

NOTES:

- * 1. SPRAY ACTUATION BI-STABLES ARE ENERGIZED TO ACTUATE.
- * 2. PRESSURE BI-STABLES SET TO ACTUATE AT APPROX. 22 PSIG (CONTAINMENT HIGH-HIGH PRESS.).

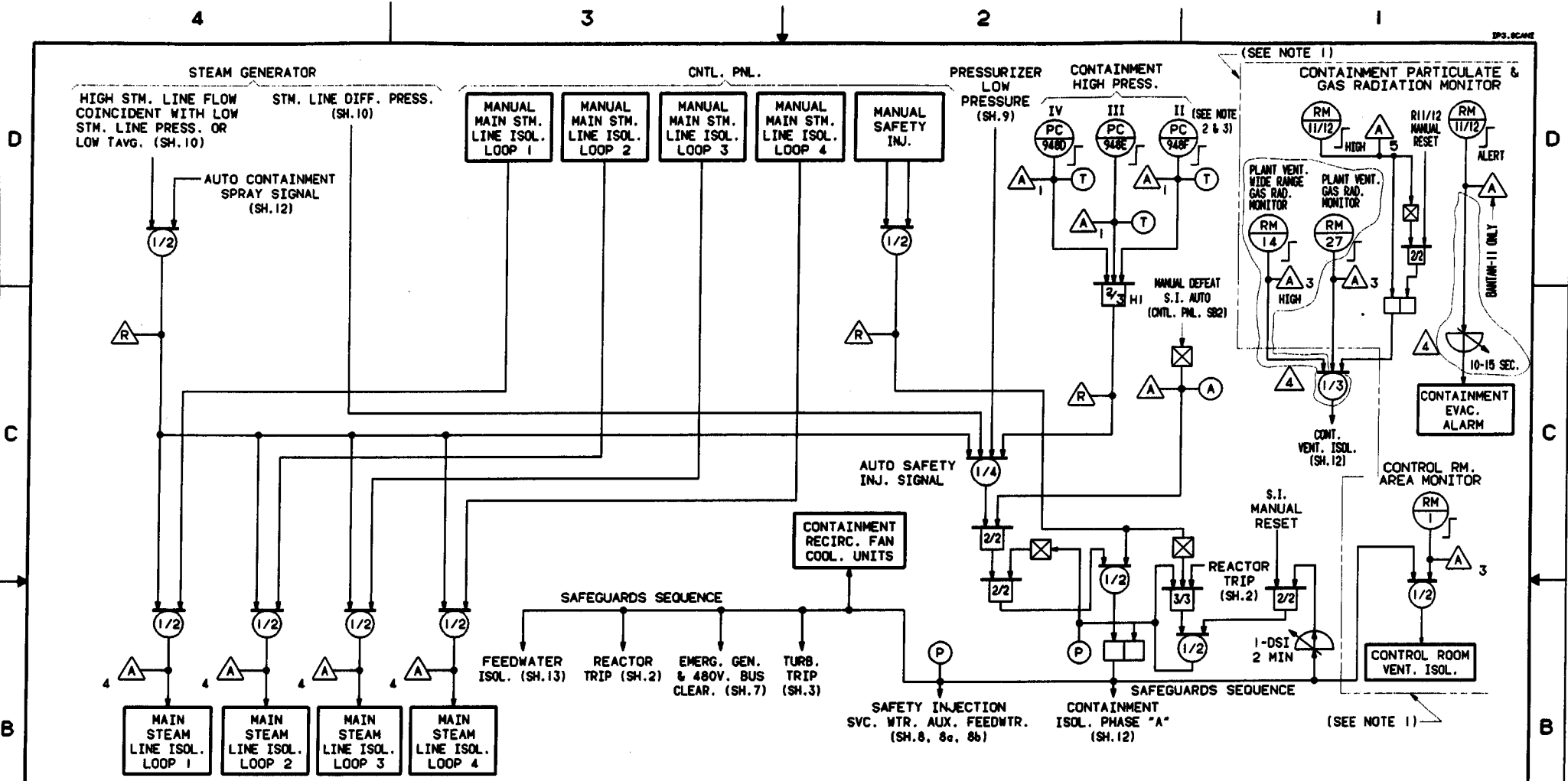
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1984 MO14

REV NO	DATE	DESCRIPTION	CHK	APP	DES	DRG	PROJ
11		AS BUILT PER DCR 100109232.	DM	FL	AE	AE	AE
10	7/6/84	AS BUILT PER DCR 100058107.	EX	REG	AE	AE	AE
9	7/13/84	AS BUILT PER PLANT WALKDOWN.	TD	REG	AE	AE	AE
8	7/18/84	AS BUILT PER IP3 TECH. SERVICES #TS-284E.	TD	REG	AE	AE	AE
7	7/18/84	AS BUILT PER IP3 TECH. SERV. & MOD #88-03-033 RP.	TD	REG	AE	AE	AE

REVISIONS

DWG/CHK'D	INDIAN POINT NO.3 NUCLEAR POWER PLANT
DES SUPV	
DISCIPLINE ENG	
DISCIPLINE DIR	
PROJ APPROVAL	
DATE	
LOGIC DIAGRAMS SAFEGUARDS ACTUATION SHEET-1	
New York Power Authority	
SCALE: NONE	
DWG NO 5651D72	REV 11
SHEET 12	



NOTES:

- ENCLOSED CIRCUITRY IS NOT PART OF THE SAFEGUARDS SYSTEM & IS NOT REDUNDANT.
- PC-948D IS FED FROM A SEPERATE INVERTER POWER SUPPLY.
- PRESS. BISTABLES SET TO ACTUATE AT APPROX. 3 PSIG. (CONTAIN. HIGH PRESSURE).

