



Consumers
Power
Company

James W Cook

Vice President - Projects, Engineering
and Construction

General Offices: 1945 West Parnall Road, Jackson, MI 49201 • (517) 788-0453

March 25, 1983

Harold R Denton, Director
Office of Nuclear Reactor Regulation
Division of Licensing
US Nuclear Regulatory Commission
Washington, DC 20555

MIDLAND ENERGY CENTER PROJECT
MIDLAND DOCKET NOS 50-329, 50-330
AUXILIARY FEEDWATER LEVEL CONTROL VALVES
FILE B7.9, B10.4.9 SERIAL 21623

SER Confirmatory Item (20) discusses Consumers Power's commitment to modify the design of the auxiliary feedwater level control valves to ensure that these valves will continue to receive a modulating signal even if the AFW actuation signal is reset. This modification has been completed and FSAR Section 7.4.1.1.3.2 has been updated in Revision 47 to describe the modified level control valve actuating circuit. Attached to this letter are Sheets 1 and 2 of Logic Diagram J-261 and Sheets 54 and 58 of Electrical Schematics E-158 which show the modified circuitry. The level control valves on the motor driven AFW pumps have been modified to begin modulating when the pump breaker is closed, while the level control valves on the turbine driven pump have been modified to begin modulating when turbine control oil pressure is available. This method of providing the modulate signal to the level control valves will not be interrupted in the event the AFW actuate signal is blocked.

The new material incorporated in FSAR Revision 45 and the attached drawings provide the information necessary for your Staff to complete their review of Confirmatory Item (20) of the Midland Safety Evaluation Report.

James W. Cook

JWC/RMH/fms

CC RJCook, Midland Resident Inspector
RHernan, US NRC
DBMiller, Midland Construction (3)
RWHouston, Washington

Boo!

oc0383-1680a131

8304010571 830325
PDR ADQCK 05000329
E PDR

CONSUMERS POWER COMPANY
Midland Units 1 and 2
Docket No 50-329, 50-330

Letter Serial 21623 Dated March 25, 1983

At the request of the Commission and pursuant to the Atomic Energy Act of 1954, and the Energy Reorganization Act of 1974, as amended and the Commission's Rules and Regulations thereunder, Consumers Power Company submits information requested in SER Confirmatory Item (20) on modifications to the AFW level control valve controllers.

