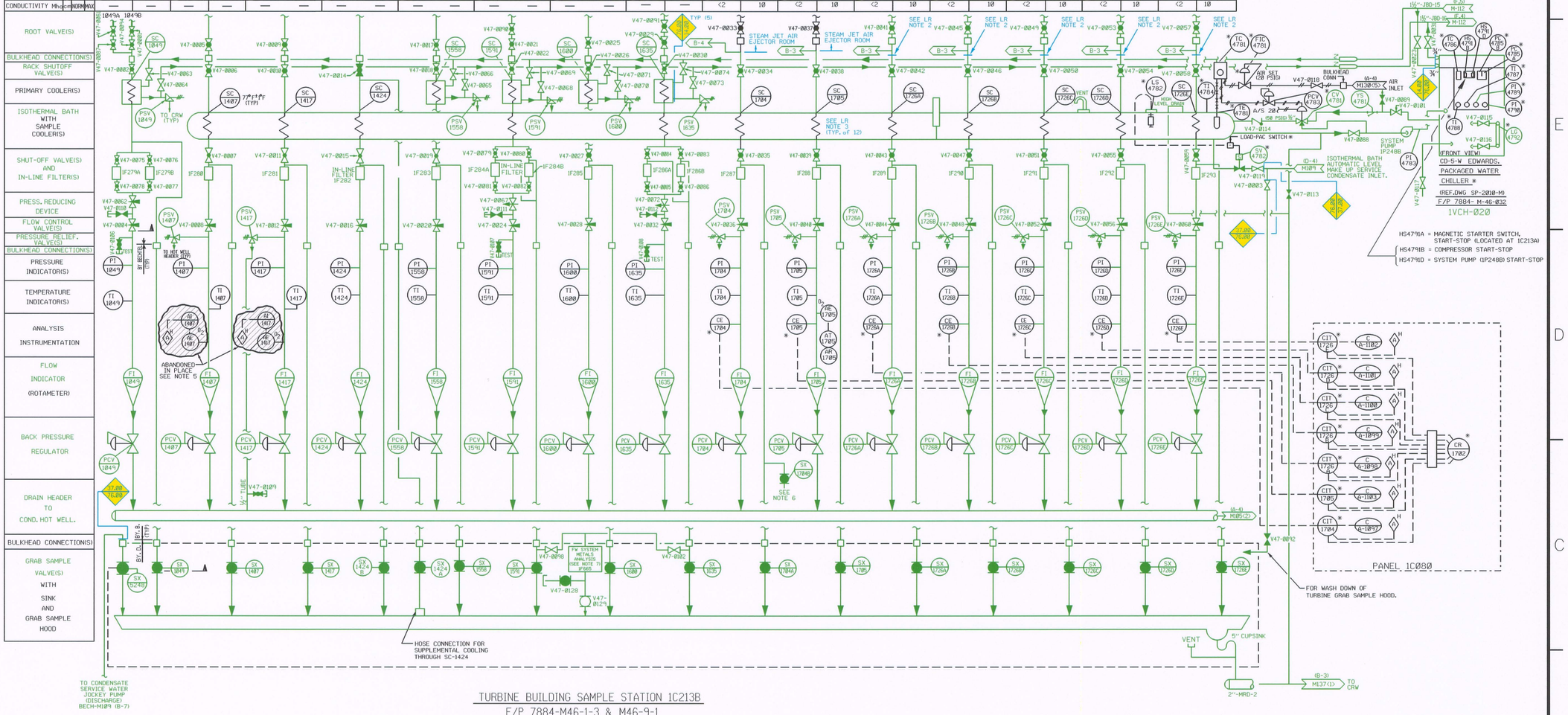
P&ID DWG REF. NO.	M103<1> (D-3)	M106 (C-6)	M106 (C-3)	M106 (B-3)	M107 (E-3)	M107 (F-7)	M107 (B-3)	M107 (D-8)	M108 (D-3)	M108 (B-3)	M108 (E-2)	M108 (E-3)	M108 (E-4)	M108 (E-4)	M108 (E-5)
SAMPLE DESCRIPTION	PRIMARY STEAM SN 1049A & SN 1049B	CONDENSATE PUMP IP 8A SAMPLE POINT	CONDENSATE PUMP IP 8B SAMPLE POINT	STEAM PACKING EXHAUSTER 1E-9 SAMPLE POINT	LP HEATER 1E-3A FEEDWATER SAMPLE	H.P. HEATER 1E-6A OUTLET-FEEDWATER SAMPLE	LP HEATER 1E-3B FEEDWATER SAMPLE	H.P. HEATER 1E-6B OUTLET-FEEDWATER SAMPLE	CONDENSATE TO DEMINERALIZERS SAMPLE	CONDENSATE FROM DEMINERALIZERS SAMPLE	CONDENSATE DEMINERALIZER TANK 1T-13A EFFL. SAMPLE	CONDENSATE DEMINERALIZER TANK 1T-13B EFFL. SAMPLE	CONDENSATE DEMINERALIZER TANK 1T-13C EFFL. SAMPLE	CONDENSATE DEMINERALIZER TANK 1T-13D EFFL. SAMPLE	CONDENSATE DEMINERALIZER TANK 1T-13E EFFL. SAMPLE
INSTRUMENT NUMBERS	SC-1049 PI- TI- FI- PCV- SX-	SC-1407, AI-1407 PSV- PI- TI- AE- FI- PCV- SX-	SC-1417, AI-1417 PSV- PI- TI- AE- FI- PCV- SX-	SC-1424 PI- TI- FI- PCV- SX-	SC-1558 PI- TI- FI- PCV- SX-	