		1	701								LOCATION				
CONTAINMENT PENETRATION	PENETRATION SIZE	LOCAT FLEVATION	AZIMUTH	LINE SIZE	QTY. LINE DESCRIPTION	REMARKS	TYPE "B" TESTABLE PENETR	TYPE "C" TESTABLE ISOLATION VALVES (INBOARD, OUTBOARD)	CONTAINMENT PENETRATION	PENETRATION SIZE	LOCATION AZIMUTH	LINE SIZE QT	Y. LINE DESCRIPTION	REMARKS	TYPE "B" TYPE "C" TESTABLE ISOLATION VALVES (INBOARD, OUTBOARD)
X-200A	4'-0" I.D.		'-6" FROM 45'	-	1 ACCESS HATCH	+	DOUBLE O-RING	(4.123.4.12)	X-212	12"	877'-7 1/2" 5' FROM 112'30'	12"	1 RCIC TURBINE EXHAUST		RCIC-37, RCIC-15CV
X-200B	4'-0" I.D.	893'-0" 8'	-6" FROM 225°	_	1 ACCESS HATCH		DOUBLE O-RING		X-213A	1Z 8"	862'-4 1/2" 67'30'	8" 1	1 TORUS DRAIN	FLANGED (SEE NOTE 2)	DOUBLE O-RING
X-201A	5'-11"	885'-10"	22.30,	5'-11"	1 VENT LINE	TYPE "A" TESTED			X 213X	<u> </u>	0, 30		Tokes bivary	TB WOLD (OLL WOLL 2)	BOODEL O MINO
X-201B	5'-11"	885'-10"	67'30'	5'-11"	1 VENT LINE	TYPE "A" TESTED			X-213B	8"	862'-4 1/2" 247*30'	8 " 1	1 TORUS DRAIN	FLANGED (SEE NOTE 2)	DOUBLE O-RING
X-201C	5'-11"	885'-10"	112'30'	5'-11"	1 VENT LINE	TYPE "A" TESTED			X-214	24"	877'-7 1/2" 340°	24" 1	1 HPCI TURBINE EXHAUST (SEE NOTE 5)		DOUBLE O-RING HPCI-44, HPCI-15CV FOR HPCI TURBINE
X-201D	5'-11"	885'-10"	157'30'	5'-11"	1 VENT LINE	TYPE "A" TESTED									APPLICABLE ONLY EXHAUST; RHR-M0167A, RHR-M0166A FOR
X-201E	5'-11"	885'-10"	202'30'	5'-11"	1 VENT LINE	TYPE "A" TESTED									FOR RHR-FLG RHR HX A VENT; RHR-M0167B, RHR-
X-201F	5'-11"	885'-10"	247'30'	5'-11"	1 VENT LINE	TYPE "A" TESTED									-18, 19, MO-166B FOR RHR HX B VENT; HPCI-A070
X-201G	5'-11"	885'-10"	292°30′	5'-11"	1 VENT LINE	TYPE "A" TESTED TYPE "A" TESTED									20RV & 21RV HPCI—A071 FOR HPCI TURBINE EXHAUST
X-201H X-202A	5'-11"	885'-10"	337°30'	5'-11" 18"	1 VENT LINE 1 VACUUM BREAKER	TYPE "A" TESTED									DRIP LEG DRAIN; RHR-RV-20RV FOR RHR HX A SHELL SIDE RV DISCHARGE;
X-202A X-202B	18"	880'_10 1/2"	22°30' 22°30'	18"	1 VACUUM BREAKER	TYPE "A" TESTED									RHR-RV-21RV FOR RHR HX B SHELL SIDE
X-202C	18"	880'-10 1/2"	67°30'	18"	1 VACUUM BREAKER	TYPE "A" TESTED									RV DISCHARGE
X-202D	18"	880'-10 1/2"	67°30'	18"	1 VACUUM BREAKER	TYPE "A" TESTED									Jissining
X-202E	18"	880'-10 1/2"	157'30'	18"	1 VACUUM BREAKER	TYPE "A" TESTED									
X-202F	18"	880'-10 1/2"	157'30'	18"	1 VACUUM BREAKER	TYPE "A" TESTED			X-215	1"	882'-8" 135*	1" 1	1 ATMOSPHERIC PRESSURE INSTRUMENTATION	(SEE NOTE 5)	
X-202G	18"	880'-10 1/2"	202°30′	18"	1 VACUUM BREAKER	TYPE "A" TESTED			X-216	4"	888'-11" 6'-5" FROM 0°	4" 1	1 SPARE	TYPE "A" TESTED	
X-202H	18"	880'-10 1/2"	202'30'	18"	1 VACUUM BREAKER	TYPE "A" TESTED			X-217	4"	888'-11" 6'-5" FROM 0°	4" 1	1 SPARE	TYPE "A" TESTED	
X-202J	18"	880'-10 1/2"	247°30'	18"	1 VACUUM BREAKER	TYPE "A" TESTED			X-218	2"	883'-4" 6'-5" FROM 112'30'	2" 1	1 SPARE	TYPE "A" TESTED	
X-202K	18"	880'-10 1/2"	247°30'	18"	1 VACUUM BREAKER	TYPE "A" TESTED			X-219	10"	883'-4" 6'-5" FROM 270°	10" 1	1 SPARE	TYPE "A" TESTED	
