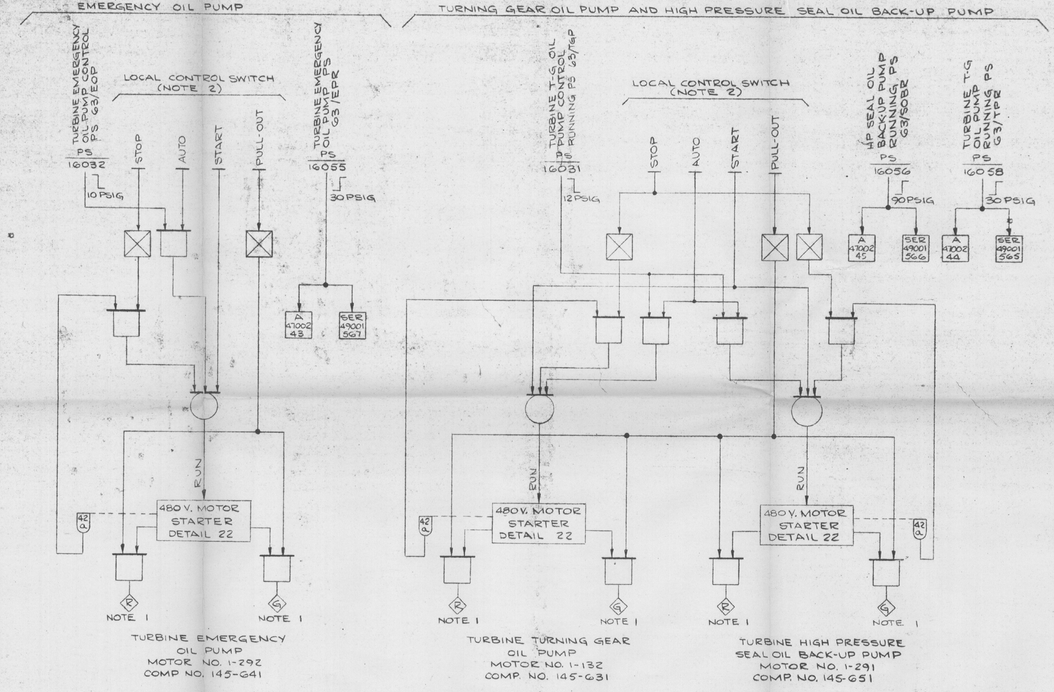
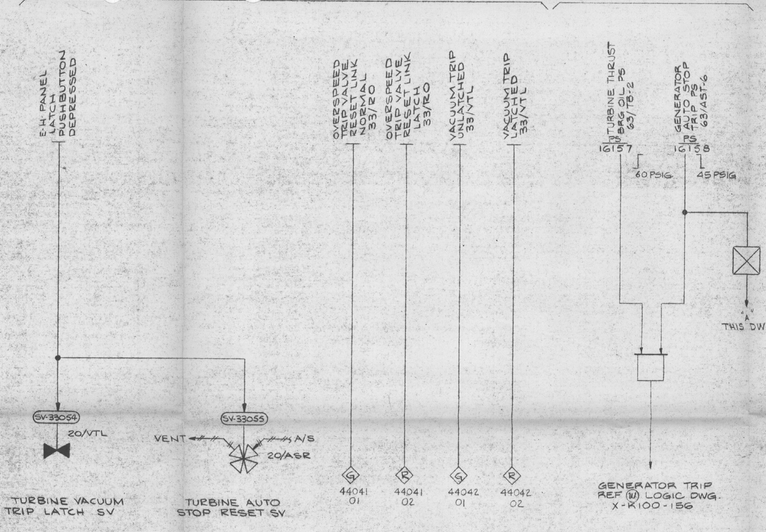




NOTES:
1. MOUNTED ON TURBINE GEAR CONSOLET
2. 3 POSITION SPRING RETURN TO AUTO PLUS PULLOUT (PULLOUT/STOP/AUTO/START) MOUNTED IN TURNING GEAR CONSOLET.
3. THE FOLLOWING MECHANICAL TRIPS WILL ALSO RESULT IN THE DUMPING OF AUTO STOP OIL TO TRIP THE TURBINE:
   a. LOW CONDENSER VACUUM
      10" Hg ABS. (UNLATCHED)
      25"-4.5 PSIG (LATCHED)
   b. THRUST BEARING
      75-80 PSIG
   c. LOW BEARING OIL PRESSURE
      5-7 PSIG
   d. MANUAL TRIP OF OVERSPEED TRIP MECHANISM.
4.
5.
6.
7.
8. OUTPUT ALSO GOES TO LOGIC "1" ON CHANNEL FAILURE

