Commonwealth Edison
LaSalle County Nuclear Station
2601 N. 21st. Rd.
Marseilles, Illinois 61341
Telephone 815/357-6761

April 8, 1994

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

Licensee Event Report #94-005-00, Docket #050-373 is being submitted to your office in accordance with 10CFR50.73(a)(2)(i).

D. J. Ray
Station Manager
LaSalle County Station

DJR/JG/mkl

Enclosure

cc: Nuclear Licensing Administrator
NRC Senior Resident Inspector
NRC Region III Administrator
INPO - Records Center
IDNS Resident Inspector

LICENSEE EVENT REPORT (LER) Form Rev 3.0

Facility Name (1)	Docket Number (2)	Page
LaSalle County Station Unit 1	0 5 0 0 0 3 7 3	1 of 0 4

Title (4) Control Rod Blade Transfer With A Technically Inoperable Hoist During Refuel Outage Due To Bypassing Up-Limit To Allow Transfer To Fuel Pool

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 3	0 9	9 4	9 4	---	0 0 5	--- 0 0	0 4	0 8	9 4	LaSalle Unit 2	0 5 0 0 0 3 7 4

OPERATING MODE (9)		POWER LEVEL (10)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11)				
4		0	0	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)	
				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	
				20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	in Abstract	
				20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	below and in	
				20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	Text)	

LICENSEE CONTACT FOR THIS LER (12)

Name	TELEPHONE NUMBER
	AREA CODE
Jeff Groff, Nuclear Engineer, Extension 2249	8 1 5 3 5 7 - 6 7 6 1

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	///
E				N							

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 3/9/94, licensing personnel from another utility contacted LaSalle Station Personnel for information on the method used for control blade movements during refueling. The question concerned bypassing the upper limit of the auxiliary hoist to provide enough clearance to move control blades from the reactor vessel to the fuel pool. Technical Specification (T.S.) 3.9.6 requires all cranes and hoists used for handling fuel assemblies or control rods within the reactor vessel to be operable. Part of the Technical Specification Surveillance requirement is that the up-travel stops when the grapple is lower than or equal to eight feet below the platform rails.

Following the conversation, LaSalle's Fuel Handling Supervisor was contacted and it was determined that bypassing the up-travel limit was commonly done when moving control blades during refueling outages. By defeating the up-travel interlock, the Technical Specification Surveillance criteria is no longer met, rendering the hoist inoperable. Therefore, Technical Specification 3.9.6 was violated and the action statement was not met. It was determined that the up-travel interlock was set overly conservative, not allowing the control blade to be raised high enough to clear the refueling chute. The up-travel interlock was overridden to provide the clearance needed for transferring the control blade to the fuel pool. The safety significance of this event was minimal. Bypassing the up-travel interlock increases the drop height assumed for the bundle drop accident in the UFSAR. However, the weight of the control blade is over 400 pounds less than the weight of a fuel bundle. Therefore, the impact energy and the damage from dropping a control blade would be much less than that of the bundle drop accident. The up-travel limits have been reset on the Unit 1 (currently in refuel) hoists to meet the Technical Specification requirements and still allow enough clearance for the control blades to pass through the refueling chute. The Unit 2 hoist limit switches have also been reset in the same manner. Procedures have been revised to provide better guidance on setting the up-travel limits and precautions on defeating this refueling interlock.

PLANT AND SYSTEM IDENTIFICATION

General Electric - Boiling Water Reactor

Energy Industry Identification System (EIIS) codes are identified in the text as (XX).

A. CONDITION PRIOR TO EVENT

Unit(s): 1/2 Event Date: 03/09/94 Event Time: 1100 Hours

Reactor Mode(s): 4/1 Modes(s) Name: Cold Shutdown/Run Power Level(s): 0%/100%

B. DESCRIPTION OF EVENT

On 3/9/94, licensing personnel from another utility contacted LaSalle Station Personnel for information on the method used for control blade movements during refueling. The question concerned bypassing the upper limit of the auxiliary hoist to provide enough clearance to move control blades from the reactor vessel to the fuel pool. Technical Specification (T.S.) 3.9.6 requires all cranes and hoists used for handling fuel assemblies or control rods within the reactor vessel to be operable. Part of the Technical Specification Surveillance requirement is that the up-travel stops when the grapple is lower than or equal to eight feet below the platform rails.

