FOR INFORMATION ONLY

PID- 1-CS-D20725

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

LEGEND

		DESIGN PRESSURE	TEST PRESSURE	MIN. TEST TEMP °F	TEST MEDIUM
	TEST BOUNDARY				
TB	TEMPORARY TEST BOUNDARY				
A1	INTEGRITY TEST	2735 PSIG	3419/3624 PSIG	35	WATER
D9	INTEGRITY TEST	248 PSIG	308/318 PSIG	35	WATER
E4	INTEGRITY TEST (IS)	150 PSIG	225/245 PSIG	35	WATER
E9	INTEGRITY TEST (IS)	200 PSIG	300/318 PSIG	35	WATER
F1	INTEGRITY TEST	150 PSIG	187.5/199 PSIG	35	WATER
P5	INTEGRITY TEST (IS)	15 PSIG	18/22.5 PSIG		AIR N_2
P27	INTEGRITY TEST	75 PSIG	94/100 PSIG	35	AIR N_2
E18	INTEGRITY TEST	220 PSIG	275/296.5 PSIG	35	WATER
N	NO TEST REQUIRED				

NOTES:
A. VENTS AND DRAINS WITH CAPS/BLIND FLANGES ETC. (ASME CL 2 & 3) SHALL BE TESTED TO THE LAST ISOLATION VALVE.
B. THE RELIEF VALVE DISCHARGE PIPING FOR VALVES CBS-V62,CBS-V227, RH-V13,RH-V25,SI-V76,SI-V181,SI-V113 & SI-V248 MUST BE FILLED WITH WATER TO THE MAXIMUM ELEVATION DURING PRESSURE TESTING.

NOTES:
1. WORK THIS DWG WITH 20720 THRU 20724 & 20726 THRU 20729. PORTIONS OF THIS DRAWING ARE DUPLICATED ON DRAWING SI-28447 DUE TO DUAL SYSTEM FUNCTIONS.
2. ALL LINES, EQUIPMENT, COMPONENTS & INSTRUMENTS HAVE SYSTEM PREFIX "CS", UNLESS NOTED OTHERWISE.
3. MIN. OF 5' OF STRAIGHT RUN AFTER MIN. FLOW ORIFICE.
4. PERMANENT SPOOL PIECE INSTALLATION SHOWN TEMP. SPOOL PIECE WITH STRAINER, PRESSURE INSTRUMENTS, VENTS & DRAINS INSTALLED ONLY DURING FLUSHING OPERATIONS & IS REMOVED BEFORE START-UP.
5. VENT AND DRAIN CODE BREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE PER 1-HHT-885111 UNLESS NOTED OTHERWISE.
6. REFER TO DRAWING VSL-20774 FOR VALVE LEAKOFFS.
7. ORIFICE PLATE NON-ASME
8. INSTRUMENT REFERENCE
   - (A) TO LCV-112A & LV-112A ON DWG. 20724.
   - (B) TO WG-PIC-8156 ON P&ID WG-20773
   - (G) TO LCV-112E & LCV-112D ON DWG. 20233.
9. INDICATES VALVE SUPPLIED BY WESTINGHOUSE.
10. CONNECT BYPASS RETURN LINE A MIN. OF 8 FEET FROM PUMP SUCTION.
11. CLEANLINESS CLASS "B"
12. THE IDENTIFICATION "J" NEAR A VALVE DENOTES THAT VALVE IS DESIGNATED FOR INSERVICE TESTING.
13. SYSTEM DESCRIPTION NO. IS SD-NAH/MCH-282
14. △ INDICATES REVISION LEVEL.

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION
13	4/19/99	DWS	—	RWS	BCS	BAW	PARTIAL INCORP DCR 980852 DCN-00, INCORP DCR 980845 DCN-00 & 04 & MMOD 980588 DCN-00
12	10/5/98	BCS	—	DWS	BCL	GRM	INCORP. MMOD 97-615 DCN-00
11	6/3/94	MPW	—	DWS	BCL	GRM	INCORP. DCR 89-152 CA*8 AND MMOD 94-085 CA*2
10	4/14/94	BCL	—	MPW	DWS	DMD	INCORP. MMOD 93-517 CA8
9	10/8/92	BCL	—	DWS	MRB	DMP	INCORP. DCR 89-73 CA8
8	4/13/92	MRB	—	BCL	DWS	JEV	INCORP MMOD 91-515 CA 02
7	10/24/90	MRB	FCB	JM	APL	BCL	INCORP MMOD 90-681 CA-00
6	9/25/89	MRB	RMC	GPM	PAL	GRM	INCORPORATED DCR 87-163 CA 8 REVISED NOTE VALVE TAG NUMBER PER PREVIOUS INCORP. DCR 87-159
5	7/22/88	GPM	RMC	MPW	APL	GRM	INCORP. DCR 87-361
4	5/25/88	GPM	RMC	APL	BCL	DJM	INCORP. DCR 87-323 REVISED V887 SYMBOL PER EP 52345, LOCATION OF INSTR. PER EP 52348, SHELL BREAK PER EP 52346, SHELL BREAK PER APPLICATION OF STRAINER & DWG. NOTE 4, INTERFACE BREAK DESIGNATION FOR BORIC ACID BOUNDARY, CHANGE DESIGNATION FOR CLASS 2 TO CLASS 3 PER DCR 87-323, ASSOCIATED SYSTEM LINE NOS. & ISO DWG NOS. TEST BOUNDARY & INTEGRITY TEST SYMBOL PER LEGEND NOTE A.
3	11/23/87	GPM	JM	DWS	BCL	RRC	INCORPORATE DCR 87-159 REVISION NOTE 4 & 5, CHGMT OF PRESSURE & FLOW ANNOTATIONS, DESCRIPTION OF SHELL BREAK PER EP 52346, AS INSTALLED CONFIGURATION, CHGMT. NOTE 4 PER 9763-F-900140 & 9763-F-900136, COMP. & DWG. NOTE 14, DELETE SHELL BREAK DESIGNATION FOR 1" DRAIN LINE, SYS DESIGNATION FOR ISO DWG NOS., DELETED CONT DWG NO. NHS-1 CL
2	6/26/86	DWS	DEEC CAD	VNK	JMS	RRC	ISSUED FOR OPERATIONS

REV. DRAWING NO.	REV	TITLE
9763-F-900150	4	CONTAINMENT SPRAY SYSTEM MITD
9763-F-900140	4	CHEMICAL & VOLUME CONTROL CHARGING METD
9763-F-900136	6	SAFETY INJECTION SYS. HIGH HEAD MITD
9763-F-805023	13	CONTAINMENT SPRAY SYSTEM P&ID
9763-F-805010	18	SAFETY INJECTION SYS HIGH HEAD PID
9763-F-805012	28	CVCS CHARGING P & ID

North Atlantic Energy Service Corporation

SEABROOK STATION

CHEMICAL & VOLUME CONTROL CHARGING SYSTEM DETAIL

PID- 1-CS-D20725

DETAIL "A"

FLEX HOSE OR TUBING LOOP (NOT SHOWN)

TYPICAL VALVE STEM LEAKOFF PIPING (SEE NOTE 6)

D-16

04/19/99