237127A-M368

FLOW DIAGRAM—STEAM GENERATOR BLOWDOWN TREATMENT SYSTEM

WISCONSIN PUBLIC SERVICE CORPORATION
KEWAUNEE NUCLEAR POWER PLANT - UNIT NO. 1
CARLTON, KEWAUNEE COUNTY, WISCONSIN

Designed By Pioneer Service & Engineering Co. Chicago

237127A-M368 W

FUNCTIONAL DESCRIPTION 237127A-M710

REVISIONS

K AT E-1 THRU E-3 ADDED TM ANALYTICAL INSTR. PANEL DRAWING & VALVES BT8-1, BT8-1, & BT13-2 IN ACCORD W/ DESIGN CHG. NO M-168 DR. R.E. CK. RE 2-28-74 2ND LEV REV. 12-11-74 FILMED 2-18-74

L AT D-5 ADDED 2" BLOWDOWN LINE FROM STM GEN. 2A & 2B HEAT EXCHANGERS IN ACCORD. W/ DESIGN CHG. NO. M-166 DR. R.E. CK. RE 6-9-75 2ND LEV. REV. 6-25-76 FILMED 6-26-75

M AT A-1 CHG'D INSTR. NO A-73539-21 WAS A-18901-11, AT A-3 INSTR. NO. A-73539-23 WAS A-18901-13 AT B-1 INSTR. NO. A-73539-25 WAS A-18901-12 AT B-3 INSTR. NO. A-73539-24 WAS A-18901-42, ALL IN ACCORD. W/ DESIGN CHG. NO M-268 DR. D.D. CK. R.E. 12-29-75 FILMED 1-2-76

N AT H8, 3 DELETED FI1064, FT1064 & WO12-17, ADDED FE 2709, FI53306, FI53307, & CV13627 WO66-1 PER DCR 223 BY: RCL 3/JUNE/77 CHK'D: WWW 4/5/77 APP'D: WWW 4/5/77 FILMED: 8-19-77

P ADDED SGBT-1X PRE-FILTER VALVES BT7-49, 7-48, 7-50, 8-27, 29-1 & DPI1653. DCR 545 BY: RCL 28/SEPT/77 CHK'D(REQ'D) APP'D(REQ'D) 11/APR/78 FILMED: 4-24-78

C AT D-10 ADDED NON-SV ZONE, SV ZONE, FLYGD RAMS IN BODY OF DWG. AT C-9 & D-9 ADDED CK VLV BT9-5 & BT-10-5 & 6 ADDED VLVS, BT7-28 & 29, AT F-8 ADDED CK VLV, BT10-7 & 8 FROM WASTE EVAP. DIST. FILTER, AT B-7 ADDED 2" LINE FROM WASTE EVAP. DIST. FILTER (JOIN 3" LINE) WAS BT7-5, BT10-13, WAS BT7-6, BT10-14, WAS BT7-7, BT10-15, ADDED CK VLV, BT11-5 DEMIN. WATER LINES & VALVES, AT A-5 REVISED AREA ENCLOSURE OR CONNS. ON ION EXCHANGERS, DR. R.E. CK. RWL 10-26-71 2ND. LEV REV. 11-3-71 FILMED 11-3-71

D AT A-4 ADDED RED. 6" x 2" SIZE FOR CV. AT B-10 & B-11 REVISED 11/4" POST FILTERS 1A & 1B, BYPASS AND B-4 DRAIN LINES AT C-2, ADDED TIE-IN TO WASTE EVAP. SUMP PUMP DISCH. "DRAWN: L. SPICE 2-22-78 CHK'D: D.G.R. 2-27-78 APP'D: R.W.L. 3-1-78 FILMED: 3-16-78

R AT A-3 CHG'D ALARM NR 18901-19 TO 73539-24 AND AT D-3 CHG'D 73539-24 TO 18901-42 "AS-BUILT" BY: RCL 15/APR/79 CHK'D: JKS 24/APR/79 APP'D: REQ'D FILMED: 5-15-79

S SGBT ION-EXCH POST FILTERS 1A & 1B, REVISED PIPING, ADDED VLVS BT8-29 & BT8-30 PER DCR 986 DWN: RD 12-3-81 CHK'D: APP'D: FILMED:

S ADDED FLANGES PER SPEC. 2-72 DWN: JT 3/9/82 CHK'D: JS 3/19/82 APP'D: PEM 3/19/82 FILMED: 8-19-82

S1-1 REVISED VALVE AT COORD H-2 PER DCR 1227 BY: KWOPE 8-31-82 CHK'D: S.P. 8-31-82

T DCR 1227 COMP. SEE REV. S1-1 APP'D: R.W.L. 1/5/84 FILM'D: WPS 1-10-84

T-1 NO WORK REQUIRED ON THIS DWG. WORK DONE ON OPER. DWG ONLY PER DWG LIST BY: L. ZEHREN 10 21 86 CHK'D JAH 10-28-86

J AT H7 REVISED DECRIPTION OF PIPING IN ACCORD WITH DESIGN CHG. NO. M-157, CHGD. MISC. FLOW DIAGRAM COORD. REFERENCES. DR. RWJ CK. R.E. 1-21-76 2ND LEV. REV. 4-27-77 FILMED 5-2-77

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DESIGN SECTION APPROVALS

SECTION	INITIALS	DATE
ELECTRICAL	[illegible]	7/27/77
ELEC. CONTROL	—	—
LIGHTING	—	—
MECHANICAL	—	—
INSTRUMENT	WLC	11/1/77
HTG. VEN. & AIR.	JP	7/11/78
STR. ANAL. & DSP.	—	—
NUCLEAR	[illegible]	7/27/77
HYDRAULIC	—	—
STRUCTURAL	—	—
SUPERVISOR	[illegible]	7-12-78

T-2 ADDED FLANGES ON SGBT 1X 12" PER VCR 2989 BY: L. ZEHREN 8 28 86 CHK'D JAH 10 29 86

U DCR 980 COMPL. SEE REV. T-2 APP'D: DMM 10-21-86 FILM'D: (WPS) 11 11 86

V DWG DISCR. COMPL. SEE REV. T-1 APP'D: WMB 12-19-86 FILM'D: (WPS) 1-6-87

WISCONSIN — LAWRENCE E. NEWHART, JR. E-11224 GLEN ELLYN, ILLINOIS — PROFESSIONAL ENGINEER — SEAL

NOTES:-
1. DRAINS TO TRENCH TERMINATE IN SUMP TANK
2. VALVES ARE SHOWN WITH SGBT SYSTEM IN ITS NORMAL OPERATING MODES. SGBT SYSTEM IS NOT OPERATING DURING NORMAL PLANT OPERATION.
3. ALL PIPING THIS SHEET IS Q.A. TYPE 3, EXCEPT AS OTHERWISE NOTED.

* GATE VALVE WITH 3/16" DIA. HOLE THRU DISC.

LEGEND: NON-SV ZONE | SV ZONE

NOT COMPLETE DCR986 DWG. DISCR.

TI APERTURE CARD 8802100163