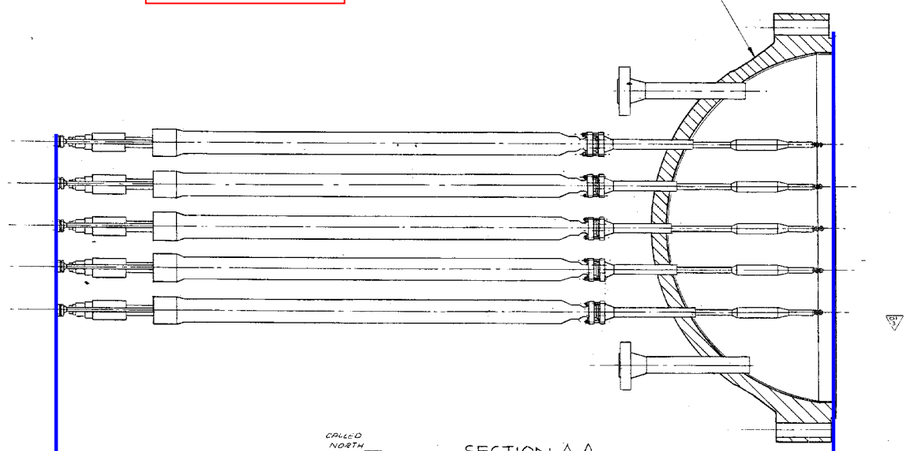
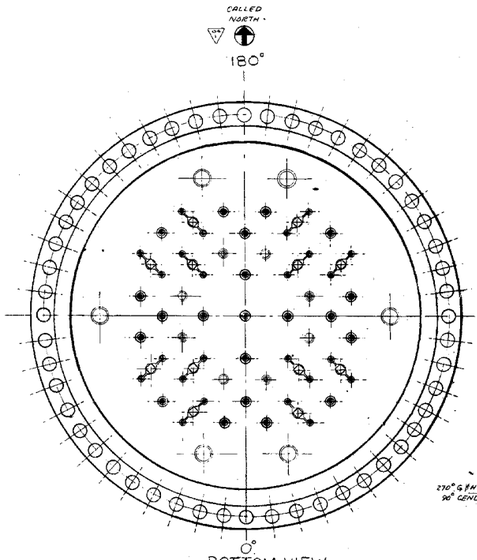
- PORTIONS OF SYSTEM WITHIN LICENSE RENEWAL SCOPE ARE BOUNDED BY LR FLAGS.
- UNLESS OTHERWISE INDICATED, VENTS, DRAINS AND TEST CONNECTIONS THAT ARE WITHIN LICENSE RENEWAL BOUNDARIES ARE INCLUDED IN LR SCOPE TO THE DISCHARGE OF THE VALVE.
- ALL INSTRUMENTATION LINES NORMALLY OPEN TO THE PROCESS SYSTEM, THROUGH AND INCLUDING THE INSTRUMENT, ARE INCLUDED IN LR SCOPE.
- IN GENERAL, LR FLAGS ARE NOT SHOWN FOR VENTS, DRAINS, TEST CONNECTIONS OR INSTRUMENT LINES EXCEPT FOR CONTAINMENT PENETRATIONS.
- THE LICENSE RENEWAL BOUNDARY INCLUDES THE PIPING AND SUPPORTS UP TO THE FIRST SEISMIC SUPPORT PAST THE BLUE BOUNDARY FLAG.

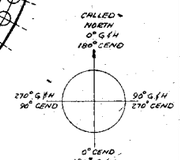
CLOSURE HEAD ASSY
CHATTANOOGA DWG NO
(E-232-416-5)



SECTION A-A



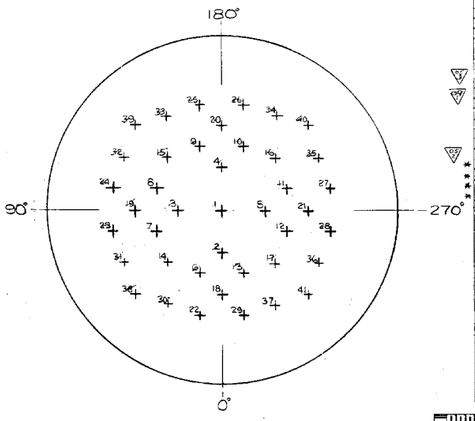
BOTTOM VIEW



KEY PLAN
(FOR CUSTOMER USE ONLY)

