



Illinois Power Company
Clinton Power Station
P.O. Box 678
Clinton, IL 61727
Tel 217 935-5623
Fax 217 935-4632

Wilfred Connell
Vice President

U-602656
2C.220
WC-340-96
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Docket No. 50-461

10CFR50.73

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

Subject: Clinton Power Station - Unit 1
Licensee Event Report No. 96-012-00

Dear Sir:

Enclosed is Licensee Event Report No. 96-012-00: Failure to Demonstrate Operability of Offsite Power Sources Within One Hour During Surveillance While Division 3 Emergency Diesel Generator Governor Speed Control Was Set to 50 Percent. This report is being submitted in accordance with the requirements of 10CFR50.73.

Sincerely yours,

Wilfred Connell
Vice President

RSF/csm

Enclosure

cc: NRC Clinton Licensing Project Manager
NRC Resident Office, V-690
Regional Administrator, Region III, USNRC
Illinois Department of Nuclear Safety
INPO Records Center

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PDR ADOCK 05000461
S PDR

JE21/

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-6 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.

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TITLE (4)

Failure to Demonstrate Operability of Offsite Power Sources Within One Hour During Surveillance While Division 3
Emergency Diesel Generator Governor Speed Control Was Set to 50 Percent

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
03	16	91	96	012	00	11	01	96	None	05000
									FACILITY NAME	DOCKET NUMBER
									None	05000
OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)								
1		20.2201(b)		20.2203(a)(2)(v)		X		50.73(a)(2)(i)		50.73(a)(2)(viii)
POWER LEVEL (10)		20.2203(a)(1)		20.2203(a)(3)(i)				50.73(a)(2)(ii)		50.73(a)(2)(x)
75		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(c)(2)				50.73(a)(2)(vii)		

LICENSEE CONTACT FOR THIS LER (12)

NAME

P. W. Kirchhofer, Engineering Projects Engineer

TELEPHONE NUMBER (Include Area Code)

(217) 935-8881, Extension 3918

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

X YES
(If yes, complete EXPECTED SUBMISSION DATE).

NO

02 28 97

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

During the performance of four different diesel generator (DG) surveillance procedures, the Division 3 emergency DG is incapable of performing its design function and should be considered inoperable because the engine governor speed droop control is set to 50 percent during the surveillances, resulting in about 3 percent reduction in generator frequency response. If a loss of offsite power were to occur concurrent with a loss of coolant accident during these surveillances, the DG will not provide the frequency needed for proper operation of its loads. None of the four surveillance procedures informs the surveillance performer that the DG is inoperable when the droop control is set to 50 percent. A review identified at least one surveillance performance in which the DG was not declared inoperable and the Technical Specification action to demonstrate operability of offsite power sources within one hour was not completed. The cause of this event is under investigation and corrective action has not been determined. However, the four surveillance procedures and the system operating procedure will be revised.

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DESCRIPTION OF EVENT

On September 25, 1996, with the plant in Mode 4 (COLD SHUTDOWN), condition report (CR) 1-96-09-175 was initiated to identify that the Division 3 emergency diesel generator [DG] [EK] was not capable of performing its design function if a loss of offsite power (LOOP) occurred concurrent with a loss of coolant accident (LOCA) during performance of surveillance procedure CPS 9080.02, "Diesel Generator 1C Operability-Manual and Quick Start Operability." During the surveillance, the engine governor [G5] speed droop control is set to 50 percent which reduces the generator frequency response by about 3 percent to approximately 58.2 hertz. The generator frequency required during a LOCA is 60 hertz. Since the Division 3 DG will not provide the frequency required for proper operation of its loads during the surveillance if a LOOP were to occur concurrent with a LOCA, the Division 3 DG should be considered inoperable during performances of the surveillance. However, surveillance procedure CPS 9080.02 does not inform the surveillance performer that the DG is inoperable when the governor speed droop control is set to 50 percent. Therefore, the DG may not have been declared inoperable and required Technical Specification actions may not have been completed during the periods of inoperability.

Investigation of CR 1-96-09-175 identified three additional Division 3 DG surveillance procedures that require the speed droop control to be set to 50 percent. The affected surveillance procedures are CPS 9080.10, "DG Operability-Independence Verification," CPS 9080.14, "Diesel Generator 1C 24 Hour Run and Hot Restart-Operability," and CPS 9080.23, "Diesel Generator 1C-ECCS Integrated." None of these three additional surveillance procedures informs the user that the Division 3 DG is inoperable when the governor speed droop control is set to 50 percent. Therefore, the DG may not have been declared inoperable and the required Technical Specification actions may not have been completed while these additional surveillances were being performed.

