.4-2 through 11.4-5/Blank
	Figure 11.4-1	Figure 11.4-1
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		T11.5-3/T11.5-4
	Figure 11.5-1 Sheet 1 Sheet 2	Figure 11.5-1
	Figure 11.5-4	Figure 11.5-4 Figure 11.5-5
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	Figure 12.3-4	Figure 12.3-4
	12.5-1/12.5-2	12.5-1/12.5-2
Chapter 13	13-i/13-ii	13-i/13-ii
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	Figure 13.1-1	Figure 13.1-1
	Figure 13.1-3	Figure 13.1-3

Location	Remove Pages	Insert Revision 3 Pages
Chapter 13 (Continued)	Figure 13.1-6	Figure 13.1-6
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