REV NO	DATE	DESCRIPTION	BY	CHK'D	APP'D	REG
4	2/23/84	AS BUILT PER DCR 100128259	SM	FR	AV	REG
3	6/1/80	AS BUILT PER DCR 100122765	SM	FR	AV	REG
2	6/9/80	AS BUILT PER DCR 100109231	SM	FR	AV	REG
			DR	FR	TH	REG
			DR	FR	TH	REG

REVISIONS

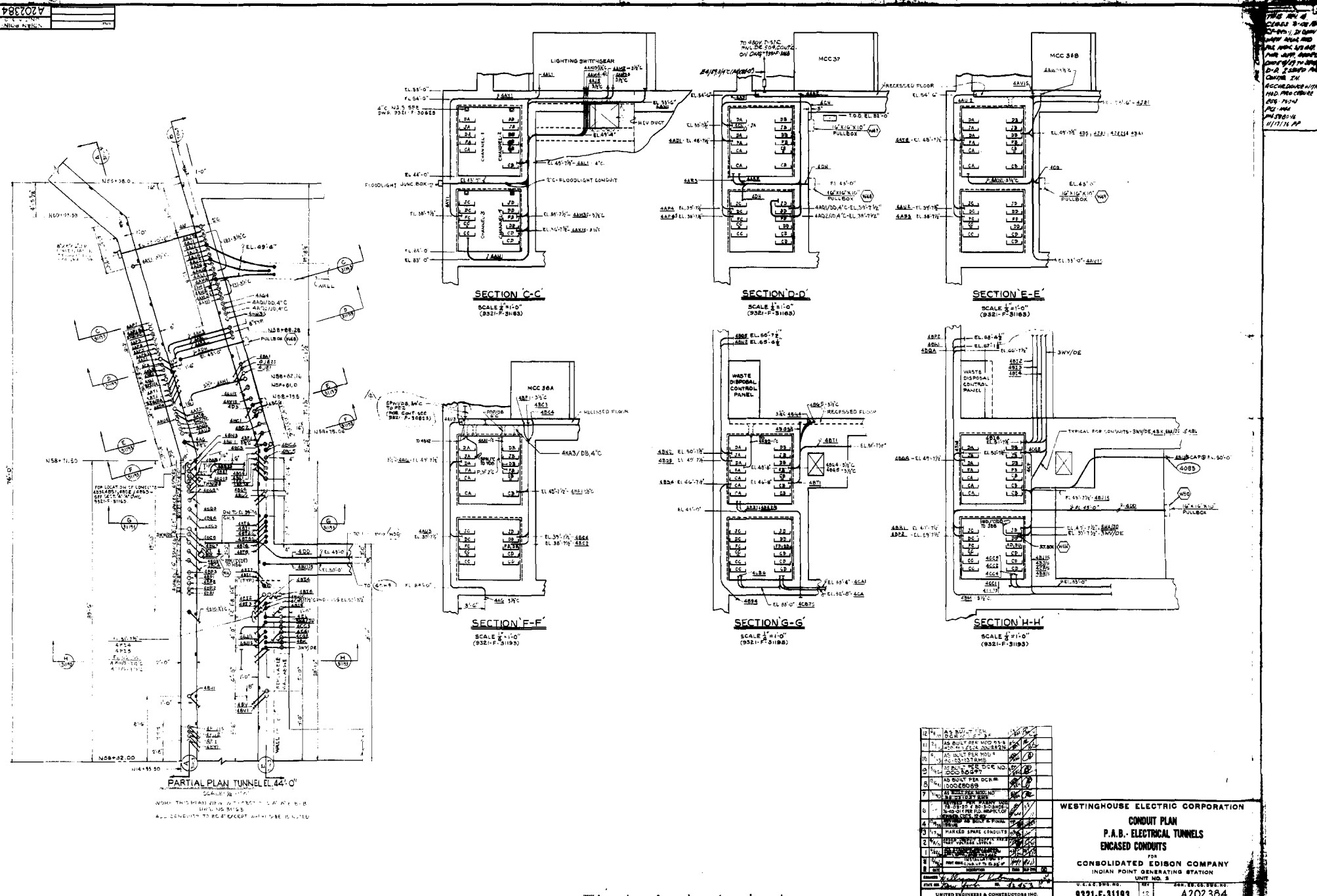
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1984M015

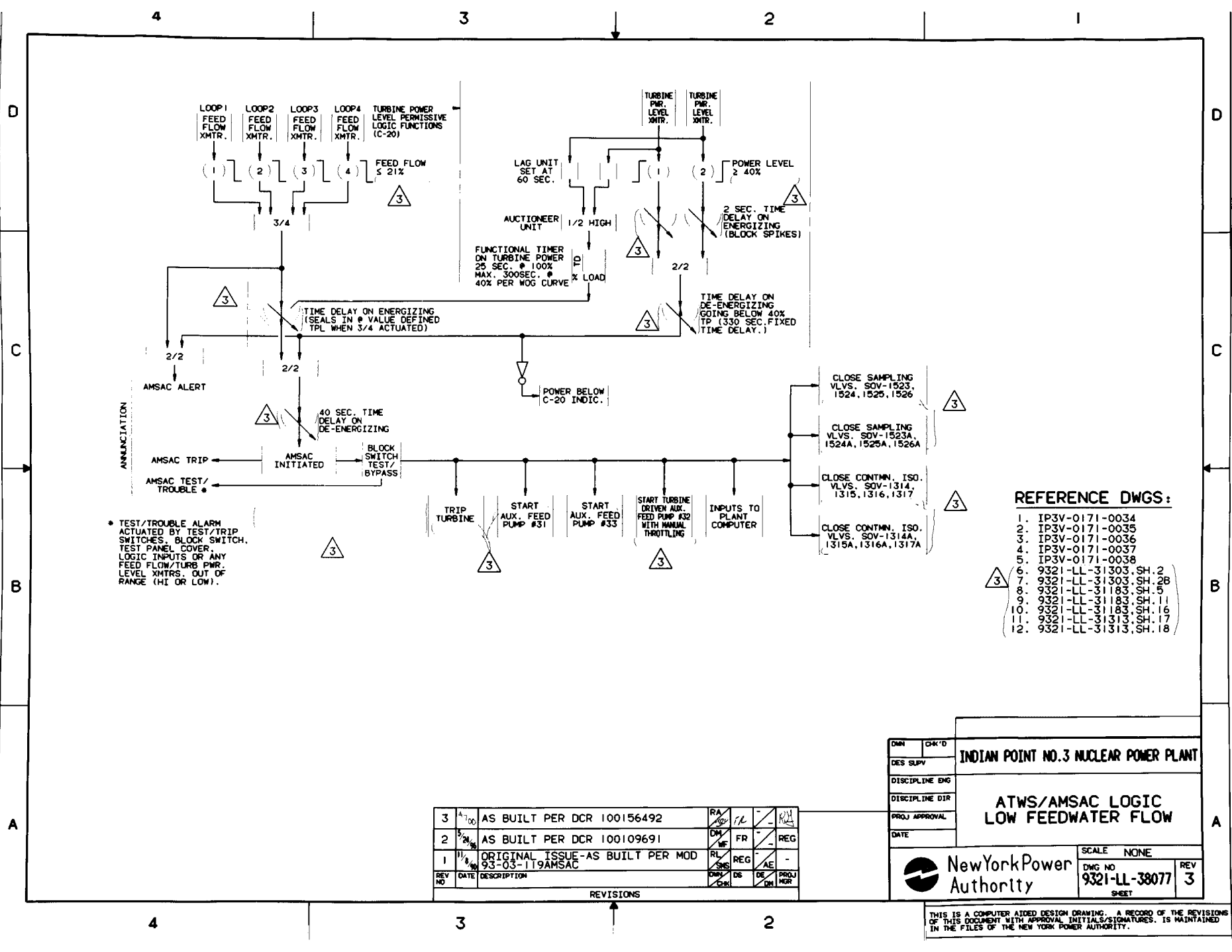
DRN/CHK'D	DES SUPV	DISCIPLINE DRD	DISCIPLINE DIR	PROJ APPROVAL	DATE
INDIAN POINT NO.3 NUCLEAR POWER PLANT					
LOGIC DIAGRAMS SAFEGUARDS ACTUATION					
New York Power Authority				SCALE NONE	DWG NO 5651D72
				REV 4	REV 4