A review of control room logs was performed to determine if the requirements of the Technical Specifications were met for the DG when these surveillances were performed. The review identified that on at least one occasion, the actions of the Technical Specifications were not completed. The review of logs was limited to identifying at least one incident reportable under the provisions of 10CFR50.73, so the actions of the Technical Specifications may not have been completed on other occasions when these surveillances were performed. However, any other occasions not identified would have circumstances similar to those described in the following incident. On October 10, 1996, Illinois Power determined that the Division 3 DG was not operable from 0500 hours to 0905 hours on March 16, 1991, during surveillance CPS 9080.02, but was not declared inoperable and the action of Technical Specification (TS) 3.8.1.1, "AC Sources-Operating," was not completed as required, to demonstrate the operability of offsite power sources within one hour. (TS 3.8.1.1 is not currently in effect and was superseded by Improved Technical Specification (ITS) 3.8.1 on January 1, 1995.)

TS 3.8.1.1 required three separate and independent diesel generators to be operable when the plant was in Modes 1 (POWER OPERATION), 2 (STARTUP), and 3 (HOT SHUTDOWN). When the Division 3 DG was inoperable for planned or preventive maintenance, action "d" of TS 3.8.1.1 required the operability of the offsite alternating current power sources to be

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demonstrated by performing TS Surveillance Requirement 4.8.1.1.1.a within one hour and at least once per eight hours thereafter. The requirement to perform surveillance requirement 4.8.1.1.1.a was not met on March 16, 1991, during performance of surveillance CPS 9080.02 while the plant was in Mode 1 at about 75 percent reactor [RCT] power.

ITS 3.8.1, "Electrical Power Systems, AC Sources-Operating," requires that three diesel generators shall be operable when the plant is in Modes 1, 2, and 3; however, the Division 3 DG is not required to be operable when the high pressure core spray system [BG] is inoperable. When one DG is inoperable, action B.1 of ITS 3.8.1 requires surveillance requirement 3.8.1.1 to be performed within one hour and once per eight hours thereafter to verify the operability of offsite power circuits.

CR 1-96-09-175 will track a cause and corrective action determination for this event.

No automatic or manually initiated safety system responses were necessary to place the plant in a safe and stable condition. No other equipment or components were inoperable at the start of this event to the extent that their inoperable condition contributed to this event.

CAUSE OF EVENT CORRECTIVE ACTION

The cause of this event is under investigation. Corrective action will be determined after the cause has been determined. Illinois Power expects to issue a supplement to this licensee event report identifying the cause of event, corrective action, and similar event discussion by February 28, 1997.

However, several DG procedures are being revised to identify the operability impact of setting the governor speed droop control to 50 percent, to minimize the time the DG is in the 50 percent droop configuration, and to require verification of offsite power circuit operability when the DG is in the 50 percent droop configuration. Surveillance procedure CPS 9080.02 has already been revised to include this information. Surveillance procedures CPS 9080.14 and CPS 9080.23, and system operating procedure CPS 3506.01, "Diesel Generator and Support Systems (DG)," will be revised to include the information prior to use. Surveillance procedure CPS 9080.10 will be revised to remove the requirement to set the governor speed droop control to 50 percent.

ANALYSIS OF EVENT

This event is reportable under the provisions of 10CFR50.73(a)(2)(i)(B) due to the failure to implement the required TS action for the inoperable Division 3 DG during surveillance CPS 9080.02 on October 10, 1991.

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An assessment of the safety consequences and implications of this event has concluded that this event was not nuclear safety significant. If the Division 3 DG was needed to perform its safety function during performance of any of the four surveillances discussed above, an automatic start of the DG will be annunciated in the main control room and operators will respond in accordance with system operating procedure CPS 3506.01, "Diesel Generator and Support Systems (DG)," by verifying the proper generator frequency.

The Division 3 DG was inoperable from 0500 hours to 0905 hours on March 16, 1991, during surveillance CPS 9080.02.

ADDITIONAL INFORMATION

No equipment or components failed during this event.

A discussion of similar events will be provided in a supplemental report as discussed in the cause of event/corrective action section of this report.

For further information regarding this event, contact P. W. Kirchhofer, Engineering Projects Engineer, at (217) 935-8881, extension 3918.