DESIGN DRAWING FOR DCR 1672

REVISIONS

	[illegible] AMSAC
	[illegible]
	[illegible]
	ZERO [illegible]

B REVISED TURB GEN MOTOR OIL SETPOINT DWN: TDE 8-17-73 CHKD: WJ 8-17-73 APPD: JCC 8-17-73 FILMED: 8-17-73

C REMOVED SIGNAL TO 2CHEATER STM SUPPLY VLV ON E1629. DWN: F.J.T. 11-21-73 CHKD: WED 11-23-73 APPD: JCC 11-23-73 FILMED: 11-30-73

D ADDED SIGNALS FROM MS ISOLATION VLVS TO THE TURB AUTO STOP TRIP S/S. (DCM-188) DWN: TY.MOY 4-30-74 CHKD: MAB 5-2-74 APPD: WJK 5-3-74 FILMED: 5-6-74

E CHANGED THE ALARM POINT ASSOCIATED WITH PS-16056 FROM 4700244-70 TO 4700245-45 BUILT DWN: TY.MOY 7-1-74 CHKD: MAB 7-1-74 APPD: WJK 7-1-74 FILMED: 7-8-74

E-1 UDS PROJ. #380207 DCR-1008 REMOVED SINGLE CHANNEL OVERSPEED TRIP SYSTEM. ADDED REDUNDANT CHANNEL OVERSPEED TRIP SYSTEM, DELETED ALARM A47003243 & SER 49001374. REVISED ALARMS A47003233, A47001453, & SER 49001385. REMOVED NOTES 4, 5, & 7. ADDED NOTE 8, DWN: AC.C. 3-2-82 CHKD: R.S. 3-15-82 APPD: DE.COV 3-19-82

PDS FILMED 3-29-82

E-2 INFO. TRANS. PER DCR-1008 DWN: KNOPP 7-16-82 CHK'D: LP 7-26-82

F DCR 1008 COMPLETE SEE REV. E-2 APP'D: JJK 7-15-83 FILMED: 8-17-83

F-1 ADDED NOTE TRAIN A TO STOP TURBINE OIL LOG E-5 PER DWG. DISC# BY: E.TWITTY 2-8-84 CHK'D: M.M. 2-8-84

G DRAWING DISCREPANCY COMPLETE, SEE REV. F-1 APP'D: B.BERNDT 3-2-84 FILED 3-22-84

G-1 DCR 1008 ADDED ANNUNCIATOR (A47003233) ACTIVATION FOR OVERSPEED TRIP RELAY ACTIVATION BY: KTB 9-2-84 CHK'D: JM 9-7-84

H DCR 1008 COMPLETE SEE REV. G-1 APP'D: PED 9-14-84 FILMED (APT) 10-25-84

H-1 DCR 1008 "AS BUILTS" AS WIRED DWG. NO. 237127A-E2057 CHANGES: 2 ADDED, 2 DELETED, 2 CHANGED, 1 MOVED DWN: KTB 11-2-84 CHK'D: JM 11-5-84 JJCC/JM X-Connect SEE REV. H-1 APP'D: PED 11-13-84 FILMED (APT) 11-27-84

DESIGN SECTION APPROVALS

SECTION	INITIALS	DATE
ELECTRICAL	[illegible]	3/17/83
ELEC. CONTROL	—	—
LIGHTING	—	—
MECHANICAL	JWL	4-1-83
INSTRUMENT	—	—
NTR, PLG. & VTG.	—	—
STR. ANAL. & SUP.	—	—
NUCLEAR	X	4-19-83
HYDRAULIC	—	—
STRUCTURAL	—	—
SUPERVISOR	[illegible]	4-19-83