TYPE A

9321-~~F~~-31193



ENT-1
DATE: 11/05/00 TIME: 10:08 ACCESS: NONE
SCALE: 1:1000
DRAWN: L-38077
LAST FILE: 00098 10:07
REV: 6



- REFERENCE DWGS:**
- 1. IP3V-0171-0034
 - 2. IP3V-0171-0035
 - 3. IP3V-0171-0036
 - 4. IP3V-0171-0037
 - 5. IP3V-0171-0038
 - 6. 9321-LL-31303, SH. 2
 - 7. 9321-LL-31303, SH. 28
 - 8. 9321-LL-31183, SH. 5
 - 9. 9321-LL-31183, SH. 11
 - 10. 9321-LL-31183, SH. 16
 - 11. 9321-LL-31313, SH. 17
 - 12. 9321-LL-31313, SH. 18

REV NO	DATE	DESCRIPTION	RA	FR	REG	AE	CHK	DES	DIS	PROJ
3	10/00	AS BUILT PER DCR 100156492	RA	FR	REG	AE	CHK	DES	DIS	PROJ
2	9/99	AS BUILT PER DCR 100109691	RA	FR	REG	AE	CHK	DES	DIS	PROJ
1	11/98	ORIGINAL ISSUE-AS BUILT PER MOD 93-03-119AMSAC	RA	FR	REG	AE	CHK	DES	DIS	PROJ

OWN	CHK'D
DES SUPV	
DISCIPLINE ENG	
DISCIPLINE DIR	
PROJ APPROVAL	
DATE	

INDIAN POINT NO.3 NUCLEAR POWER PLANT

**ATWS/AMSAC LOGIC
LOW FEEDWATER FLOW**

New York Power Authority

SCALE: NONE

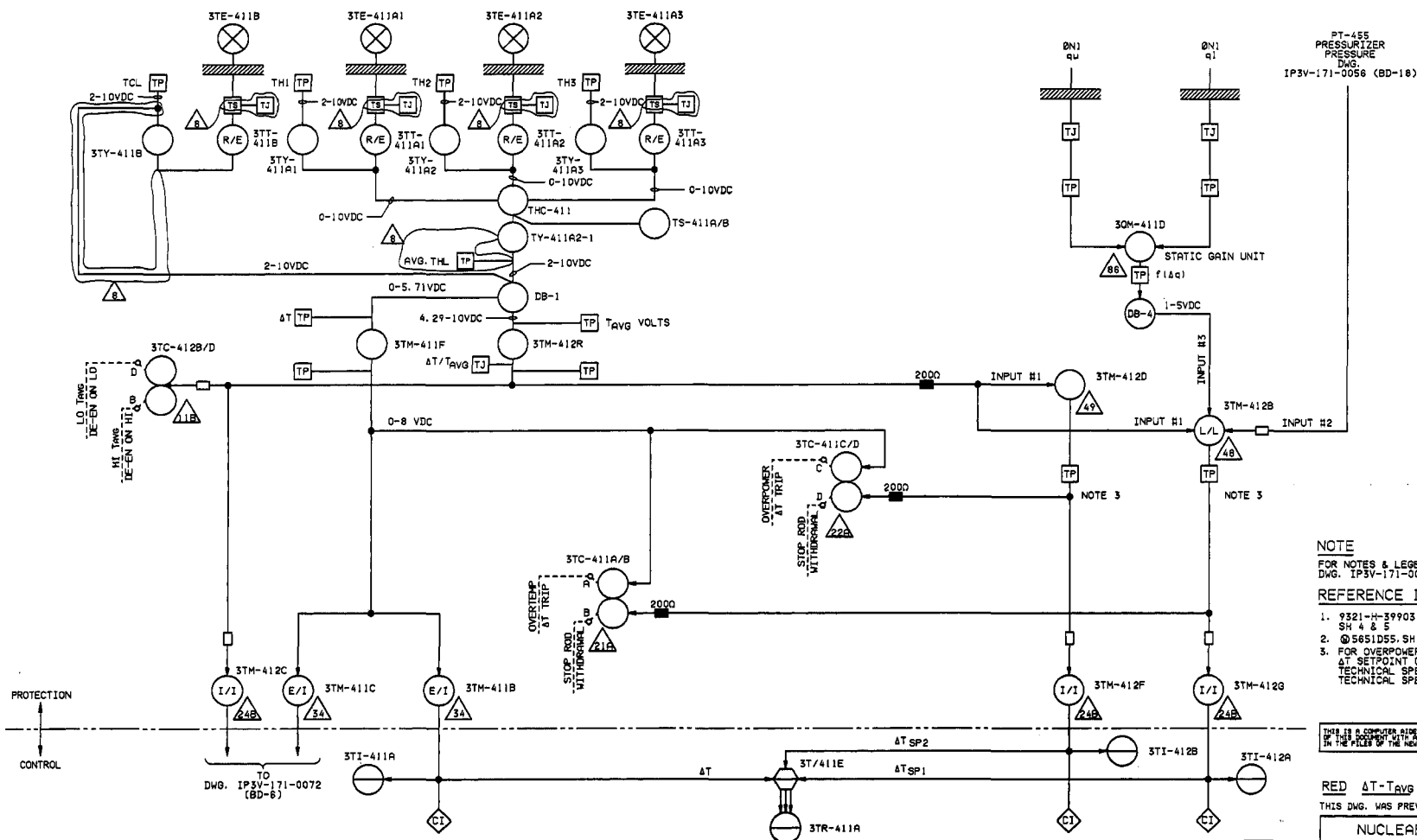
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SHEET: 3

REV: 3

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ΔT-Tavg LOOP-1 RED CHANNEL I



NOTE

FOR NOTES & LEGENDS SEE
DWG. IP3V-171-0071 (BD-1)

REFERENCE DWGS.