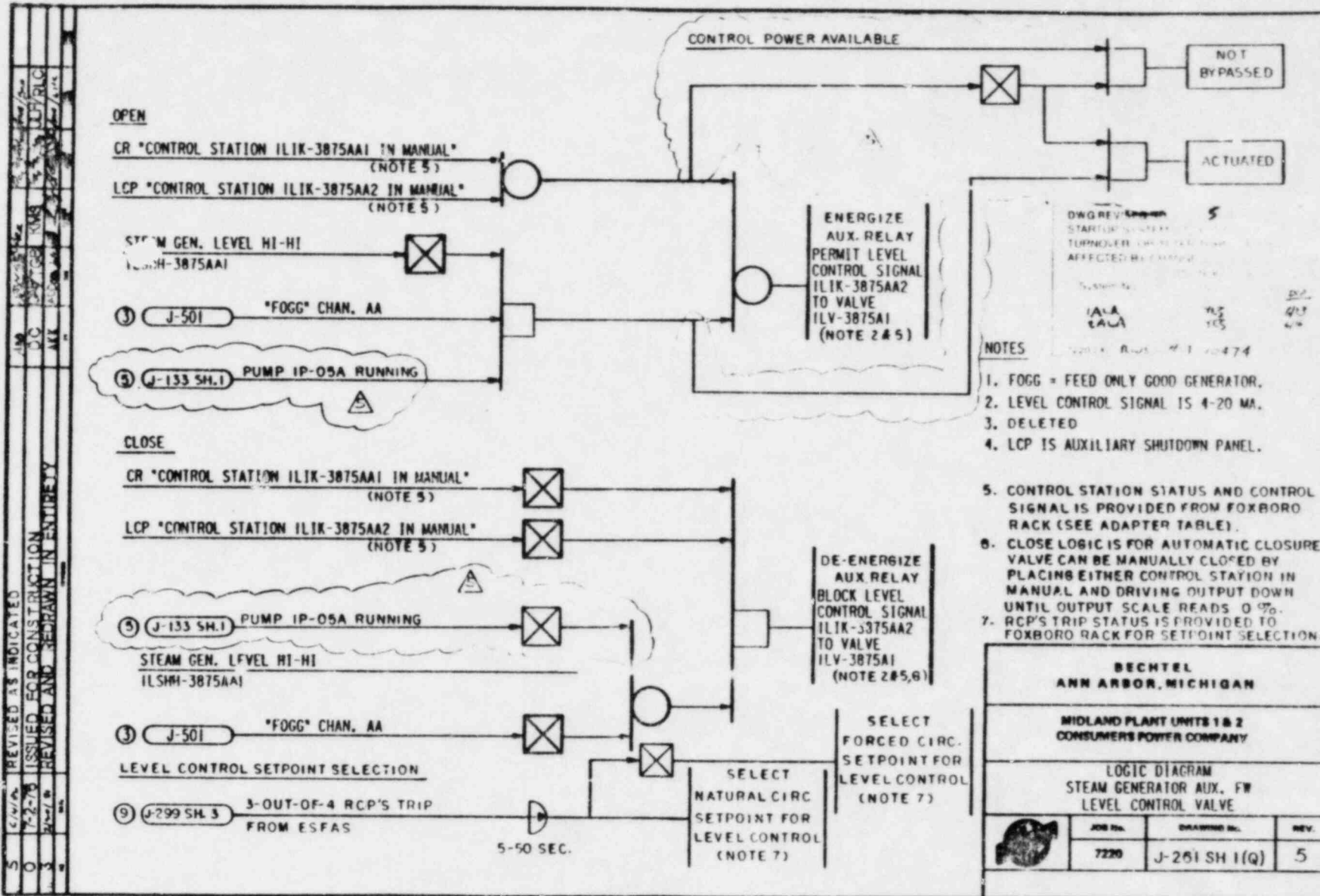
CONSUMERS POWER COMPANY

By J W Cook
J W Cook, Vice President
Projects, Engineering and Construction

Sworn and subscribed before me this 28 day of March, 1983 .

Barbara (B) Leuninger
Notary Public
Jackson County, Michigan

My Commission Expires September 8, 1984





This drawing and the design it covers are the property of BECHTEL. They are hereby loaned and on the borrower's return agreement that they will not be reproduced, copied, or used in any way without the written consent of BECHTEL. Any written consent given by the lender is the borrower's responsibility.


7220-115

REVISED AS INDICATED
7-2-76 ISSUED FOR CONSTRUCTION
7-2-76 REVISED AND REDRAWN IN ENTIRE

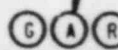
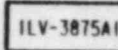
INDICATING LIGHTS

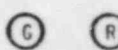
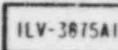
VALVE ILV-3875A1 OPEN (ao)  1ZS-3875A1

VALVE ILV-3875A1 NOT FULL OPEN (bo)  1ZS-3875A1

LCP "CONTROL STATION ILIK-3875AA2 IN MANUAL" 

