THE CLEVELAND ELECTRIC ILLUMINATING COMPANY

P.O. BOX 97 ■ PERRY, OHIO 44081 ■ TELEPHONE (216) 259-3737 ■ ADDRESS-10 CENTER ROAD
FROM CLEVELAND: 241-1650

Serving The Best Location in the Nation
PERRY NUCLEAR POWER PLANT

Al Kaplan

VICE PRESIDENT
NUCLEAR GROUP

August 18, 1989
PY-CEI/NRR-1054 L

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Perry Nuclear Power Plant
Docket No. 50-440
LER 89023

Dear Sir:

Enclosed is Licensee Event Report 89023 for the Perry Nuclear Power Plant.

Very truly yours,

Al Kaplan
Vice President
Nuclear Group

AK/njc

Enclosure: LER 89023

cc: T. Colburn
NRC Resident Inspector

U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

IE22
1/1

NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Perry Nuclear Power Plant, Unit 1	0 5 0 0 0 4 4 0	1 OF 0 3

TITLE (4) Entry Into Operational Condition 2 With An Inoperable Control Rod Results In Technical Specification Violation Due to Procedure Deficiency and Operator Error

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 NAMES	DOCKET NUMBER(S)
											0 5 0 0 0
0 7	2 3	8 9	8 9	–	0 2 3	– 0 0	0 8	2 1	8 9		0 5 0 0 0

OPERATING MODE (9)	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
2	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10) 0 0 0	20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
	20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
	20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
	20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
	20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
Gregory A. Dunn, Compliance Engineer, Extension 6484	AREA CODE 2 1 6 2 5 9 – 3 7 3 7

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)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On July 23, 1989 at 0413 entry into Operational Condition 2, Startup, was completed with a control rod inoperable due to being untrippable as a result of an improper valve lineup. This is a violation of Technical Specifications 3.1.3.1, 3.1.3.3 and 3.0.4 The control rod was returned to an operable status, and the valve lineups of the remaining control rods were verified to be correct prior to continuing reactor startup.

The causes of the event were procedural deficiency and personnel error. Plant Administrative Procedure (PAP-0205), "Operability of Plant Systems", does not require independent verification documentation to be completed at the site of performance. Non-licensed plant operators performed a nitrogen charge of a control rod scram accumulator on July 19, 1989, apparently, without completely restoring the hydraulic control unit valve lineup. Believing the evolution to have been completed properly, the operators completed the verification checklists after leaving the containment. This was in an effort to prevent unnecessary contamination of verification documents.

In order to prevent recurrence, PAP-0205 will be modified to require that documentation of independent verification be completed at the site of performance. Additionally, the operators involved in this event have been reminded of their responsibilities for independent verification. Finally, this event will be discussed with all operations personnel as a part of the Operator Requalification Training Program.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Perry Nuclear Power Plant, Unit 1	0 5 0 0 0 4 4 0	8 9	— 0 2 3	— 0 0	0 2 OF 0 3

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

On July 23, 1989 at 0413, An Operational Condition Change was completed without meeting all applicable Technical Specification Limiting Conditions for Operation, in violation of Technical Specification 3.0.4. At the time of the event, the plant was entering Operational Condition 2, (Startup), following the first refueling outage. The reactor pressure vessel [RPV] was depressurized, and reactor coolant temperature was approximately 125 degrees Fahrenheit.

On July 19, 1989 at 2330, control rod [ROD] accumulator [ACC] 06-27 was precharged with Nitrogen in accordance with System Operating Instruction (SOI-C11) "Control Rod Drive Hydraulic System" [AA]. As required by the instruction and by Plant Administrative Procedure (PAP-0205), Operability of Plant Systems, plant operators completed an independent verification of the position of required components and documented the action on a verification checklist. Operational Condition 2, Startup, was entered on July 23, 1989, at 0413 to begin the startup following the first refueling outage. At 1725 on July 23, 1989, when control rod 06-27 would not move during reactor startup, the Hydraulic Control Unit [HCU] insert riser isolation valve [ISV] 1C11-EP-101 and the charging water isolation valve 1C11-EP-113 were discovered to be closed. This configuration, which renders the accumulator and associated control rod inoperable, is conservatively assumed to have been established at the time of the accumulator charge on July 19, 1989. No evidence of other activities could be identified that would have impacted the valve [V] positions. Technical Specifications 3.1.3.1 and 3.1.3.3 requires all control rods and associated accumulators to be operable in Operational Condition 2; therefore, the entry into the Operational Condition on July 23, 1989 was in violation of Technical Specification 3.0.4. The control room operators took action to immediately restore control rod 06-27 to operability, and initiated an inspection of all HCUs to verify proper valve position. One additional valve, drive water isolation valve 1C11-EP-103 on HCU 54-47, was determined to be out of position closed, and was immediately restored to the open position. The mispositioning of the drive water isolation valve did not disable the trip function of control rod 54-47.

The causes of the event are procedural deficiency and personnel error. PAP-0205 does not require documentation of independent verification to be completed at the site of the actual verification. The control rod HCUs are located in the containment, and several were being recharged at the time. The operators who performed the nitrogen charging evolutions did not complete the verification checklist at the worksite in an effort to minimize the possibilities for contamination. The operators believed they had properly unisolated the HCU for control rod 06-27, and completed the verification checklist after exiting the containment area.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Perry Nuclear Power Plant, Unit 1	0 5 0 0 0 4 4 0	8 9	— 0 2 3	— 0 0	0 3 OF 0 3

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

The Control Rod Drive System controls gross changes in core reactivity by incrementally positioning neutron absorbing control rods within the reactor core in response to control signals. During the period that control rod 06-27 was inoperable in this event, the control rod was fully inserted, and the lineup of the HCU prevented rod withdrawal. The control of reactivity through the scram function of the remaining control rods was not affected by the condition of control rod 06-27. This event, therefore, is not considered to be significant with respect to safety. No previous similar events have been identified.

In order to prevent recurrence of this event, PAP-0205 will be modified to specifically require documentation of independent verifications to be completed at the site of performance. This will serve as an additional safeguard against mispositioning errors. The operators who performed the nitrogen charging evolution for HCU 06-27 have been reminded of their responsibilities for proper performance of independent verification. Additionally, this event will be reviewed with all licensed and non-licensed operations personnel as a routine part of the Operator Requalification Program.

Energy Industry Identification System Codes are identified in the text as [XX].