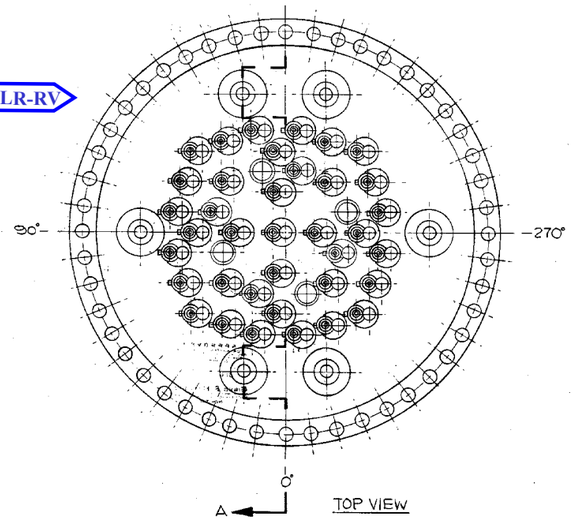
ITEM NO.	TAG NO.
1	RC-10-01
2	RC-10-02
3	RC-10-03
4	RC-10-04
5	RC-10-05
6	RC-10-06
7	RC-10-07
8	RC-10-08
9	RC-10-09
10	RC-10-10
11	RC-10-11
12	RC-10-12
13	RC-10-13
14	RC-10-14
15	RC-10-15
16	RC-10-16
17	RC-10-17
18	RC-10-18
19	RC-10-19
20	RC-10-20
21	RC-10-21
22	RC-10-22
23	RC-10-23
24	RC-10-24
25	RC-10-25
26	RC-10-26
27	RC-10-27
28	RC-10-28
29	RC-10-29
30	RC-10-30
31	RC-10-31
32	RC-10-32
33	RC-10-33
34	RC-10-34
35	RC-10-35
36	RC-10-36
37	RC-10-37
38	RC-10-38
39	RC-10-39
40	RC-10-40
41	RC-10-41

LR-RV LR-RV



KEY PLAN, CLOSURE HEAD PENETRATIONS

LR-RV



TOP VIEW

TABULATION

PENETRATION & C.E.D.M. NO.	PIECE NO.	THERMAL SLEEVE	LIMIT SWITCH SETTINGS 1	2	3	4	5	6
1	J-23866-163-001-1	CND-D-3233-1						
2	J-23866-163-001-1	D-3233-2						
3	J-23866-163-001-1	D-3233-3						
4	J-23866-163-001-1	D-3233-4						
5	J-23866-163-001-1	D-3233-5						
6	J-23866-163-001-1	D-3233-6						
7 PLUGGED (CAPPED WELDED)	J-23866-163-001-1	D-3233-7						
8 PLUGGED (CAPPED WELDED)	J-23866-163-001-1	D-3233-8						
9 PLUGGED (CAPPED WELDED)	J-23866-163-001-1	D-3233-9						
10 PLUGGED (CAPPED WELDED)	J-23866-163-001-1	D-3233-10						
11 PLUGGED (CAPPED WELDED)	J-23866-163-001-1	D-3233-11						
12	J-23866-163-001-1	CND-D-3233-12						
13 PLUGGED (CAPPED WELDED)	J-23866-163-001-1	D-3233-13						
14	J-23866-163-001-27	D-3233-14						
15	J-23866-163-001-26	D-3233-15						
16	J-23866-163-001-27	D-3233-16						
17	J-23866-163-001-16	D-3233-17						
18	J-23866-163-001-33	D-3233-18						
19	J-23866-163-001-33	D-3233-19						
20	J-23866-163-001-33	D-3233-20						
21	J-23866-163-001-33	D-3233-21						
22	J-23866-163-001-1	D-3233-22						
23	J-23866-163-001-1	D-3233-23						
24	J-23866-163-001-1	D-3233-24						
25	J-23866-163-001-1	D-3233-25						
26	J-23866-163-001-1	D-3233-26						
27	J-23866-163-001-1	D-3233-27						
28	J-23866-163-001-1	D-3233-28						
29	J-23866-163-001-1	D-3233-29						
30	J-23866-163-001-27	D-3233-30						
31	J-23866-163-001-27	D-3233-31						
32	J-23866-163-001-26	D-3233-32						
33	J-23866-163-001-26	D-3233-33						
34	J-23866-163-001-27	D-3233-34						
35	J-23866-163-001-27	D-3233-35						
36	J-23866-163-001-26	D-3233-36						
37	J-23866-163-001-26	D-3233-37						
38	J-23866-163-001-1	D-3233-38						
39	J-23866-163-001-1	D-3233-39						
40	J-23866-163-001-1	D-3233-40						
41	J-23866-163-001-1	D-3233-41						

