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Duane Arnold Energy Center
Operated by Nuclear Management Company, LLC

August 1, 2005

NG-05-0421
10 CFR 50.73

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555-0001

Duane Arnold Energy Center
Docket 50-331
License No. DPR-49

Licensee Event Report #2005-001-00

Please find attached the subject Licensee Event Report (LER) submitted in accordance with 10 CFR 50.73. There are no new commitments contained within this report. Should you have any questions regarding this report, please contact this office.

Gary D. Van Middlesworth
Site Vice President, Duane Arnold Energy Center
Nuclear Management Company, LLC

cc: Administrator, Region III, USNRC
Project Manager, DAEC, USNRC
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NRC FORM 366 (1-2001) U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

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

APPROVED BY OMB NO. 3150-0104 EXPIRES 7-31-2004
Estimated burden per response to comply with this mandatory information collection request: 50 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to bjs1@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202 (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Duane Arnold Energy Center	05000331	1 of 3

TITLE (4)
Failure to Demonstrate the Capability to Achieve and Maintain Safe Shutdown Conditions

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MO	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO	MO	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
06	02	2005	2005	– 001 –	00	08	01	2005	FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9)	1
POWER LEVEL (10)	94

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply) (11)

	20.2201(b)		20.2203(a)(3)(ii)	x	50.73(a)(2)(ii)(B)		50.73(a)(2)(ix)(A)
	20.2201(d)		20.2203(a)(4)		50.73(a)(2)(iii)		50.73(a)(2)(x)
	20.2203(a)(1)		50.36(c)(1)(i)(A)		50.73(a)(2)(iv)(A)		73.71(a)(4)
	20.2203(a)(2)(i)		50.36(c)(1)(ii)(A)		50.73(a)(2)(v)(A)		73.71(a)(5)
	20.2203(a)(2)(ii)		50.36(c)(2)		50.73(a)(2)(v)(B)		OTHER Specify in Abstract below or in NRC Form 366A
	20.2203(a)(2)(iii)		50.46(a)(3)(ii)		50.73(a)(2)(v)(C)		
	20.2203(a)(2)(iv)		50.73(a)(2)(i)(A)		50.73(a)(2)(v)(D)		
	20.2203(a)(2)(v)		50.73(a)(2)(i)(B)		50.73(a)(2)(vii)		
	20.2203(a)(2)(vi)		50.73(a)(2)(i)(C)		50.73(a)(2)(viii)(A)		
	20.2203(a)(3)(i)		50.73(a)(2)(ii)(A)		50.73(a)(2)(viii)(B)		

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
Robert Murrell, Regulatory Affairs	319-851-7900

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

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FA CTURER	REPORTABLE TO EPIX

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 15 single-spaced typewritten lines) (16)

On June 2, 2005, with the plant operating at 94% power in Run Mode, while reviewing an event at Monticello (LER 2005-001), it was determined that Duane Arnold Energy Center (DAEC) was vulnerable to a similar failure. Specifically, it was determined that the Remote Shutdown Panel (RSP) did not meet design criteria for Appendix R in that metering circuits in the control room could cause a lock out of an essential bus.

To correct this issue, a temporary modification was implemented on June 17, 2005.

The cause of this event was the failure to identify the potential vulnerability of the DAEC remote shutdown system design to a fault in the metering circuits.

There were no actual safety consequences associated with this event. There was no effect on public health and safety as a result of this event. This event is reportable under 10CFR50.73(a)(2)(ii)(B).

I. Description of Event:

On June 2, 2005, with the plant operating at 94% power in Run Mode, while reviewing an event at Monticello (LER 2005-001), it was determined that Duane Arnold Energy Center (DAEC) was vulnerable to a similar failure. Specifically, it was determined that the Remote Shutdown Panel (RSP) did not meet design criteria for Appendix R in that metering circuits in the control room could cause a lock out of an essential bus (1A4). The design criteria was not met because the metering circuits are not isolated by the operation of RSP transfer switches, and could have resulted in a fault after the RSP was activated, and therefore, could have delayed the restoration of reactor vessel level. The metering circuit in question was not independent of the area, room, or zone under consideration (the control room) and therefore the remote shutdown system design did not meet the Technical Specification bases requirements for the design of the remote shutdown system. As such, this event is reportable per 10CFR50.72(b)(3)(ii)(B), "Degraded or Unanalyzed Condition." As a result of this issue, a 30-day LCO (Technical Specification 3.3.3.2) for an inoperable RSP was entered on June 2, 2005.

The 30-day LCO was exited on June 18, 2005, after the installation of a temporary modification that corrected the condition.

II. Assessment of Safety Consequences:

A 10CFR50.72(b)(3)(ii)(B), "Degraded or Unanalyzed Condition" notification was made on June 2, 2005 and is listed as event number EN 41742. This report is being submitted pursuant to 10CFR50.73(a)(2)(ii)(B).

This event did not affect the availability of other systems needed to maintain safe shutdown conditions, remove residual heat, control the release of radioactive material, or mitigate the consequences of an accident.

Therefore, there were no actual safety consequences associated with this event. There was no effect on public health and safety as a result of this event.

There were no Safety System Functional Failures as a result of this event.

III. Cause of Event:

The cause of this event was the failure to identify the potential vulnerability of the DAEC remote shutdown system design to a fault in the metering circuits, which could result in a lockout of Bus 1A4 power supply to the RSP.

IV. Corrective Actions:

On June 17, 2005, a temporary modification, TM-05-007 was implemented. This modification disconnected control room ampere meters cables in the 1A4 essential switchgear room removing the possibility of a "hot short" causing a lockout. Jumpers were installed in each 4160 Volt current transformer to keep the bus over-current protection in service.

A permanent modification will be installed to permanently resolve the issue with the current monitoring circuit. This modification is due to be completed by January 30, 2006.

EIIS System and Component Codes:

N/A – no component failures occurred.

V. Additional Information:

Previous Similar Occurrences:

A review of LERs at the DAEC over the last 3 years identified no LERs with similar causes.