NRC FORM 366 U.S. NUCLEAR REGULATORY COMMISSION APPROVED BY OMB NO 2150-0104 (4-95) EXPERS 04/30/88 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 LICENSEE EVENT REPORT (LER) 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 (See reverse for required number of digits/characters for each block) MANAGEMENT AND BUDGET, WASHINGTON, DC 20503. DOCKET NUMBER (2) PAGE (3) Clinton Power Station 05000461 1 OF 3 Insufficient Suppression Pool Makeup Volume to Meet the Design Basis Suppression Pool Level Requirements Following a Loss of Coolant Accident EVENT DATE (5) LER NUMBER (6) REPORT DATE (7) OTHER FACILITIES INVOLVED (8) REVISION YEAR MONTH DAY FACILITY NAME VEAR MONTH DAY YEAR NUMBER 05000 None FACILITY NAME 08 28 98 1998 030 00 09 DOCKET NUMBER 28 98 None 05000 **OPERATING** THIS REPORT IS SUBMITTED PURSUAN ( TO THE REQUIREMENTS OF 10 CFR 1: (Check one or more) (11) MODE (9) 20.2201(b) 20.2203(a)(2)(v) 50.73(a)(2)(i) 50.73(a)(2)(viii) 4 POWER 20.2203(a)(1) 20.2203(a)(3)(i) 50.73(a)(2)(ii) 50.73(a)(2)(x) LEVEL (10) 000 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) 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(a)(2) 50.73(a)(2)(vii) LICENSEE CONTACT FOR THIS LER (12) NAME FELEPHONE NUMBER (Include Area Code) D. E. Korneman, Nuclear Station Engineering Department (217) 935-8881, Extension 3062 COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13) COMPONENT | MANUFACTURER COMPONENT | MANUFACTURER REPORTABLE CAUSE SYSTEM CAUSE SYSTEM REPORTABLE

TO NPROS TO NPROS 9810020356 980928 PDR ADDCK 05000461 PDR SUPPLEMENTAL REPORT EXPECTED (14) EXPECTED MONTH DAY YEAR SUBMISSION DATE (15) X YES NO 11 02 98 (If yes, complete EXPECTED SUBMISSION DATE).

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced type written lines) (16)

On August 28, 1998, during the current outage, Sargent and Lundy engineers were reviewing calculation O1SM1, Revision 3, "Calculation of Minimum Water Levels Required in the 828' 3" Containment Pools for Various Combinations of Gate Installations in the Pool," in support of a plant modification. During this review, it was discovered that the value used for the makeup volume required to fill the drywell to the top of the suppression pool weir wall did not match the value found in General Electric (GE) specification 22A2576, Revision 3, "Customer/A: Supplied Data-Phase I." For the value specified in 22A2576, Revision 3, 01SM1 would indicate that there is insufficient makeup volume to support the design basis makeup requirements of the suppression pool following a Loss of Coolant Accident (LOCA). The Operations Shift Manager (SM) established a restraint to the Limiting Condition for Operation of Technical Specification 3.6.2.4, "Suppression Pool Makeup (SPMU) System," for Modes 1 (POWER OPERATION), 2 (STARTUP), or 3 (HOT SHUTDOWN). This event is still under investigation. A revision will be issued to this report identifying the cause, corrective actions, safety significance, and previous similar event information. Illinois Power (IP) expects to issue a revision to this report by November 2, 1998.

NRC FORM 366A

U.S. NUCLEAR REGULATORY COMMISSION

(4-95)

# LICENSEE EVENT REPORT (LER)

TEXT CONTINUATION

	TEXT CONTINUATION						
FACILITY NAME (1)	DOCKET	Service and the service and th	LER NUMBER (6	1)	F	PAGE (3	)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Clinton Power Station	05000461	1998	030	00	2	OF	3
linton Power Station	05000461	1998	030	00	2		OF

