ILLINOIS POWER COMPANY

U-0546
L30-82(09-17)6
500 SOUTH 27TH STREET, DECATUR, ILLINOIS 62525
September 17, 1982

Mr. Cecil O. Thomas, Chief
Standardization & Special Projects Branch
Division of Licensing
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Thomas:

Reference: IP letter 2/23/82 (U-0422), G. E. Wuller, IP to J. R. Miller, NRC - transmitted Preservice Inspection Program

Clinton Power Station Unit 1
Docket No. 50-461
Preservice Inspection Pump Program

Transmitted herewith is a copy of the pump testing program for the Clinton Power Station Unit 1, to be added to the Preservice Examination Plan which was provided by the referenced letter.

The NRC Staff review of this submittal should close out the Clinton SER outstanding issue #8. Please let us hear soon if you have any questions on our pump testing program.

Sincerely,

G. E. Wuller

G. E. Wuller
Supervisor-Licensing
Nuclear Station Engineering

GEW/ja
Attachment
cc: J. H. Williams, NRC Clinton Project Manager (w/o enc.)
H. H. Livermore, NRC Resident Inspector
M. R. Hum, NRC MTEB
Illinois Department of Nuclear Safety (w/o enc.)

B001
AD ER Dist.
SEND Drwgs to:
PM

8209210236 a

CLINTON POWER STATION PUMP TESTING PROGRAM

All code class 1, 2 & 3 pumps, provided with an emergency power source whose function is to safely shutdown the reactor or to mitigate the consequences of an accident, will be tested for operational readiness throughout their service life in accordance with Subsection IWP of Section XI of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (hereafter referred to as the code).

This program is based on the 1977 Edition, Summer 1978 Addenda of Section XI of the Code. Per the requirements of 10CFR50.55a(g)(4) the program will be upgraded to the Edition and Addenda of Section XI recognized by 10CFR50.55a(b) twelve (12) months prior to the issuance of the operating License.

Table one (1) of this submittal indicates the pumps subject to periodic testing, their respective P&ID location, the parameters to be tested and the legend and notes associated with Table I.

Attachment one (1) is the relief requests anticipated for use during Inservice Inspection. Attachment two (2) identifies the flow path to be used during operability testing of these pumps.

TABLE 1
ILLINOIS POWER COMPANY
CLINTON POWER STATION
UNIT 1
INSERVICE INSPECTION PROGRAM
SECTION XI OF ASME CODE
PUMP SUMMARY LISTING (IWP-6210)

SYSTEM RESIDUAL HEAT REMOVAL - 1E12 CLASS 2

PUMP NO.	SERVICE	P&ID	COORDINATES	SPEED		INLET PRESS.		DIFF. PRESS.		FLOW RATE		VIBRATION		LUB LEVEL OR PRESS		BEARING TEMP.		REMARKS
				STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	
C002A	RHR	M05-1075 SH1	A-7	E,1	NA	X	YES	X	YES	X	YES	X	YES,2	E,3	NA	E,4	NA	NONE
C002B	RHR	M05-1075 SH2	A-3	E,1	NA	X	YES	X	YES	X	YES	X	YES,2	E,3	NA	E,4	NA	NONE
C002C	RHR	M05-1075 SH3	B-3	E,1	NA	X	YES	X	YES	X	YES	X	YES,2	E,3	NA	E,4	NA	NONE
C003	RHR Water leg	M05-1075 SH3	C-3	E,1	NA	X	YES	X	YES	X	YES	X	YES,2	LEVEL	YES	E,4	NA	NONE

FOR LEGEND AND NOTES, SEE LAST PAGE

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SYSTEM HIGH PRESSURE CORE SPRAY - 1E22 CLASS 2

PUMP NO.	SERVICE	P&ID	COORDINATES	SPEED		INLET PRESS.		DIFF. PRESS.		FLOW RATE		VIBRATION		LUB LEVEL OR PRESS		BEARING TEMP.		REMARKS
				STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	
C001	HPCS	M05-1074	B-3	E,1	NA	X	YES	X	YES	X	YES	X	YES,2	E,3	NA	E,4	NA	NONE
C003	HPCS Water leg	M05-1074	C-5	E,1	NA	X	YES	X	YES	X	YES	X	YES,2	LEVEL	YES	E,4	NA	NONE