- 9321-H-39903 PROTECTION RACK LAYOUT
SH 4 & 5
- 5651D55 SH 13 FUNCTIONAL
- FOR OVERPOWER ΔT AND OVERTEMPERATURE
ΔT SETPOINT CALCULATIONS SEE
TECHNICAL SPECIFICATIONS/IMPROVED
TECHNICAL SPECIFICATIONS AS APPLICABLE.

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1973M2147

RED ΔT-Tavg LOOP-1

THIS DWG. WAS PREVIOUSLY FOXBORO DWG. HBD-2 REV. 4.

NUCLEAR SAFETY RELATED

INDIAN POINT NO. 3 NUCLEAR POWER PLANT

INSTRUMENT BLOCK DIAGRAM
INTEGRATING
REACTOR PROTECTION SYSTEM

DWG. PMN
DES. SUPV
DISCIPLINE ENG
DISCIPLINE DIR
PROJ. APPROVAL
DATE

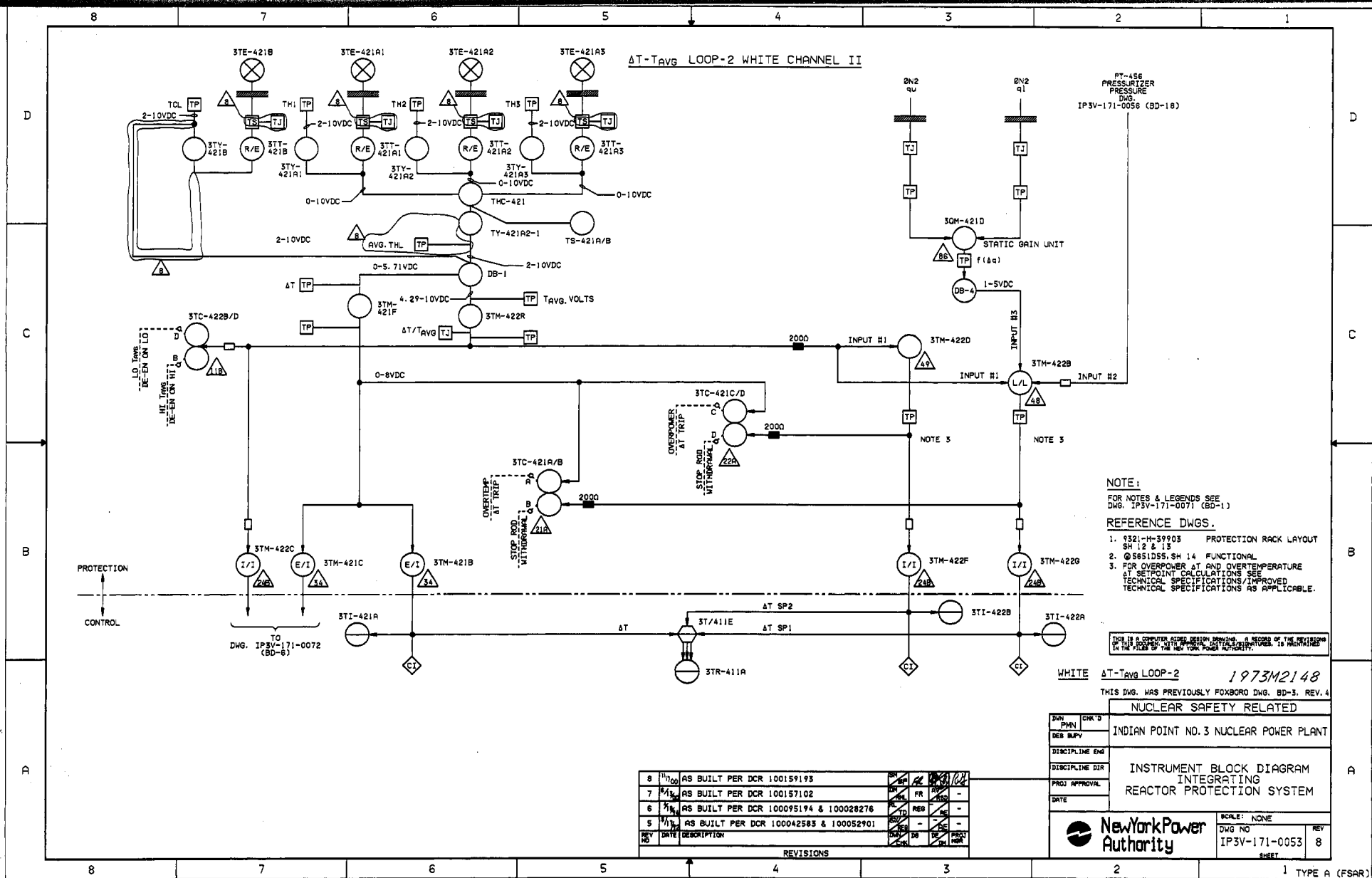
New York Power
Authority

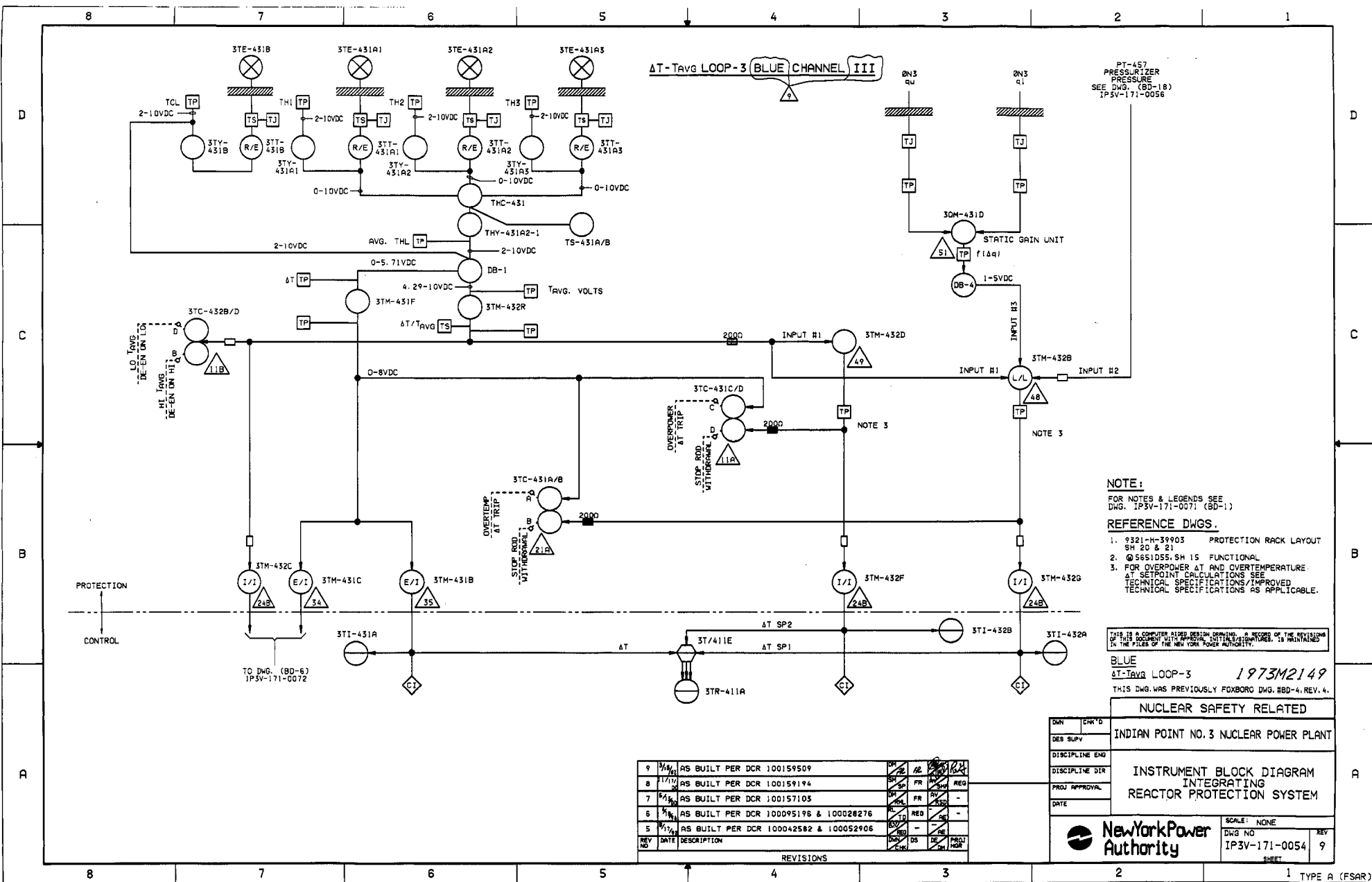
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DWG NO
IP3V-171-0052
SHEET