SC-1591 PI- TI- FI- PCV- SX-	SC-1600 PI- TI- FI- PCV- SX-	SC-1635 PI- TI- FI- PCV- SX-	SC-1704, FI-1704 PSV- PI- TI- CE- PCV- SX- A B	SC-1705, CE-1705 PSV- PI- TI- AT- AR- FI- POV- SX-	SC-1726A, FI-1726A PSV- PI- TI- CE- PCV- SX-	SC-1726B, FI-1726B PSV- PI- TI- CE- PCV- SX-	SC-1726C, FI-1726C PSV- PI- TI- CE- PCV- SX-	SC-1726D, FI-1726D PSV- PI- TI- CE- PCV- SX-	SC-1726E, FI-1726E PSV- PI- TI- CE- PCV- SX-
LINE NUMBER	20"-EBD-2	16"-GBD-1	16"-GBD-1	24"-GBD-2	16"-GBD-8	16"-DBD-4	16"-GBD-8	16"-DBD-4	24"-GBD-3	24"-GBD-4	12"-GBD-4	12"-GBD-4	12"-GBD-4	12"-GBD-4	12"-GBD-4
PRESSURE OPER. / MAX.	1000 / 1365	472 / 575	472 / 575	467 / 575	346 / 575	1200 / 1980	346 / 575	1200 / 1980	467 / 575	407 / 575	407 / 575	407 / 575	407 / 575	407 / 575	407 / 575
TEMPERATURE OPER. / MAX.	545 / 573	112 / 112	112 / 112	113 / 113	278 / 278	424 / 424	278 / 278	424 / 424	114 / 114	114 / 114	114 / 114	114 / 114	114 / 114	114 / 114	114 / 114
CONDUCTIVITY Mhos NORM / MAX	— / —	— / —	— / —	— / —	— / —	— / —	— / —	— / —	<2 / 10	<2 / 10	<2 / 10	<2 / 10	<2 / 10	<2 / 10	<2 / 10