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SYSTEM LOW PRESSURE CORE SPRAY - 1E21 CLASS 2

PUMP NO.	SERVICE	P&ID	COORDINATES	SPEED		INLET PRESS.		DIFF. PRESS.		FLOW RATE		VIBRATION		LUB LEVEL OR PRESS		BEARING TEMP.		REMARKS
				STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	
C001	LPCS	M05-1073	E-7	E,1	NA	X	YES	X	YES	X	YES	X	YES,2	E,3	NA	E,4	NA	NONE
C002	LPCS Water leg	M05-1073	B-7	E,1	NA	X	YES	X	YES	X	YES	X	YES,2	LEVEL	YES	E,4	NA	NONE

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SYSTEM REACTOR CORE ISOLATION COOLING - 1E51 CLASS 2

PUMP NO.	SERVICE	P&ID	COORDINATES	SPEED		INLET PRESS.		DIFF. PRESS.		FLOW RATE		VIBRATION		LUB LEVEL OR PRESS		BEARING TEMP.		REMARKS
				STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	
C001	RCIC	M05-1079 SH-2	E-1	X	YES	X	YES	X	YES	X	YES	X	YES,2	LEVEL	YES	E,4	NA	NONE
C003	RCIC Water leg	M05-1079 SH-2	B-5	E,1	NA	X	YES	X	YES	X	YES	X	YES,2	LEVEL	YES	E,4	NA	NONE

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SYSTEM SHUTDOWN SERVICE WATER - 1SX CLASS 3

PUMP NO.	SERVICE	P&ID	COORDINATES	SPEED		INLET PRESS.		DIFF. PRESS.		FLOW RATE		VIBRATION		LUB LEVEL OR PRESS		BEARING TEMP.		REMARKS
				STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	
01PA	SX	M05-1052 SH-1	D-7	E,1	NA	X	5	X	YES	X	YES	X	YES,2	E,3	NA	E,4	NA	NONE
01PB	SX	M05-1052 SH-2	D-7	E,1	NA	X	5	X	YES	X	YES	X	YES,2	E,3	NA	E,4	NA	NONE
01PC	SX	M05-1052 SH-3	D-8	E,1	NA	X	5	X	YES	X	YES	X	YES,2	E,3	NA	E,4	NA	NONE

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SYSTEM STANDBY LIQUID CONTROL - 1C41 CLASS 2

PUMP NO.	SERVICE	P&ID	COORDINATES	SPEED		INLET PRESS.		DIFF. PRESS.		FLOW RATE		VIBRATION		LUB LEVEL OR PRESS		BEARING TEMP.		REMARKS
				STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	
C001A	SLC	M05-1077	C-5	E,1	NA	X	YES	X	YES	X	YES	E,6	NA	E,3	NA	E-4	NA	NONE
C001B	SLC	M05-1077	D-5	E,1	NA	X	YES	X	YES	X	YES	E,6	NA	E,3	NA	E-4	NA	NONE

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SYSTEM DIESEL GENERATOR FUEL OIL - 1DO CLASS 3

PUMP NO.	SERVICE	P&ID	COORDINATES	SPEED		INLET PRESS.		DIFF. PRESS.		FLOW RATE		VIBRATION		LUB LEVEL OR PRESS		BEARING TEMP.		REMARKS
				STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	STATUS	TEST-ABLE	
01PA	DO	M05-1036 SH-1	B-1	E,1	NA	X	YES	X	YES	X	NO,7	X	YES,2	E,3	NA	E,4	NA	NONE
01PB	DO	M05-1036 SH-1	B-6	E,1	NA	X	YES	X	YES	X	NO,7	X	YES,2	E,3	NA	E,4	NA	NONE
01PC	DO	M05-1036 SH-2	B-4	E,1	NA	X	YES	X	YES	X	NO,7	X	YES,2	E,3	NA	E,4	NA	NONE

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TABLE I

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PUMP SUMMARY LISTING (IWP-6210)

LEGEND

E - Exempt

NA - Not Applicable

X - Testing Required

NOTES

1 - Constant speed motors exempt from speed test (IWP-4400)

2 - No instrumentation installed. Use portable contact type instrument.