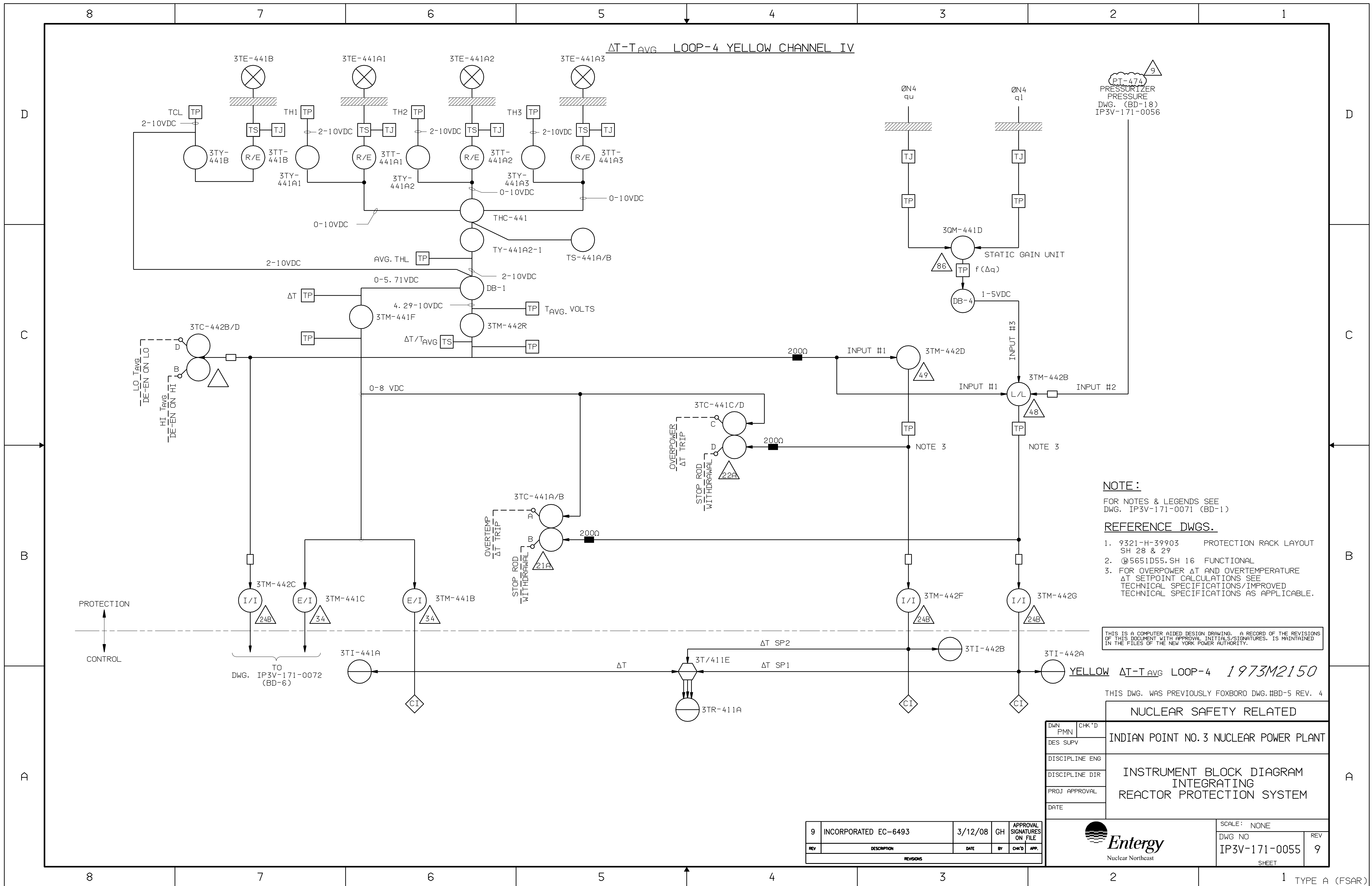
REV
8

REV	DATE	DESCRIPTION	BY	CHK'D	APP'D
8	11/10/00	AS BUILT PER DCR 100159196	AS	FR	AS
7	11/13/00	AS BUILT PER DCR 100157101	AS	FR	AS
6	11/14/00	AS BUILT PER DCR 100095192 & 100028276	AS	FR	AS
5	11/17/00	AS BUILT PER DCR 100042584 & 100052888	AS	FR	AS

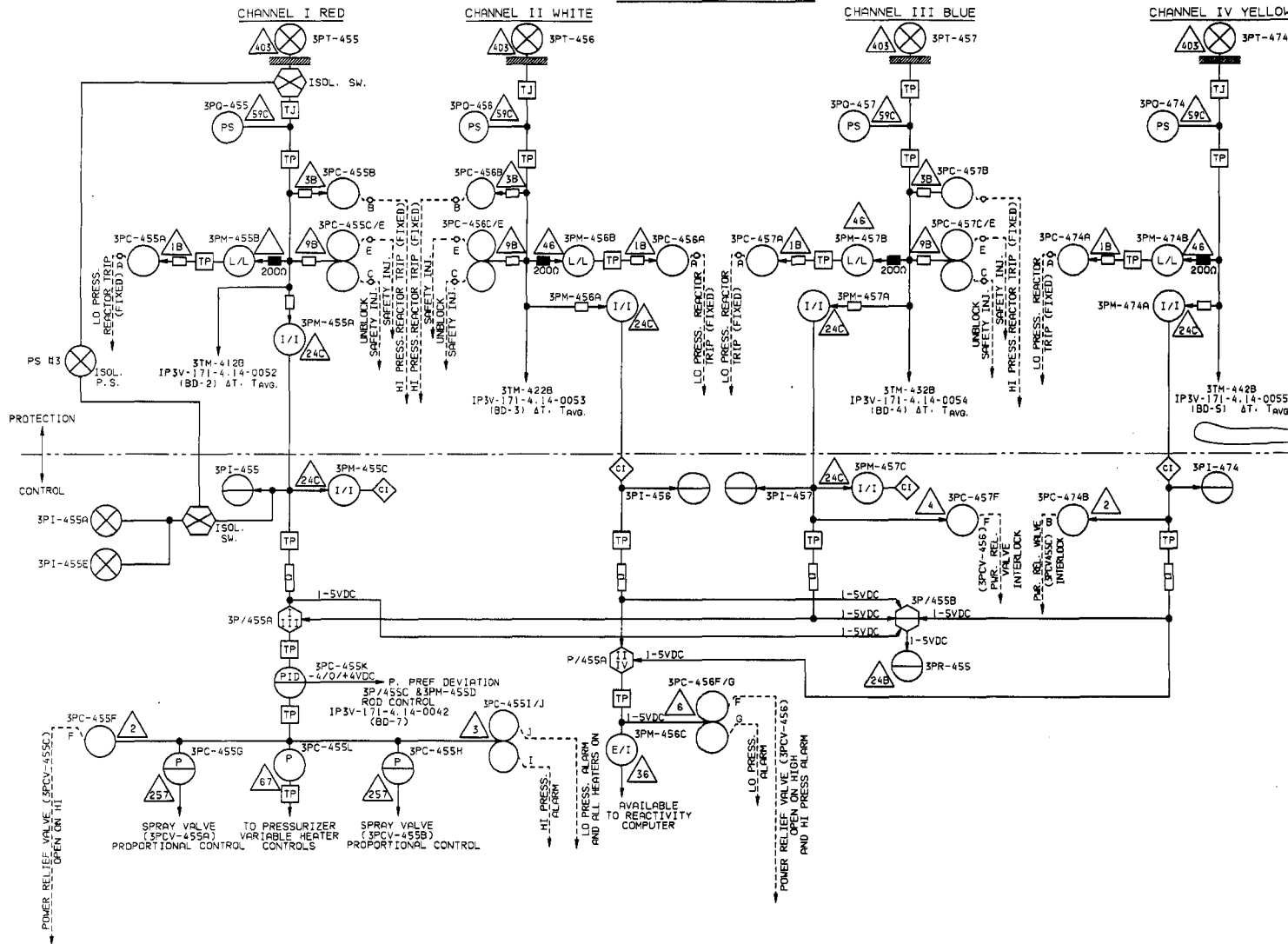
REVISIONS







PRESSURIZER PRESSURE



NOTE:

FOR NOTES & LEGENDS SEE
DWG. IP3V-171-4.14-0055 (BD-1)

REFERENCE DWGS.

5651D55 SH. 1 = FUNCTIONAL

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PRESSURIZER PRESS. 1973M2163

THIS DWG. WAS PREVIOUSLY FOXBORO DWG. BD-18, REV. 5.

