

Indiana Michigan  
Power Company  
Cook Nuclear Plant  
One Cook Place  
Bridgman, MI 49106  
616-465-5901



February 2, 2001

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

Operating Licenses DPR-58 and DPR-74  
Docket Nos. 50-315 and 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:

LER 315/1998-060-01: "Retraction – Reactor Trip System Response Time Testing Does Not Comply With Technical Specification Requirement."

No commitments were identified in this submittal.

Should you have any questions regarding this correspondence, please contact Mr. Ronald W. Gaston, Manager, Regulatory Affairs, at 616/465-5901, extension 1366.

Sincerely,

Joseph E. Pollock  
Plant Manager

/bwo  
Attachment

c: J. E. Dyer, Region III  
A. C. Bakken  
L. Brandon  
T. P. Noonan  
R. P. Powers  
M. W. Rencheck  
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NRC Resident Inspector  
Records Center, INPO

IE22

# LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS MANDATORY INFORMATION COLLECTION REQUEST: 50.0 HRS. REPORTED LESSONS LEARNED ARE INCORPORATED INTO THE LICENSING PROCESS AND FED BACK TO INDUSTRY. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (T-8 F33), 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 1	DOCKET NUMBER (2) 05000-315	PAGE (3) 1 of 2
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TITLE (4)  
Retraction - Reactor Trip System Response Time Testing Does Not Comply With Technical Specification Requirement

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	
12	31	1998	1998	-- 060 --	01	02	02	2001	Cook Plant Unit 2	05000316	
									FACILITY NAME	DOCKET NUMBER	

OPERATING MODE (9) 5	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)									
POWER LEVEL (10) 00	20.2201 (b)				20.2203(a)(2)(v)			50.73(a)(2)(i)		50.73(a)(2)(viii)
	20.2203(a)(1)				20.2203(a)(3)(i)			50.73(a)(2)(ii)		50.73(a)(2)(x)
	20.2203(a)(2)(i)				20.2203(a)(3)(ii)			50.73(a)(2)(iii)		73.71
	20.2203(a)(2)(ii)				20.2203(a)(4)			50.73(a)(2)(iv)		<input checked="" type="checkbox"/> OTHER
	20.2203(a)(2)(iii)				50.36(c)(1)			50.73(a)(2)(v)		Specify in Abstract below or in NRC Form 366A
20.2203(a)(2)(iv)				50.36(c)(2)			50.73(a)(2)(vii)			

LICENSEE CONTACT FOR THIS LER (12)										
NAME Ron Gaston, Regulatory Affairs								TELEPHONE NUMBER (Include Area Code) 616 / 465-5901, x1366		

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)										
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	

SUPPLEMENTAL REPORT EXPECTED (14)					EXPECTED SUBMISSION DATE (15)		
YES (If Yes, complete EXPECTED SUBMISSION DATE).	<input checked="" type="checkbox"/>		NO		MONTH	DAY	YEAR

**Abstract (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)**  
 LER 50-315/1998-060-00 reported that Reactor Trip System Response Time (RTSRT) testing did not comply with the Technical Specifications (TS) definition of RTSRT. Definition 1.22 of the TS states that the RTSRT is considered to be the interval from when a monitored parameter exceeds its trip setpoint at the channel sensor until the loss of stationary gripper coil voltage. TS surveillance test procedures measured the response time from the initiation of the channel sensor trip to the opening of the reactor trip breakers. However, these procedures did not measure the response time from the opening of the reactor trip breakers to the loss of stationary gripper coil voltage. Instead, a fixed value of 120 milliseconds (msec) was added to the measured RTSRT to account for the time from the opening of the reactor trip breakers until the loss of stationary gripper coil voltage allowed the control rods to begin to fall. It was concluded that the surveillance requirement of TS 4.3.1.1.3 had not been met. LER 50-315/1998-060-00 was submitted to the NRC in accordance with 10CFR50.73(a)(2)(i)(B), as a condition prohibited by the plant's TS.

Subsequent investigation of the issue identified that a fixed value is discussed as a bounding limit for rod movement in the Donald C. Cook Plant Updated Final Safety Analysis Report, and its use is supported by the rod control system vendor. Also, the entire response time of the rod control system is measured through a series of sequential tests, as allowed by the TS, which envelopes the fixed value used to account for the decay of the stationary gripper coil voltage in the RTSRT testing. Therefore, the use of a fixed value in the RTSRT testing is acceptable and meets the requirements of TS surveillance requirement 4.3.1.1.3.

As it has been determined that all RTSRT testing requirements of TS have been met, LER 50-315/1998-060-00 is hereby retracted.

**LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION**

FACILITY NAME (1)	DOCKET NUMBER(2)	LER NUMBER (6)				PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
Donald C. Cook Nuclear Plant Unit 1	05000-315	1998	-- 060 --	01		2 of 2

TEXT (If more space is required, use additional copies of NRC Form (366A) (17))

**Description of Event**

LER 50-315/1998-060-00 reported that Reactor Trip System Response Time (RTSRT) testing did not comply with the Technical Specifications (TS) definition of RTSRT. Definition 1.22 of the TS states that the RTSRT is considered to be the interval from when a monitored parameter exceeds its trip setpoint at the channel sensor until the loss of stationary gripper coil voltage. Surveillance test procedures used for compliance with the TS surveillance requirement measured the response time from the initiation of the channel sensor trip to the opening of the reactor trip breakers. However, these procedures did not measure the response time from the opening of the reactor trip breakers to the loss of stationary gripper coil voltage. Instead, a fixed value of 120 milliseconds (msec) was added to the measured RTSRT to account for the time from the opening of the reactor trip breakers until the loss of stationary gripper coil voltage allowed the control rods to begin to fall.

At the time the issue was identified, a licensing investigation determined that there was no plant documentation that indicated that the NRC had allowed an exception to TS surveillance requirement 4.3.1.1.3 for use of a fixed value for part of the response time test. Additionally, the investigation determined that NRC generic communications did not allow any applicable exception for the use of a fixed value in the response time testing. Based on the results of the preliminary investigation, it was concluded that the surveillance requirement of TS 4.3.1.1.3 had not been met. LER 50-315/1998-060-00 was submitted to the NRC in accordance with 10CFR50.73(a)(2)(i)(B), as a condition prohibited by the plant's TS.

**Basis for Retraction**

Subsequent investigation of the issue identified that a fixed value is discussed as a bounding limit for rod movement in the Donald C. Cook Plant Updated Final Safety Analysis Report, and its use is supported by the rod control system vendor. Also, the entire response time of the rod control system is measured through a series of sequential tests, as allowed by the TS, which envelopes the fixed value used to account for the decay of the stationary gripper coil voltage in the RTSRT testing. Additionally, the use of a fixed value to account for the time from the opening of the reactor trip breakers until the loss of stationary gripper coil voltage is common industry practice. Therefore, the use of a fixed value in the RTSRT testing is acceptable and meets the requirements of TS surveillance requirement 4.3.1.1.3.

As it has been determined that all RTSRT testing requirements of TS have been met, LER 50-315/1998-060-00 is hereby retracted.