3 - Bearings are lubricated by pump discharge no measurement necessary.

4 - See relief request no. 001

5 - See relief request no. 002

6 - See relief request no. 003

7 - See relief request no. 004

CLINTON POWER STATION
IN-SERVICE TESTING OF PUMPS
RELIEF REQUEST NO. 001

I. Component Identification:

A. Name: All pumps listed in Table I

B. Number: See Table I

C. Function: Safely shutdown the reactor or mitigate the consequences of an accident.

D. ASME Section III Code Class: See Table I

E. ASME Section XI Valve Category: Not Applicable

II Relief from:

A. ASME Code Requirement: IWP-4310 Bearing Temperature

B. Reason for Relief: The measurement of annual pump bearing temperature does not increase any confidence in the reliability of the pumps because bearing temperature rises just minutes prior to failure of the pump. Therefore measurement of annual pump bearing temperature as required by the code will not be recorded.

III Alternate In-Service Test:

- None -

CLINTON POWER STATION
IN-SERVICE TESTING OF PUMPS
RELIEF REQUEST NO. 002

I. Component Identification:

A. Name: Shutdown Service Water Pumps 1A, 1B, and 1C

B. Number: 1SX01PA, 1SX01PB, & 1SX01PC

C. Function: Shutdown Service Water Pumps provide a reliable source of cooling water for station auxiliaries which are essential to shutdown the reactor safely following the unlikely event of a LOCA or a complete loss of offsite AC Power.

D. ASME Section III Code Class: 3

E. ASME Section XI Valve Category: Not Applicable

II Relief from:

A. ASME Code Requirement: IWP-4200 Inlet Pressure

B. Reason for Relief: The suction is taken directly from the lake. Suction pressure is depend upon the lake level and varies approximately 0.43 psi per foot of the lake level and lake level would be approximately constant throughout the year.

III Alternate In-Service Test: - None -

CLINTON POWER STATION
IN-SERVICE TESTING OF PUMPS
RELIEF REQUEST NO. 003

I. Component Identification:

A. Name: Standby Liquid Control pump 1A & 1B

B. Number: 1C41-C001A & 1C41-C001B

C. Function: Standby control pump supply a neutron absorbing solution into the reactor in sufficient concentration and quantity to overcome the maximum positive reactivity.

D. ASME Section III Code Class: 2

E. ASME Section XI Valve Category: Not applicable

II Relief from:

A. ASME Code Requirement: IWP-4500 Vibration Amplitude

B. Reason for Relief: Vibration amplitude will not be measured on the standby liquid control pumps. Measurement of mechanical vibration of reciprocating positive displacement pump provides no meaningful data because of the oscillatory action of a reciprocating pump.

III Alternate In-Service Test: - None -

CLINTON POWER STATION
IN-SERVICE TESTING OF PUMPS
RELIEF REQUEST NO. 004

I. Component Identification:

A. Name: Diesel Fuel Oil Transfer pump 1A, 1B, and 1C

B. Number: 1D0-01PA, 1D0-01PB, and 1D0-01PC

C. Function: The Diesel Fuel Oil Transfer pump transfer diesel fuel from diesel storage tank to diesel fuel day tank.

D. ASME Section III Code Class: 2

E. ASME Section XI Valve Category: Not Applicable

II Relief from:

A. ASME Code Requirement: IWP-4600 Flow rate

B. Reason for Relief: Flow rate measuring instrument not installed.

III Alternate In-Service Test: The flow rate of diesel fuel oil transfer pumps is calculated dividing the change of level of diesel fuel day tank by the time of diesel fuel oil transfer pump in operation.