General (6) electric P3K-AL-0366-A01 CONT ON SHEET TITLE TEST INSTRUCTIONS FOR PLANT COMMUNICATIONS LOGIC (REMOTE OPERATION CONTROL INTERFACE) P3K-AL-0366-AOL CONT ON SHEET 2 SH NO. 1 FIRST MADE FOR EHC MARK II (PLANT COMMUNICATIONS) REVISIONS SCOPE This instruction outlines the specifications for testing the Plant Communications Logic board 1PC2-DOOL; CIRCUIT BOARD 118D1579 -- REMOTE OPERATION CONTROL INTERFACE II. CIRCUIT DESCRIPTION When the power to the EHC control system is initially turned on, the unit will be in a TRIPPED condition with the circuit breaker open. When the REMOTE OFERATION option is purchased by the customer this board is furnished to provide the interface input connections from the customer to EHC. All customer inputs to this board are 125 VDC and all outputs to EHC circuitry are 24 VDC. The 125 VDC is furnished to the customer via this board when REMOTE 2. OPERATION mode is selected at the EHC control panel. The customer can revert the control back to the EHC (manual) via the GO MANUAL input line. III. CIRCUIT SPECIFICATIONS 1. This board contains only relays -- both 24 VDC and 125 VDC coil 2. All functional tests shown in the Logic Testing Table can be made: with the board coated as well as uncoated. 3. The symbols used in the Logic Testing Table are as follows: TABLE SYMBOLS No voltage applied, or absence of wltage at output terminals and test points. Power applied to power input terminals, or presence of power at output terminals and GC_DATE. test points. ET-273 273-2

Jumper the two terminals indicated.

Omission = No change from previous test condition.

4. Before applying power to the circuit board, perform the following continuity checks:

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4. (continued)		
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	to 46	
47	to 48	
5. All relays have	case grounds that are connected to ter	minal 19.
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	2	24 VDC power on		1	1										
	3	125 VDC power on					1	1				1.			
	4	Select RO mode	The second secon			1									
	5	Select GO MANUAL		, page of the				:		J			,,		
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conditions should hold their status quo for the remaining tests. APPROVALS

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GENERAL (%) ELECTRIC P3K-AL-0366-A01 TITLE. TEST INSTRUCTIONS FOR PLANT COMMUNICATIONS LOGIC P3K-AL-0366-A01 (REMOTE OPERATION CONTROL INTERFACE) EHC MARK II (PLANT COMMUNICATIONS) CONT ON SHEET 7 FIRST MADE FOR SH NO. REVISIONS LOAD CONTROL POWER INPUTS Transfer FUNCTION UNDER TEST 48 48 48 48 48 48 48 59 60 61 62 63 64 65 29 40 0 0 0 0 0 0 0 As left from step 17 1 Provide inputs Select RO mode Select steam pressure limiter "OFF" J 21 Select SPL "ON" 22 TABLE 0 J Select SPL "DECREASE" 0 J Select SPL "INCREASE" 0 J Select transfer to PA 25 J Select transfer to PA hold 26 0 0 J Select transfer to FA 27 0 0 28 Clear Leave power as shown in step 6 and proceed to step 29. These conditions should hold their status quo for the PRINTS TO remaining tests.

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CONT ON SHEET . 9

P3K-AL-0366-A01 CONT ON SHEET sh No. 8

TEST INSTRUCTIONS FOR PLANT COMMUNICATIONS LOGIC (REMOTE OPERATION CONTROL INTERFACE) FIRST MADE FOR EHC MARK II (PLANT COMMUNICATIONS)

REVISIONS

TRIP AND MONITORING

TITLE

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NO.		RO selected POWER INPUT 🖟		Select master reset	Start mech. 0/S trip test	Start mech. trip piston test	elec, trip			Manual mode trip test sel.	Start mech. 0/S trip test	17 17	art elec. trip test	Resot	Master reset	TE55 TEST POINT		
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29	As left from step 28	0		0	0	0	0	0		1_	0	0	0	0	0.	0		-
30	Select RO mode	1								0		T-ATT-MANAGEMENT TO A	,	Stan processor in		1		-
31	Start mechanical O/S test				J		-				1							
32	Start mechanical trip piston			,	0	J					0	1		ar percent				
33	Start electrical trip test					0	J					0	1			 		
34	Select test reset						0	J			approximation of		0	1.				
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TITLE

TEST INSTRUCTIONS FOR PLANT COMMUNICATIONS LOGIC (REMOTE OPERATION CONTROL INTERFACE)

CONT ON SHEET su-no. 9 FIRST MADE FOR EHC MKII (Plant Communications)

REVISIO:

TEST INSTRUCTIONS 1PC2-DOOL

Assembly 118D1579

Schematic 117D9807

PROCEDURE:

- Connect the circuit under test as described in the setup instructions.
- 2. Test the logic circuitry using Table A.

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TITLE CONT ON SHEET 11 SH NO. 10

P3K-AL-0366-AO1 TEST INSTRUCTIONS FOR PLANT COMMUNICATIONS LOGIC (REMOTE OPERATION CONTROL INTERFACE)

CONT ON SHEET 11 SH NO. 10 FIRST MADE FOR EHC MKII

REVISION

SETUP INSTRUCTIONS - FMCC 1PC2-DOO1

- 1. The loads to be applied to the circuit under test are +1% tolerance.
- 2. Unless otherwise specified, all voltages to be applied and to be measured (signfied by an "X" on the logic test table) are +24.00VDC (tolerance ±100MV)
- 3. This circuit card has 76 pins total with 73 pin in use. The terminal board configuration is 2 22 pt. and 2 16 pt.
- 4. Connect pins 2 and 19 to ground.
- 5. Va = +62.5 VDCVb = -62.5 VDC

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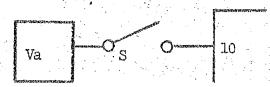
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P3K-AL-0366-AOL cont on sheet 12 314 NO. 11 TITLE TEST INSTRUCTIONS FOR PLANT COMMUNICATIONS LOGIC P3K-AL-0366-AO1 (REMOTE OPERATION CONTROL INTERFACE) CONT ON SHEET 12 sm NO. 11 FIRST MADE FOR EHC MKII

INSTRUCTIONS FOR USE OF LOGIC TABLE

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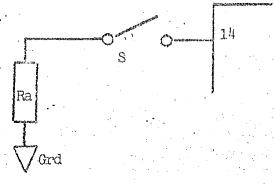
Close S to apply Va to Pin 10 If Va is not specified, assume +24.0 VDC.



r 10 Va = reset 10 to Va

open S

s 14 Ra = set 14 to Ra



Close S to apply load Ra to Pin 14.

- An "X" in the logic table indicates a voltage measurement of +24.00VDC. A letter (ie "C") in the logic table indicates a voltage measurement, the voltage being equal to that specified by the subscript letter (ie "Vc"). A blank space indicates a 0 VDC measurement.
- E. The voltage at all pins and all test points will be measured at each step of the logic table.

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