NUCLEAR SAFETY RELATED

INDIAN POINT NO. 3 NUCLEAR POWER PLANT

INSTRUMENT BLOCK DIAGRAM
INTEGRATING
REACTOR PROTECTION & CONTROL
SYSTEM

DWG. PMN
DES. SUPV.
DISCIPLINE ENG
PROJ. APPROVAL
DATE



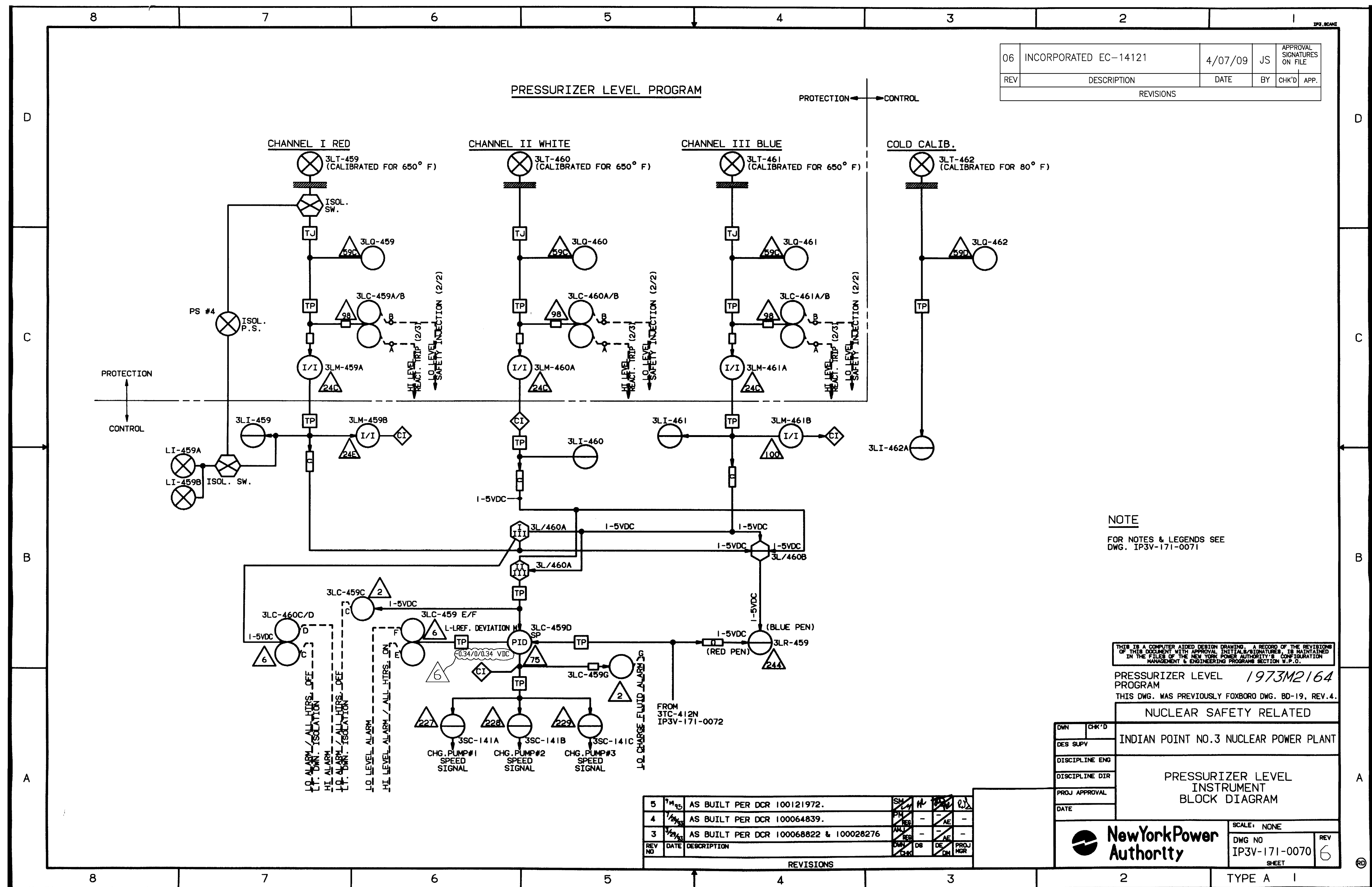
New York Power
Authority

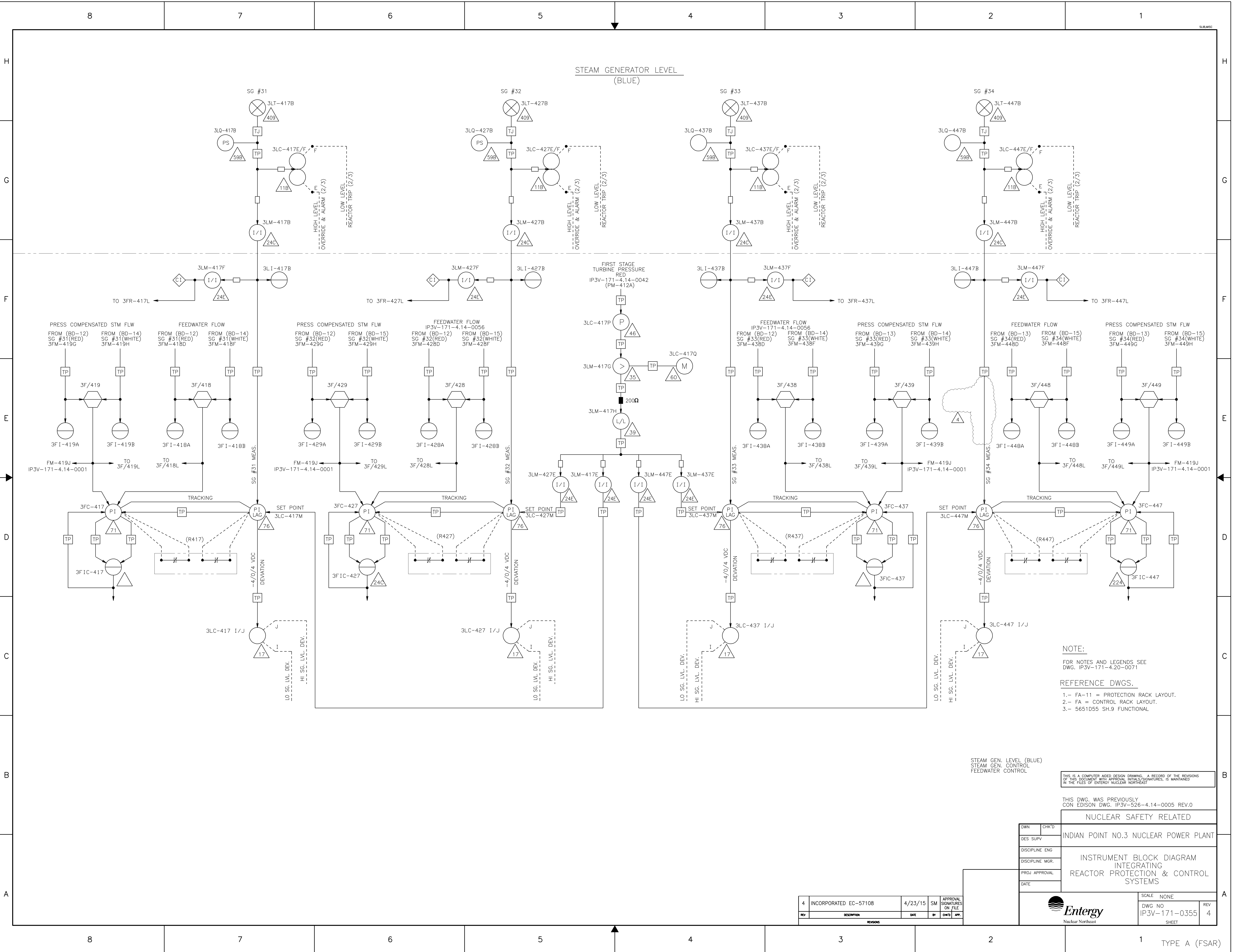
SCALE: NONE
DWG. NO.
IP3V-171-0056
SHEET