Following the conversation, LaSalle's Fuel Handling Supervisor was contacted and it was determined that bypassing the up-travel limit was commonly done when moving control blades during refueling outages with the reactor defueled. By defeating the up-travel interlock, the surveillance criteria is no longer met, rendering the hoist inoperable.

It was determined that Technical Specification (T.S.) 3.9.6, which requires all cranes and hoists used for handling fuel assemblies or control rods within the reactor vessel to be operable, was violated and the proper action was not taken. It was determined that the up-travel interlock was set overly conservative, not allowing the control blade to be raised high enough to clear the refueling chute. The up-travel interlock was overridden to provide the needed clearance. By defeating the up-travel interlock, the surveillance criteria is no longer met, rendering the hoist inoperable. This event is reportable pursuant to 10CFR50.73(a)(2)(i)(B) due to a condition prohibited by the plant's Technical Specifications.

C. APPARENT CAUSE OF EVENT

The event was caused by an overly conservative method of setting the up-travel stop during initial pre-operational testing. The up-travel stops were previously set ensuring eight feet of cable was below the water line. This method did not account for the 18 inches of the grapple tool and the 12 inches from the water line to the platform rails. This caused the up-travel stop to actuate 30 inches prior to the Technical Specification limit and did not allow enough clearance for the control blade to pass through the refueling chute.

D. SAFETY ANALYSIS OF EVENT

The bundle drop accident in the UFSAR assumes a maximum drop height of 30 feet. Bypassing the up-travel stop could possibly increase the drop height assumed in this analysis. However, the weight of the control blade is over 400 pounds less than the weight of a fuel bundle. Therefore, the impact energy and damage from a control blade drop would be much less than the assumed values in the UFSAR.

Whenever the up-travel limit was bypassed, administrative controls were taken to prevent raising the control rod blade too high. These controls had a Radiation Protection Technician and a Fuel Handling Supervisor present to ensure no increased dose levels were received while lifting the control rod blade high enough to clear the refueling chute. It was believed that these controls were sufficient when the limit was bypassed. It was not recognized that defeating the limit switch made the hoist inoperable.

E. CORRECTIVE ACTIONS

1. The up-travel stops for the Unit 1 hoists have been reset to meet Technical Specifications and allow enough room to clear the refueling chute. The appropriate Fuel Handling Procedures have been revised to provide better guidance on verifying the up-travel stop limit and to caution the use of the up-travel override. These procedure changes have been made for all hoists used for control blade movement.

2. The Unit 2 bridge and hoists were declared inoperable and entered in the Degraded Equipment Log (DEL). Work request L25441 was written and adjustments to the Unit 2 hoist limit switches were satisfactorily made to meet the Technical Specification requirements.

3. A review of Technical Specification 3/4.9 "Refueling Operations" was performed by Operations Department Management to ensure there were no other compliance issues. The review specifically addressed each section for identification of how each Limiting Condition for Operation (LCO) is met and that each surveillance requirement is current and performed without changes to the design logic or intent.

4. All Supervisors involved with reactivity manipulations on the refuel floor were trained on this event.

F. PREVIOUS EVENTS

None.

G. COMPONENT FAILURE DATA

None.

SHEET 1

EVENT SUMMARY AND CAUSE CODES

DVR Number
__-__-__-___

- ☐ Lost generation
- ☐ Cost > $25,000
- ☐ Hazard or Spill
- ☐ Personnel injury

- ☐ Reactor trip
- ☐ ESF actuation
- ☐ NRC reportable
- ☐ LER
- ☐ PSE

- ☐ NRC violation, level__
- ☐ GSEP event, class____
- ☐ Tech Spec LCO
- ☐ Potential or future lo
- ☐ SALP functional area_