

November 6, 2001

Gary Van Middlesworth
Site Vice President
Duane Arnold Energy Center
Nuclear Management Company, LLC
3277 DAEC Road
Palo, IA 52324-0351

SUBJECT: DUANE ARNOLD ENERGY CENTER - ISSUANCE OF AMENDMENT
REGARDING EXTENDED POWER UPRATE (TAC NO. MB0543)

Dear Mr. Van Middlesworth:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 243 to Facility Operating License No. DPR-49 for the Duane Arnold Energy Center. This amendment consists of changes to the operating license and Technical Specifications (TS) in response to your application dated November 16, 2000, as supplemented April 16 (two letters) and 17; May 8 (two letters), 10, 11 (two letters), 22, and 29; June 5, 11, 18, 21, and 28; July 11, 19, and 25; August 1, 10, 16, and 21; September 24; and October 17, 2001.

The amendment revises the Operating License and TS to allow an increase in the maximum power level at DAEC from 1658 MWt (megawatts thermal) to 1912 MWt, representing a power increase of 15.3 percent. The amendment includes supporting TS changes, the revision of License Conditions 2.C.(1) and 2.C.(2)(a), and the addition of License Condition 2.C.(2)(b), which are necessary to implement this increase in licensed power level.

The NRC staff conducted a very comprehensive and multidisciplined review that involved multiple requests for additional information (RAIs) that you could not have anticipated. In addition, NMC staff supported the NRC staff's aggressive review through telephone conferences that were carefully documented in the licensee's responses to more than 100 questions. The NRC staff notes that your responses to our RAIs were expeditious and of good quality reflecting excellent work by those engineering and licensing personnel who were involved in formulating the responses. The NRC staff also notes that the NMC engineering and licensing staff were equally thorough at the NRC's Advisory Committee on Reactor Safeguards meetings held on September 26-27, and October 4-6, 2001, demonstrating a very comprehensive, proactive, and high quality effort was achieved in the DAEC extended power uprate program.

G. Middlesworth

- 2 -

A copy of the Safety Evaluation is also enclosed. The Notice of Issuance has been forwarded to the Office of the Federal Register for publication.

Sincerely,

/RA/

Brenda L. Mozafari, Project Manager, Section 1
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-331

Enclosures: 1. Amendment No. 243 to
License No. DPR-49
2. Safety Evaluation
3. Notice of Issuance

cc w/encls: See next page

A copy of the Safety Evaluation is also enclosed. The Notice of Issuance has been forwarded to the Office of the Federal Register for publication.

Sincerely,
/RA/
 Brenda L. Mozafari, Project Manager, Section 1
 Project Directorate III
 Division of Licensing Project Management
 Office of Nuclear Reactor Regulation

Docket No. 50-331

- Enclosures: 1. Amendment No. 243 to License No. DPR-49
 2. Safety Evaluation
 3. Notice of Issuance

cc w/encls: See next page

DISTRIBUTION

PUBLIC	WReckley	WBeckner	RLobel	TScarbrough	RBarrett
PDIII-1 Reading	BMozafari	GHill(2)	DShum	KKavanaugh	TQuay
SCollins	MShuaibi	KWichman	REckenrode	GHubbard	
BSheron	RBouling	ZAbdullahi	APal	RCaruso	
JZwolinski	THarris	HGarg	KManoly	CHolden	
LMarsh	OGC	DHarrison	RGoel	EMarinos	
SBajwa	ACRS	CWu	PShemanski	DTrimble	

ADAMS Accession No. ML013050389 (Amendment Package)

ADAMS Accession No. ML013050321 (Cover letter & amendment pages)

ADAMS Accession No. ML013050330 (License Pages)

ADAMS Accession No. ML013050342 (Safety Evaluation)

ADAMS Accession No. ML013050344 (Notice of Issuance)

*Previously Concurred

OFFICE	PDIII-1/PM	PDIII-1/LA	TECH ED*	OGC	PDIII-1/SC(A)
NAME	BMozafari	RBouling	PKleene	RWeisman	WReckley
DATE	11/06/01	11/06/01	08/28/01	11/06/01	11/06/01

OFFICE	PDIII/D	DLPM/D	NRR/D
NAME	SBajwa	JZwolinski	SCollins
DATE	11/06/01	11/06/01	11/06/01

*The following technical branches provided safety evaluation input by memos dated**