LCP CONTROL STA. IN MANUAL



CR



LCP

NOT BYPASSED

ACTUATED
CR AFWS STATUS

DWG REVISED NO 5
STARTUP SYSTEMS, S.W. CONTROL
TURNOVER, OR AFTER TURNOVER
AFFECTED BY CHANGES

System No. 133

1ALA 2ALA 133

7220-242 RWS J-10474

VALVE NUMBER	POSITION SWITCH NUMBER	CONTROL STATION		CONV. STA. LOC.		STM. GEN. HI-HI LEVEL INTERLOCK	PUMP RUNNING INTERLOCK	TOGG. CHANNEL	J-501 MATCH NUMBER	CONTROL STATIONS STATUS AND SIGNAL TO & FROM FOX RACK	RCP'S STATUS J-299 MATCH NO.	RCP'S TIME DELAY (SEC)
		CR	LCP	CR	LCP							
ILV-3875A1	1ZS-3875A1	ILIK-3875AA1	ILIK-3875AA2	IC11	IC114	ILSHH-3875AA1	J-133 SH.1	AA	3	1C445A	9	5-50
ILV-3875A2	1ZS-3875A2	ILIK-3875AB1	ILIK-3875AB2	IC11	IC114	ILSHH-3875AB1	J-133 SH.1	BA	5	1C445A	9	5-50
ILV-3875B1	1ZS-3875B1	ILIK-3875BB1	ILIK-3875BB2	IC11	IC114	ILSHH-3875BB1	J-132 SH.3	BB	5	1C445B	10	5-50
ILV-3875B2	1ZS-3875B2	ILIK-3875BB1	ILIK-3875BB2	IC11	IC114	ILSHH-3875BB1	J-132 SH.3	AB	3	1C445B	10	5-50
ZLV-3975A1	2ZS-3975A1	ZLIK-3975AA1	ZLIK-3975AA2	2C11	2C114	ZLSHH-3975AA1	J-133 SH.1	AA	3	2C445A	9	5-50
ZLV-3975A2	2ZS-3975A2	ZLIK-3975AB1	ZLIK-3975AB2	2C11	2C114	ZLSHH-3975AB1	J-133 SH.1	BA	5	2C445A	9	5-50
ZLV-3975B1	2ZS-3975B1	ZLIK-3975BB1	ZLIK-3975BB2	2C11	2C114	ZLSHH-3975BB1	J-132 SH.3	BB	5	2C445B	10	5-50
ZLV-3975B2	2ZS-3975B2	ZLIK-3975BB1	ZLIK-3975BB2	2C11	2C114	ZLSHH-3975BB1	J-132 SH.3	AB	3	2C445B	10	5-50

VALVE POS. LIGHTS		LCP CONT. ST. "MANUAL" LIGHT LOC.	CR AFWS STATUS LIGHTS LOC.	LOAD GROUP "120V AC PREFERRED POWER"	REFERENCES	
CR	LCP					
IC11	IC114	2C11	IC14	I	M-438 SH. 3A/3B J-338 SH 39	ELEC. SCHEME E-158 SH. 54-57
IC11	IC114	IC11	IC14	I		
IC11	IC114	IC11	IC14	I		
IC11	IC114	IC11	IC14	I		
2C11	2C114	2C11	2C14	I	N-439 SH. 3A/3B J-337 SH 39	
2C11	2C114	2C11	2C14	I		
2C11	2C114	2C11	2C14	I		