LIMIT SWITCH SETTINGS

SEE NOTE 3

1. SETPOINT INDICATES NON-OPERATED REGION OF LIMIT SWITCHES.
2. LIMIT SWITCHES ARE NUMBERED CONSECUTIVELY WITH #1 AT THE TOP OF THE SWITCH ASSY.
3. ✱ NON TRIPPING, C.E.D.M.

APPROVED
DEC 7 1971
Babcock & Wilcox, Inc.
NUCLEAR POWER GENERATION DEPARTMENT

E-23866-163-007 09

APPROVED REFERENCE DESIGN

REV.	DESCRIPTION	ORIG APPD	REV A APPD	REV B APPD	REV C APPD
07	LIMIT SW. 1 MIN BELOW 162°, SW 3 MIN ABOVE 3°, SW 5 MIN ABOVE 4°, REV PER ECO 23866-474				
08	1 UPGRADED TO "ASME, REF DESIG 12," REV PER ECO 23866-718				
09	1) PENETRATION NOS. 7,8,11,12 WERE PLUGGED (WELDED) 2) ADDED PENETRATIONS 13,14,15 WERE WELDED 3) PENET. 7,8,11,12 & 13 REV PER ECO 23866-720				

REV.	DESCRIPTION	ORIG APPD	REV A APPD	REV B APPD	REV C APPD
	DISCARDED C.E.D.M. NOS TO PLACE WITH PENETRATION NOS. 2) NON-TRIPPING C.E.D.M. WERE LOCATED AT PENETRATION NOS. 36,38,39 & 41, REV PER ECO 23866-682				
	3) PENETRATIONS 6, 8, 9 & 11 WERE NON-PLUGGED PENETRATIONS, PER ECO 23866-682				
	ADDED LIMIT SWITCH SETTINGS & NOTE 3 PER REV REQ 23866-650				

REV.	DESCRIPTION	ORIG APPD	REV A APPD	REV B APPD	REV C APPD
	1) ADDED NO VENT, CND-D-3233, D, REV PER TABULATION SHEET 1, 2) ADDED 4 PLCS, REV PER ECO 23866-718				
	1) DELETED C.E.D.M. NOS. 38, 39, 40 & 41, PLUG OFF-LOCA THICK NICKEL ALLOY, TYP PER REV PER 3 MIN 235				
	1) ZONE A-1 & D-2 "CAL" TO INDICATE "AS LABELED AS" NO. PER REV ECO 23866-395				
	1) ADDED REV NUM, RELOCATED CALLED NORTH, REV PER ECO 23866-781				

FORT CALHOUN STATION
PROJECT ENGINEERING SECTION
REV SH: 31875
FILE 1514
APVD MVC 11/19/71
REV 1

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN UNIT NO. 1
C.E. CONTRACT NO 23866

EA-FC-00-133 DF 12/01

PRINT APPD:
FINAL APPD:
SUPERSEDES:
SUPERSEDED:
DO NOT SCALE DWG. CALC. WT.:
SCALE 3/4"=1'-0" ACT. WT.:

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PREPARED UNDER ASC CONTRACT
CENO CONTRACT 23866

DRAWN BY M.V. MILLER 12-1-71
CHECKED A.W. BOWMAN 12-1-71
APPROVED C.A. ZIEGLER 12-1-71
ENGINEER J.F. SCHMUTZ 12-1-71

C.E.D.M. INSTALLATION DWG.
E-23866-163-007 09
SHEET OF REV.

0015141 DNA 1(NP)

FOR INFORMATION ONLY

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