SEAL

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

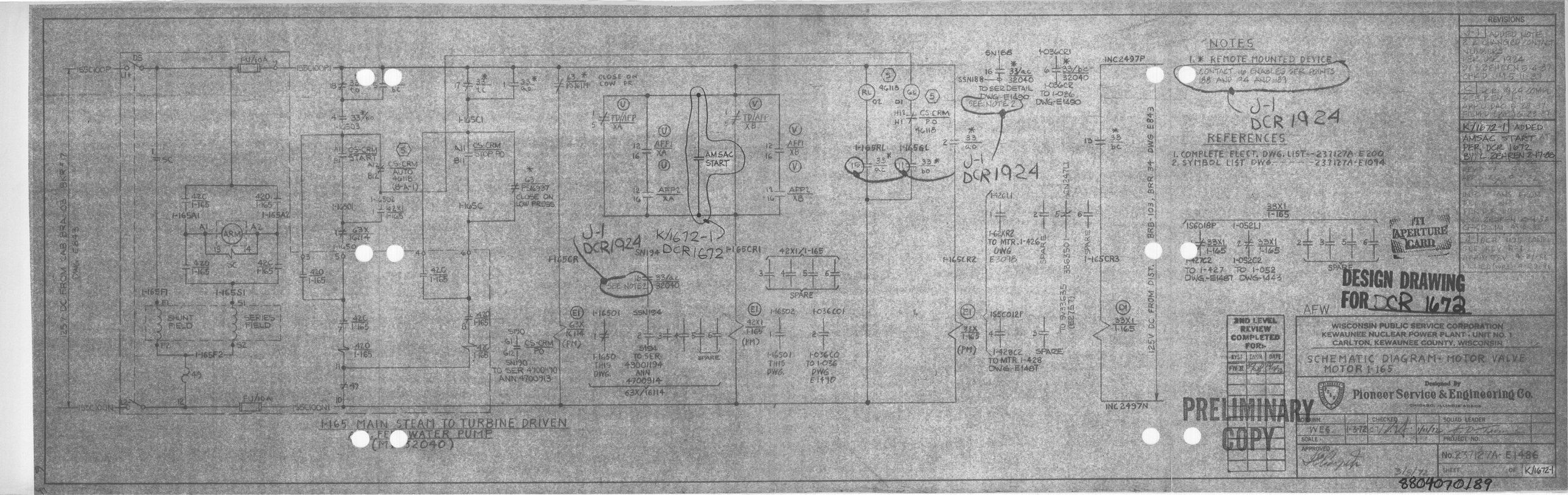
INTEGRATED LOGIC DIAGRAM TURBINE SYSTEM

Designed By
Pioneer Service & Engineering Co.
Chicago, Ill. 60606

	DRAWN	DESIGNED	AED
	3-1-82	JCC 4-12-83	
	CHECKED	CHECKED	
	MAB 4-12-83		
APPROVED	4-19-83	PROJECT & DWG. NO.	SHT 2 OF 4
		237127A-E2057	J/1672-1

237127A-E2057 (J)

PRELIMINARY COPY



NOTES

1. * REMOTE MOUNTED DEVICE CONTACT 10 ENABLES SER POINTS 188 AND 194 AND 189

J-1 DCR 1924

REFERENCES

1. COMPLETE ELECT. DWG. LIST--237127A-E200
2. SYMBOL LIST DWG-- 237127A-E1094

REVISIONS

J-1	ADDED NOTE 1, 2 CHANGED CONTACT NUMBER PER DCR 1924 DRAWN BY J.F. ZEHREN 2-14-80 CHKD. J.M. SILL 2-19-80
K/1672-1	ADDED AMSAC START PER DCR 1672 BY L. ZEHREN 2-17-80

DESIGN DRAWING FOR DCR 1672

AFW

2ND LEVEL REVIEW COMPLETED FOR:-

	SYST	DWG	DATE
FW II			

PRELIMINARY COPY

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

SCHEMATIC DIAGRAM - MOTOR VALVE MOTOR 1-165

Designed By
Pioneer Service & Engineering Co.
CHICAGO, ILLINOIS 60606

DRAWN	CHECKED	SQUAD LEADER
WES	1-372	

SCALE: PROJECT NO.