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

#### DESCRIPTION OF EVENT

On August 28, 1998, at approximately 1245 hours the plant was in Mode 4 (COLD SHUTDOWN), reactor [RCT] coolant temperature was being maintained between 95 and 115 degrees Fahrenheit (F), and reactor coolant pressure was atmospheric. Sargent and Lundy (S&L) engineers were reviewing calculation 01SM1, Revision 3, "Calculation of Minimum Water Levels Required in the 828' 3" Containment Pools for Various Combinations of Gate Installations in the Pool," in support of a plant modification. During the review of calculation O1SM1, it was discovered that the value used for the volume required to fill the drywell to the top of the suppression pool weir wall did not match the value found in General Electric (GE) specification 22A2576, Revision 3, "Customer/AE Supplied Data-Phase I." For the value given in specification 22A2576, Revision 3, 01SM1 would indicate that there is insufficient makeup volume to support the design basis makeup requirement of the suppression pool following a Loss of Coolant Accident (LOCA). Condition Report 1-98-08-325 was written to identify and track this issue to resolution. Pending resolution of this issue, the Operations Shift Manager (SM) established a restraint to the Limiting Condition for Operation of Technical Specification 3.6.2.4, "Suppression Pool Makeup (SPMU) System," for Modes 1 (POWER OPERATION), 2 (STARTUP), or 3 (HOT SHUTDOWN). Technical Specification 3.6.2.4 requires two SPMU subsystems to be operable during Modes 1, 2, and 3.

The purpose of the Suppression Pool Makeup System is to provide water from the upper containment pool to the suppression pool by gravity flow following a LOCA. The quantity of water provided should be sufficient to account for post accident entrapment volumes (including the volume in the drywell to the top of the suppression pool weir wall) while maintaining long-term post accident suppression pool water level two feet above the drywell vents. Calculation 01SM1 currently states that 33,400 cubic feet (FT3) of water is the required volume to fill the drywell to the top of the suppression pool weir wall. This design input value was taken from Sargent and Lundy letter SLMN-53, dated September 20, 1974, and supports maintaining the design minimum long-term post-accident suppression pool water level of 2 feet above the top of the drywell vents. General Electric (GE) specification 22A2576, Revision 3, specifies a volume of 33,060 to 36,880 FT3 of water to fill the drywell to the top of the suppression pool weir wall. Applying the larger entrapped volume of 36,880 FT3 to the 01SM1 calculation results in an insufficient makeup volume to support the long-term post accident suppression pool water level of two feet above the top of the drywell vents.

The discrepancy between the S&L letter SLMN-53 and GE specification 22A2576, Revision 3, is under investigation.

No automatic or manually initiated safety system responses were necessary to place the plant in a safe and stable condition. This event was not affected by other inoperable equipment or components.

NRC FORM 366A (4-95)

U.S. NUCLEAR REGULATORY COMMISSION

## LICENSEE EVENT REPORT (LER)

**TEXT CONTINUATION** 

162	CONTINUATION						
FACILITY NAME (1)	DOCKET		1)	PAGE (3)			
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Clinton Power Station	05000461	1998	030	00	3	OF	3

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

#### CAUSE OF EVENT

This event is under investigation. A revision will be issued to this report identifying the cause, corrective actions, safety significance, and previous similar event information. Illinois Power (IP) expects to issue a revision to this report by November 2, 1998.

#### CORRECTIVE ACTIONS

As an immediate corrective actic pending resolution of this issue, the Operations Shift Manager (SM) established a rest. It to the Limiting Condition for Operation of Technical Specification 3.6.2.4, "Suppression Pool Makeup (SPMU) System," for Modes 1 (POWER OPERATION), 2 (STARTUP), or 3 (HOT SHUTDOWN). Technical Specification 3.6.2.4 requires two SPMU subsystems to be operable during Modes 1, 2, and 3.

Additional corrective actions for this event have not been determined and will be provided in the revision to this report.

### ANALYSIS OF EVENT

This event is reportable under the provisions of 10CFR50.73(a)(2)(ii)(B). Suppression pool makeup capacity is insufficient to account for post accident entrapment volumes and support the long-term post accident suppression pool water level of two feet above the top of the drywell vents.

An assessment of the safety consequences and implications of this event will be provided in a revision to this report.

#### ADDITIONAL INFORMATION

No equipment or components failed during this event.

Previous similar event information will be provided in the revision to this report.

For further information regarding this event, contact Dana E. Korneman, Nuclear Station Engineering, at (217) 935-8881, extension 3062.

.