REV 6

REV	DATE	DESCRIPTION	BY	CHK'D	APP'D
6	9/10/80	AS BUILT PER DCR 100157119	FR	FR	REG
5	1/2/81	AS BUILT PER DCR 100124998	FR	FR	REG
4	9/1/80	AS BUILT PER DCR 100109242	FR	FR	REG
3	8/1/80	AS BUILT PER DCR 100058497	FR	FR	REG

REVISIONS





4

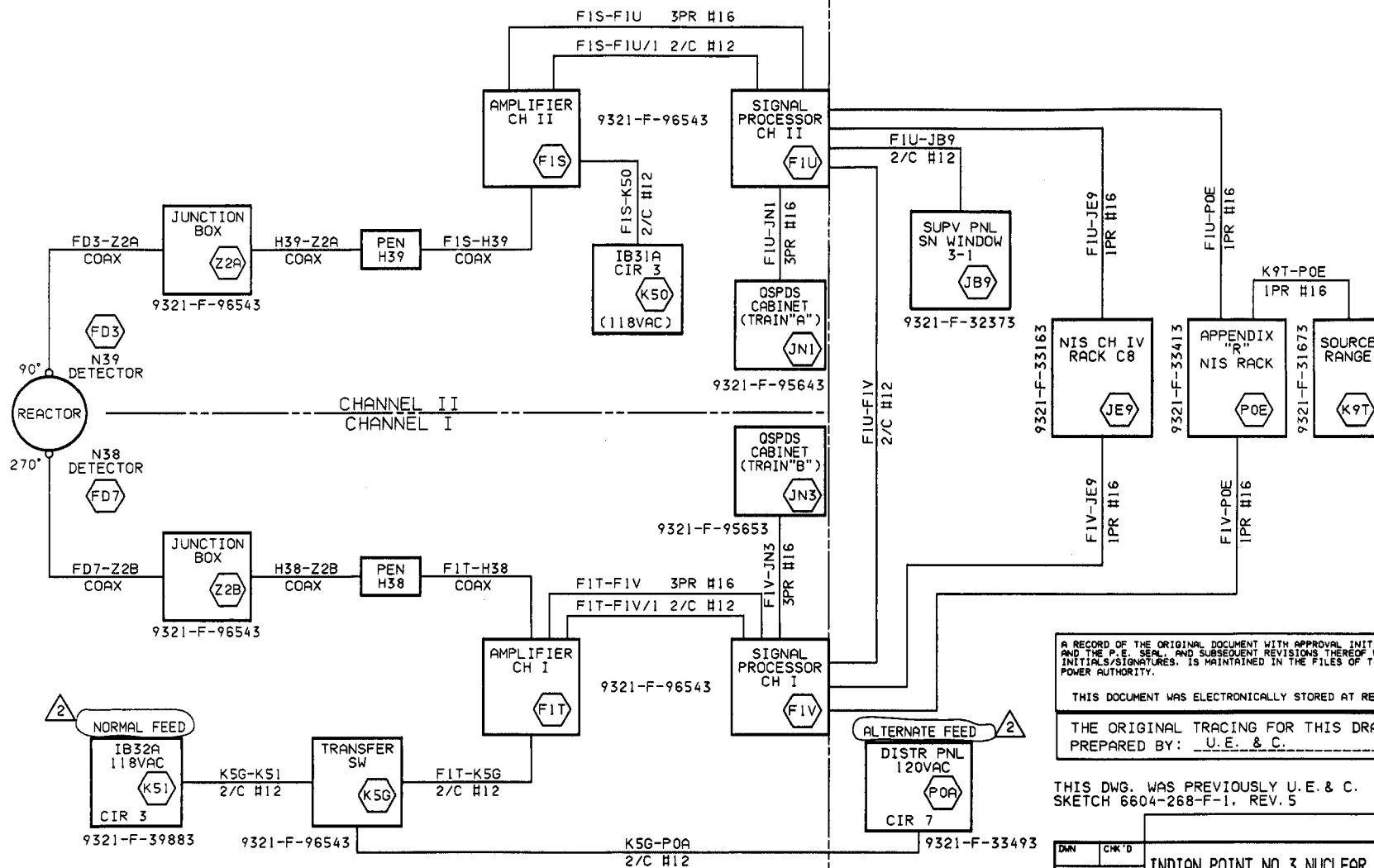
3

2

1

SAFETY RELATED (CATEGORY I)

NON SAFETY RELATED (SIGNALS CATEGORY M)



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THIS DOCUMENT WAS ELECTRONICALLY STORED AT REVISION 0

THE ORIGINAL TRACING FOR THIS DRAWING WAS PREPARED BY: U.E. & C.

THIS DWG. WAS PREVIOUSLY U.E. & C. SKETCH 6604-268-F-1, REV. 5

2	9/1/80	AS BUILT PER DCR 100156762	RM	AL	AL	RD	
1	1/1/80	DOCUMENT ELECTRONICALLY CONVERTED	KS	RG	REG	AE	-
REV NO	DATE	DESCRIPTION	CHK	DS	DE	DM	PROJ APP.

REVISIONS

DWN	CHK'D	INDIAN POINT NO. 3 NUCLEAR POWER PLANT
DES SUPV		
DISCIPLINE ENG		
DISCIPLINE MOR.		
PROJ APPROVAL		SCHEMATIC BLOCK DIAGRAM EXCORE NEUTRON FLUX DETECTION SYSTEM
DATE		
New York Power Authority		SCALE NONE
DWG NO 9321-LL-96553		REV 2
SHEET		

1 TYPE A (FSAR)

200-1-96553
 11/10/2000 11:30:23 11/10/2000