BECHTEL
ANN ARBOR, MICHIGAN

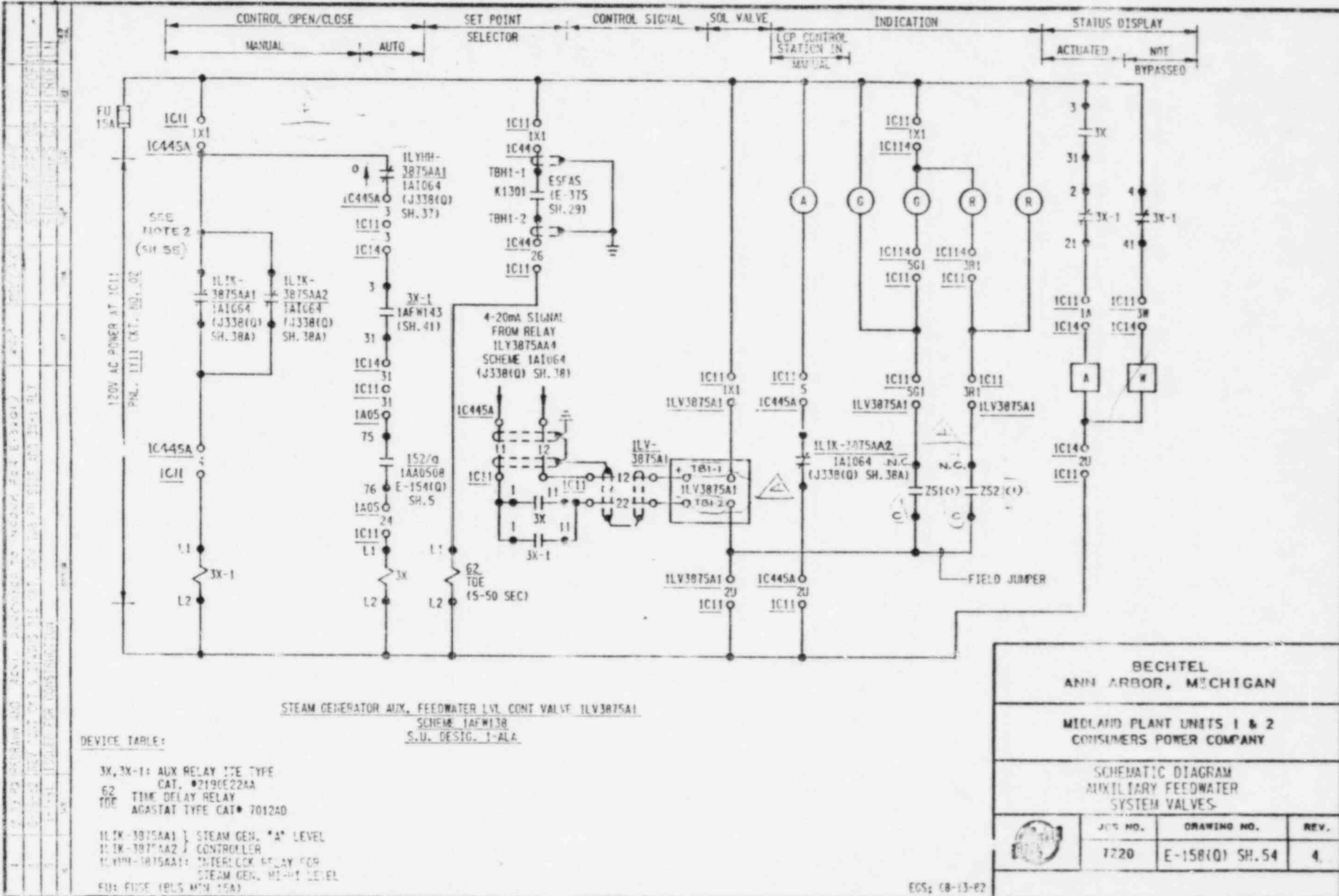
MIDLAND PLANT UNITS 1 & 2
CONSUMERS POWER COMPANY

LOGIC DIAGRAM
STEAM GENERATOR AID, FW
LEVEL CONTROL VALVE



JOB No.	DRAWING No.	REV.
7220	J-261 SH 2 (Q)	5

This drawing and the design of control are the property of BECHTEL. They are hereby loaned to you on the condition that you will not use, reproduce, or in any way disclose the contents hereof to any third party without the prior written consent of BECHTEL.



BECHTEL ANN ARBOR, MICHIGAN		
MIDLAND PLANT UNITS 1 & 2 CONSUMERS POWER COMPANY		
SCHEMATIC DIAGRAM AUXILIARY FEEDWATER SYSTEM VALVES		
	JCS NO. 7220	DRAWING NO. E-158(1) SH.54
	REV. 4	

This drawing and the data on it remain the property of BECHTEL. They are hereby loaned to the borrower's exclusive use and the borrower agrees to return them to the lender. They are not to be reproduced, stored, loaned, or used in any way without the written consent of the lender.