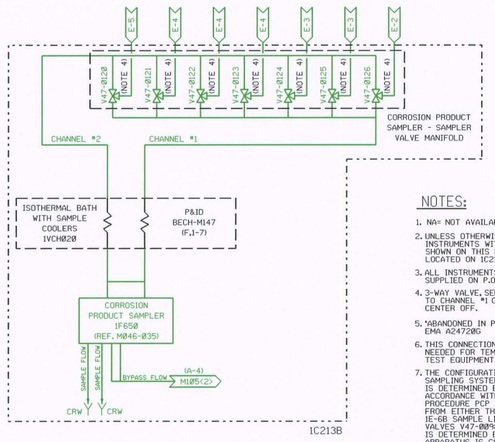
TURBINE BUILDING SAMPLE STATION 1C213B
F/P 7884-M46-1-3 & M46-9-1
(REF. DELPHI. DWG. NUMBER-03120)

TURBINE BLDG LOCAL GRAB SAMPLE POINTS

P&ID	POINT NO.	LINE/EQUIP.NO.	DESCRIPTION
M131	SX3133A	1T003	L.O. CENTRIFUGE OIL INLET SAMPLE
M131	SX3133B	1T003	L.O. CENTRIFUGE OIL OUTLET SAMPLE
M131	SX3133C	1T003	L.O. CENTRIFUGE WATER OUTLET SAMPLE
M131	SX3147	1T002A	CLEAN L.O. STORAGE TANK OIL SAMPLE
M131	SX3149	1T002B	DIRTY L.O. STORAGE TANK OIL SAMPLE
M132	SX3211	1T034	DIESEL OIL STORAGE TANK SAMPLE
M109	SX5245	1T045	DEMINERALIZED WATER
M109	SX5248	1P011	CONDENSATE SERVICE WATER

TURBINE BLDG. LOCALLY MOUNTED CONDUCTIVITY POINTS

P & ID	INSTR NO.	LINE / EQUIP NO	DESCRIPTION	READING LOCAL	INSTR REMOTE
M106	CE1515A	24"-HBD-15	CONDENSER 1E007B OUTLET CONDUCTIVITY	CIT1515A	CR1514
	CE1515B	COND 1E007B	CONDENSER 1E007B CONDUCTIVITY	CIT1515B	
	CE1515C			CIT1515C	
	CE1515D			CIT1515D	
	CE1515E			CIT1515E	
	CE1516A	24"-HBD-15	COINDENSER 1E007A OUTLET CONDUCTIVITY	CIT1516A	
	CE1516B	COND 1E007A	CONDENSER 1E007A CONDUCTIVITY	CIT1516B	
	CE1516C			CIT1516C	
	CE1516D			CIT1516D	
	CE1516E			CIT1516E	
M109	CE5209	4"-HCD-20	DEMINERALIZED WATER	CIT5209	—



NOTES:

1. NA= NOT AVAILABLE
2. UNLESS OTHERWISE SHOWN ALL INSTRUMENTS WITH TAG NUMBERS SHOWN ON THIS P&ID WILL BE LOCATED ON 1C213B.
3. ALL INSTRUMENTS SHOWN ARE SUPPLIED ON P.O. M-46.
4. 3-WAY VALVE, SELECTABLE TO CHANNEL #1 OR #2 WITH CENTER OFF.
5. "ABANDONED IN PLACE" BY EMA A247206.
6. THIS CONNECTION USED AS NEEDED FOR TEMPORARY TEST EQUIPMENT
7. THE CONFIGURATION OF THE FEEDWATER SAMPLING SYSTEM INSIDE THE SAMPLE HOOD IS DETERMINED BY PLANT CHEMISTRY IN ACCORDANCE WITH PLANT CHEMISTRY PROCEDURE PCP 2.5. SAMPLES CAN BE TAKEN FROM EITHER THE H.P. HEATER 1E-6A OR 1E-6B SAMPLE LINE. THE POSITION OF ISOLATION VALVES V47-0098 AND V47-0102 (OPEN OR CLOSED) IS DETERMINED BY WHICH LINE THE SAMPLING APPARATUS IS CONNECTED TO.

D-069

NO.	DATE	REVISION	DR'TR.	CHK'D.	ENGR.	LEAD
0	9/19/00	INITIAL RELEASE	KB	JVS	TH	CLB

IES UTILITIES INC.

P&ID
TURBINE BUILDING SAMPLE SYSTEM

DWG. NO. BECH-M147-LR REV. 0

BASE P&ID REV 33

LR NOTES:

1. EXPOSED DRAIN PIPING IS IN SCOPE FOR LICENSE RENEWAL BECAUSE IT AFFECTS SAFETY RELATED EQUIPMENT.
2. BOUNDARY BETWEEN THE TURBINE BUILDING CONDENSATE DEMINERALIZER TANK PITS AND THE TURBINE BUILDING 2ND FLOOR SAMPLE STATION AREA.
3. SAMPLE COOLING COILS ARE LOCATED INSIDE THE ISOTHERMAL BATH TANK AND THUS ARE NOT AVAILABLE TO LEAK OR SPRAY ON ANY OTHER COMPONENT.

LR LEGEND:

- COMPONENTS IN SCOPE PER 10CFR54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 54.21
- COMPONENTS NOT SUBJECT TO AMR
- COMPONENTS IN SCOPE PER 10CFR54.4(a)(2) AND SUBJECT TO AMR PER 54.21
- SYSTEM BOUNDARY INTERFACE
  - 14.00 REACTOR BUILDING CLOSED COOLING WATER
  - 37.00 CONDENSATE AND DEMINERALIZED WATER
  - 76.00 TURBINE BUILDING SAMPLING