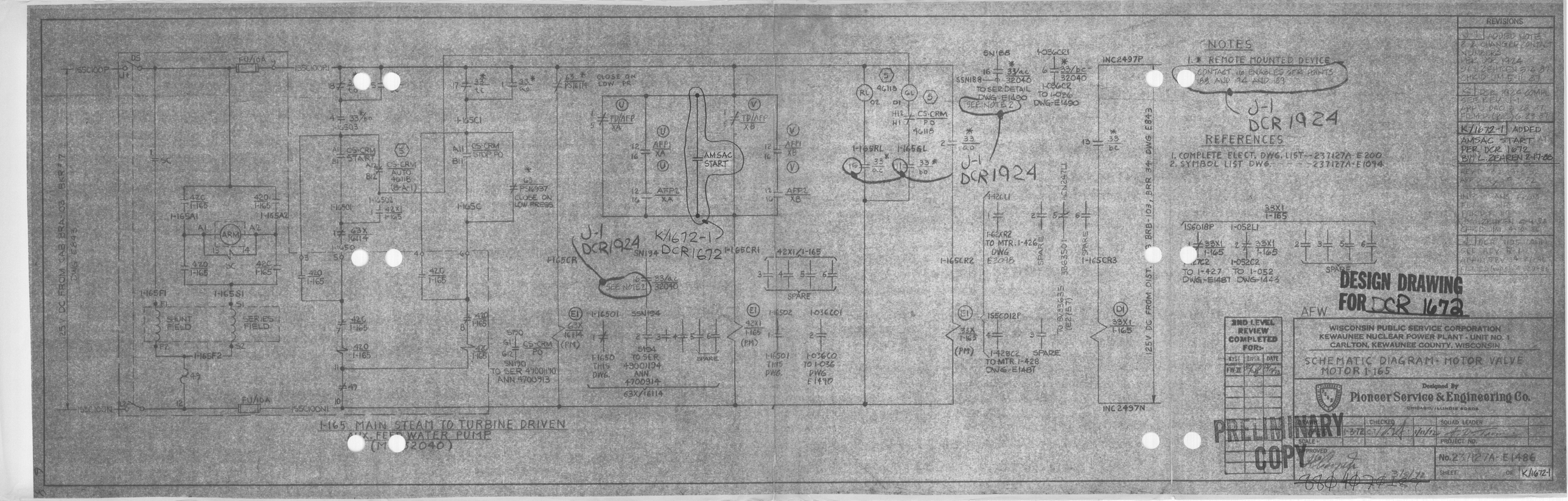
APPROVED 3/5/80

No. 237127A-E1486

SHEET OF K/1672-1

APERTURE CARD

8004070189


125 V DC FROM CAB BRA-103 BRK #17 DWG E843
1S5C100P
1S5C100N
D3
F41/10A
F41/10A
1S5C100P1
1S5C100N1
1-165 MAIN STEAM TO TURBINE DRIVEN AUX. FEED WATER PUMP (M-32040)
1-165A1
1-165A2
ARM
1-165F1
SHUNT FIELD
1-165S1
SERIES FIELD
1-165F2
CS-CRM START
CS-CRM AUTO 46116 (8-A-1)
CS-CRM STOP PO
1-165C1
1-165C
1-165D1
1-165D
1-165CR
1-165CR1
CLOSE ON LOW PRESS
CLOSE ON LOW PR
TD/AFP XA
TD/AFP XB
AFP1 XA
AFP2 XA
AMSAC START
AFP1 XB
AFP2 XB
J-1 DCR1924
K/1672-1 DCR1672
SN194
SEE NOTE 2
1-165RL
1-165SL
SN188
TO SEE DETAIL DWG-E1490
SEE NOTE 2
1-036CR1
TO 1-036 DWG E1490
INC2497P
INC2497N
1-165CR2
1-165CR3
1-428LI
1-62XR2 TO MTR 1-426 DWG E2018
1SEC012P
1-428C2 TO MTR 1-428 DWG-E1487
SPARE
TO 5V33635 (E2157)
125V DC FROM DIST. PANEL BRB-103, BRK 34 DWG E843
1-036CR2
1-036CR3
1-036CO TO 1-036 DWG E1490
1-16501 THIS DWG.
1-16502 THIS DWG.
1-1650 THIS DWG.
SN194 TO SER 4900N194 ANN 4700914
SN190 TO SER 4900N190 ANN 4700913
63X/16114
42XI/1-165
33XI/1-165
1-052LI
1S6018P
1-052C2 TO 1-052 DWG-1443
1-427 DWG-E1487
NOTES
1. * REMOTE MOUNTED DEVICE CONTACT 1/0 ENABLES SER. POINTS 89 AND 94 AND 189
J-1 DCR 1924
REFERENCES
1. COMPLETE ELECT. DWG. LIST--237127A-E200
2. SYMBOL LIST DWG. -- 237127A-E1094
DESIGN DRAWING FOR DCR 1672
AFW
2ND LEVEL REVIEW COMPLETED FOR:
SYST
ENGR
DATE
FW II
WISCONSIN PUBLIC SERVICE CORPORATION
KEWAUNEE NUCLEAR POWER PLANT - UNIT NO. 1
CARLTON, KEWAUNEE COUNTY, WISCONSIN
SCHEMATIC DIAGRAM- MOTOR VALVE MOTOR 1-165
Designed By
Pioneer Service & Engineering Co.
CHICAGO, ILLINOIS 60606
DRAWN
CHECKED
SQUAD LEADER
SCALE:
PROJECT NO.
APPROVED
No. 237127A-E1486
SHEET
OF
K/1672-1
PRELIMINARY COPY
REVISIONS
J-1 ADDED NOTE 2 & CHANGED CONTACT NUMBERS PER DCR 1924 BY L. ZEHREN 5-2-89
K/1672-1 ADDED AMSAC START PER DCR 1672 BY L. ZEHREN 2-17-88