

# CATEGORY 1

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9711280123      DOC. DATE: 97/11/17      NOTARIZED: NO      DOCKET #  
 FACIL: 50-316 Donald C. Cook Nuclear Power Plant, Unit 2, Indiana M      05000316  
 AUTH. NAME      AUTHOR AFFILIATION  
 KINGSEED, J.      Indiana Michigan Power Co.  
 BLIND, A.A.      Indiana Michigan Power Co.  
 RECIP. NAME      RECIPIENT AFFILIATION

SUBJECT: LER 97-004-01 re change to component cooling water temp w/o  
rev to FSAR. LER 97-004-00 retracted. W/971117 ltr.

DISTRIBUTION CODE: IE22T      COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 3  
 TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

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Bridgman, MI 49106



November 17, 1997

United States Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

Operating Licenses DPR-74  
Docket No. 50-316

Document Control Manager:

In accordance with the criteria established by 10 CFR 50.73 entitled Licensee Event Report System, the following report is being submitted:

97-004-01

Sincerely,

A. A. Blind  
Site Vice President

/mbd

Attachment

c: A. B. Beach, Region III  
E. E. Fitzpatrick  
P. A. Barrett  
S. J. Brewer  
J. R. Padgett  
D. Hahn  
Records Center, INPO  
NRC Resident Inspector

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## LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)  
Donald C. Cook Nuclear Plant - Unit 2DOCKET NUMBER (2)  
50-316

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## TITLE (4)

LER Retraction - Change to Component Cooling Water Temperature Without Revision to FSAR

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
08	26	97	97	-- 004 --	01	11	17	97	None	
									FACILITY NAME	DOCKET NUMBER

  

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 50.73: (Check one or more) (11)			
POWER LEVEL (10)	100	20.2201(b)	20.2203(a)(3)(i)	50.73(a)(2)(iii)	73.71(b)
		20.2203(a)(1)	20.2203(a)(3)(ii)	50.73(a)(2)(iv)	73.71(c)
		20.2203(a)(2)(i)	20.2203(a)(4)	50.73(a)(2)(v)	OTHER
		20.2203(a)(2)(ii)	50.36(c)(1)	50.73(a)(2)(vii)	(Specify in Abstract below and in Text, NRC Form 366A)
		20.2203(a)(2)(iii)	50.36(c)(2)	50.73(a)(2)(viii)(A)	
		20.2203(a)(2)(iv)	50.73(a)(2)(i)	50.73(a)(2)(viii)(B)	
		20.2203(a)(2)(v)	X	50.73(a)(2)(ii)	50.73(a)(2)(x)

## LICENSEE CONTACT FOR THIS LER (12)

NAME

Mr. Jeb Kingseed, Nuclear Safety and Analysis Manager

TELEPHONE NUMBER (Include Area Code)

616/697-5106

## COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

## SUPPLEMENTAL REPORT EXPECTED (14)

YES	X	NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
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## ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On August 26, 1997, with Unit 2 at 100 percent Rated Thermal Power, it was determined that the unit had operated outside its design basis during the Unit 2 1996 refueling outage. It was determined that this event was reportable under 10 CFR 50.72(b)(1)(ii)(B) as a condition outside the design basis, and an ENS notification was made at 1533 hours on August 26, 1997. An interim LER was submitted pursuant to 10 CFR 50.73(a)(2)(ii) as a condition outside the design basis on September 22, 1997.

Per the Updated Final Safety Analysis Report (UFSAR), the design of the spent fuel pool (SFP) heat exchanger is based on a maximum Component Cooling Water (CCW) inlet temperature of 95 degrees Fahrenheit. A safety evaluation was performed for the 1996 Unit 2 refueling outage full core offload which was based on a maximum CCW inlet temperature of 90 degrees Fahrenheit to the heat exchanger, and an administrative limit of 90 degrees CCW temperature was imposed. The 10 CFR 50.72 notification and interim LER were submitted because it was thought at the time that the 90 degree Fahrenheit limit had not been properly reviewed under 10 CFR 50.59, thus making an unauthorized change to the plant's design basis.

Upon subsequent review, it has been determined that the 90 degrees Fahrenheit CCW limit and associated administrative controls had been properly reviewed pursuant to 10 CFR 50.59, and an unreviewed safety question did not exist. A change to the UFSAR was not necessary, since it was a temporary change to the plant. For this reason, the interim LER submitted on September 25, 1997, as LER 316/97-004-00 is being retracted.

## LICENSEE EVENT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Cook Nuclear Plant - Unit 2	50-316	YEAR	SEQUENTIAL	REVISION	2 OF 2
		97	-- 004 --	01	

TEXT (if more space is required, use additional NRC Form 366A's) (17)

### Conditions Prior to Event

Unit 2 was in Mode 1 at 100 percent Rated Thermal Power.

### Description of Event

During the NRC Architect Engineering Inspection, a question was raised regarding whether or not an Unreviewed Safety Question Determination (USQD) had been performed for a change to Component Cooling Water (CCW) temperature during the Unit 2 1996 refueling outage. Specifically, CCW system temperature was administratively controlled at 90 degrees Fahrenheit to support the thermal analysis for the spent fuel pool during the Unit 2 1996 refueling outage full core offload.

Per the Updated Final Safety Analysis Review (UFSAR), the design of the spent fuel pool (SFP) heat exchanger is based on a maximum CCW inlet temperature of 95 degrees Fahrenheit. A safety evaluation was performed for the 1996 Unit 2 refueling outage full core offload which was based on a maximum CCW inlet temperature of 90 degrees Fahrenheit to the heat exchanger, and an administrative limit of 90 degrees CCW temperature was imposed. The 10CFR50.72 notification and interim LER were submitted because it was thought at the time that the 90 degrees Fahrenheit limit had not been properly reviewed under 10CFR50.59, thus making an unauthorized change to the plant's design basis.

Upon subsequent review, it has been determined that the 90 degrees Fahrenheit CCW limit and associated administrative controls had been properly reviewed pursuant to 10CFR50.59, and an unreviewed safety question did not exist. A change to the UFSAR was not necessary, since it was a temporary change to the plant. For this reason, the interim LER submitted on September 25, 1997, as LER 316/97-004-00 is being retracted.

### Analysis of the Event

An USQD was performed to support the spent fuel pool heat loads during the Unit 2 1996 refueling outage. A calculational analysis of the Unit 2 1996 refueling outage full core offload, performed prior to the outage, determined that the maximum CCW temperature of 90.7 degrees Fahrenheit would result in a spent fuel pool temperature less than the maximum allowable design temperature. As a result, an administrative temperature of 90 degrees Fahrenheit was established. The USQD recognized that the CCW temperature assumed in the analysis was less than the value given in the UFSAR. Since the change to CCW temperature was temporary in nature, specific to the Unit 2 1996 refueling outage, a change to the UFSAR was not appropriate. The USQD did however provide justification that the spent fuel pool heat exchangers could adequately remove the spent fuel pool heat load at the lower CCW temperature. Therefore, the capability of a single train of the spent fuel pool cooling system was determined to be sufficient to maintain the spent fuel pool with in the design basis temperature given in the UFSAR. Furthermore, because the spent fuel pool cooling system could maintain the pool below the maximum design temperature, the probability or consequences of a radiological release from the spent fuel pool was not increased. The condition was concluded not to represent a USQD per 10CFR50.59.

As a result of the subsequent investigation into this condition, it has been concluded that the USQD performed in support of the Unit 2 1996 refueling outage full core offload assured that the CCW system and the spent fuel pool remained within their design basis. As a result, interim LER 316/97-004-00, submitted on September 25, 1997, is being retracted.