OFFICE	SPLB	SRXB	EEIB	I&C	EMCB
NAME	GHubbard	RCaruso	CHolden	EMarinos	KWichman
DATE*	08/08/01	08/31/01	07/26/01	06/12/01	05/18/01

OFFICE	EMEB	IOLB	SPSB	IWPB
NAME	KManoly	DTrimble	RBarrett	TQuay
DATE*	08/17/01	08/16/01	09/09/01	08/14/01

Duane Arnold Energy Center

cc:

Al Gutterman
Morgan, Lewis, & Bockius LLP
1800 M Street, N. W.
Washington, DC 20036-5869

Chairman, Linn County
Board of Supervisors
Cedar Rapids, IA 52406

Plant Manager, Nuclear
Duane Arnold Energy Center
Nuclear Management Company, LLC
3277 DAEC Road
Palo, IA 52324

U.S. Nuclear Regulatory Commission
Resident Inspector's Office
Rural Route #1
Palo, IA 52324

Regional Administrator
U.S. NRC, Region III
801 Warrenville Road
Lisle, IL 60532-4531

Daniel McGhee
Utilities Division
Iowa Department of Commerce
Lucas Office Building, 5th floor
Des Moines, IA 50319

Mr. Roy A. Anderson
Executive Vice President and
Chief Nuclear Officer
Nuclear Management Company, LLC
700 First Street
Hudson, WI 54016

Nuclear Asset Manager
Alliant Energy/IES Utilities, Inc.
3277 DAEC Road
Palo, IA 52324

NUCLEAR MANAGEMENT COMPANY, LLC

DOCKET NO. 50-331

DUANE ARNOLD ENERGY CENTER

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 243
License No. DPR-49

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Nuclear Management Company, LLC (the licensee) dated November 16, 2000, as supplemented April 16 (two letters) and 17; May 8 (two letters), 10, 11 (two letters), 22, and 29; June 5, 11, 18, 21, and 28; July 11, 19, and 25; August 1, 10, 16, and 21; September 24; and October 17, 2001, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. DPR-49 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 243, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

In addition, the license amended to revise paragraph 2.C.(1) of Facility Operating License No. DPR-49 to reflect the new authorized reactor core power level. The license is also amended to revise License Condition 2.C.(2)(a) and add new License Condition 2.C.(2)(b). The revised and new License Conditions read as follows:

- (a) For Surveillance Requirements (SRs) whose acceptance criteria are modified, either directly or indirectly, by the increase in authorized maximum power level in 2.C.(1) above, in accordance with Amendment No. 243 to Facility Operating License DPR-49, those SRs are not required to be performed until their next scheduled performance, which is due at the end of the first surveillance interval that begins on the date the Surveillance was last performed prior to implementation of Amendment No. 243.
 - (b) The licensee will perform the generator load reject and full main steamline isolation valve closure transient tests required by the General Electric Licensing Topical Report for Extended Power Uprate (NEDC-32424P-A) - ELTR-1, including the allowances described in Section L.2.4 (2) of ELTR-1 regarding credit for unplanned plant transient events, using the thermal power level (1658 MWt) to establish ELTR-1 power level limits. The testing shall be performed at an initiating power level greater than the steady-state operation power level exceeding the respective ELTR-1 power level limit for each transient.
3. The license amendment is effective as of the date of issuance and shall be implemented within 120 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Samuel J. Collins, Director
Office of Nuclear Reactor Regulation

Attachment: Changes to the Operating License and Technical Specifications

Date of Issuance: November 6, 2001

ATTACHMENT TO LICENSE AMENDMENT NO. 243

FACILITY OPERATING LICENSE NO. DPR-49

DOCKET NO. 50-331

Replace the following pages of the Operating License with the attached revised pages. The revised areas are identified by amendment number and contain marginal lines indicating the areas of change.

<u>Remove</u>	<u>Insert</u>
3	3
4	4

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised areas are identified by amendment number and contain marginal lines indicating the areas of change.

<u>Remove</u>	<u>Insert</u>
1.1-5	1.1-5
2.0-1	2.0-1
3.2-1	3.2-1
3.2-2	3.2-2
3.3-2	3.3-2
3.3-3	3.3-3
3.3-5	3.3-5
3.3-7	3.3-7
3.3-9	3.3-9
3.3-27	3.3-27
3.3-28	3.3-28
3.3-29	3.3-29
3.4-3	3.4-3
3.4-5	3.4-5
3.6-33	3.6-33
3.7-16	3.7-16
5.0-18	5.0-18