X-202L	18"	880'-10 1/2"	337*30'	18"	1 VACUUM BREAKER	TYPE "A" TESTED			X-220	16"	890'-10 1/2" 6'-6" FROM 135°	16" 1	1 VENT PURGE OUTLET		LEVEL DOUBLE O-RING PC-230MV, PC-245AV FOR PURGE & VENT
X-202M	18"	880'-10 1/2"	337'30'	18"	1 VACUUM BREAKER	TYPE "A" TESTED								(SEE NOTE 5)	FOR INBOARD EXHAUST; PC-305MV, PC-1308MV FOR
X-203A	1"	882'-8" 6'	' FROM 112°30'	1"	1 HYDROGEN/OXYGEN ANALYZER	TYPE "A" TESTED (SEE NOTE 5)	IF MODIFIED		V 201	~**	070' 0 4 (0" 0' 5750' 1175	0"	1	(CEE NOTE 0)	FLANGE ON PC-230 BYPASS TO PC-230MV
X-203B	20"	882'-8"	9' FROM 135'	20"	HYDROGEN/OXYGEN ANALYZER VACUUM RELIEF FROM BLDG. VENT PURGE INLET	TYPE "A" TESTED (SEE NOTE 5) FOR REF. LEG OF PC-3B-1 0-30' TORUS LEVE	IF MODIFIED EL DOUBLE O-RING	PC-233MV, PC-237MV FOR PURGE & VENT	X-221	2"	878'-2 1/2" 9' FROM 112'30'	2" 1	1 RCIC VACUUM PUMP DISCHARGE 1 HPCI TURBINE DRAIN TO TORUS	(SEE NOTE 2) (SEE NOTE 2)	RCIC-16CV, RCIC-12CV
X-205	ZU	090 - 10 1/2	292.30,	20"	YACOUN RELIEF FROM BLUG. VENT PURGE INLET	TON NET. LEG OF PO-3B-1 U-30 TORUS LEVE	FOR INBOARD	PC-243AV, PC-13CV FOR VACUUM RELIEF	X-222 X-223A	10"	878'-2 1/2" 6' FROM 337'30' 877'-7 1/2" 8' FROM 157'30'	10"	1 CORE SPRAY PUMP A TEST LINE	(SEE NOTE 2)	DOUBLE O-RING CS-M026A FOR CS A TEST LINE; CS-M05A
		+ +					FLANGE ON	PC-244AV, PC-13CV FOR VACUUM RELIEF	Λ-223A	10	0// -/ 1/2 0 FRUM 15/30	10	OOKE STIVAL FOWER A TEST LINE	(SEE NOTE 2)	APPLICABLE ONLY FOR CS A MIN. FLOW: CS-RV-11RV FOR
							VALVES PC-233,	PC-1304MV, PC-1303MV DILUTION SUPPLY							FOR CS-FLG-11RV CS PUMP A RV DISCHARGE
				+		1	243 & 244	FOR LOOP A FROM SBNI	X-223B	10"	877'-7 1/2" 8' FROM 202°30'	10"	1 CORE SPRAY PUMP B TEST LINE	(SEE NOTE 2)	DOUBLE O-RING CS-MO26B FOR CS B TEST LINE; CS-MO5B
X-206A	1"	882'-8"	8' FROM 135'	1"	1 LIQUID LEVEL INDICATOR	TYPE "A" TESTED (SEE NOTE 5)	210 32 211	TON 2001 // THOM 02/11	X 2200	10	577 7 172 8 11KOM 202 00	10	CONE OF THE PROPERTY LINE	(CEE HOTE 2)	APPLICABLE ONLY FOR CS B MIN. FLOW; CS-RV-13RV FOR
X-206B	1"	 ****	8' FROM 135°	1"	1 LIQUID LEVEL INDICATOR	TYPE "A" TESTED (SEE NOTE 5)									FOR CS-FLG-13RV CS PUMP B RV DISCHARGE
X-206C	1"		-6" FROM 225°	1"	1 LIQUID LEVEL INDICATOR	TYPE "A" TESTED (SEE NOTE 5)			X-224	6"	864'-2 1/2" 9'-6" FROM 112°30'	6" 1	1 RCIC PUMP SUCTION	(SEE NOTE 2)	RCIC-MO41
X-206D	1"	870'-7" 7'	-6" FROM 225°	1"	1 LIQUID LEVEL INDICATOR	TYPE "A" TESTED (SEE NOTE 5)			X-225A		864'-2 1/2" 3'-6" FROM 45°	20" 1	1 RHR SYSTEM PUMP 1-A SUCTION	(SEE NOTE 2)	DOUBLE O-RING RHR-MO13A; RHR-RV-10RV FOR RHR PUMP
X-207A	1"	878'-0"	22*30'	1"	1 VENT LINE DRAIN	LOCATED AT LOW POINT OF EACH VENT LINE									APPLICABLE ONLY 1-A RV DISCHARGE
X-207B	1"	878'-0"	67°30'	1"	1 VENT LINE DRAIN	LOCATED AT LOW POINT OF EACH VENT LINE									FOR RHR-FLG-10RV
X-207C	1"	878'-0"	112'30'	1"	1 VENT LINE DRAIN	LOCATED AT LOW POINT OF EACH VENT LINE			X-225B	20"	864'-2 1/2" 8'-7 3/4" FROM 45°	20" 1	1 RHR SYSTEM PUMP 1-C SUCTION	(SEE NOTE 2)	DOUBLE O-RING RHR-MO13C; RHR-RV-12RV FOR RHR PUMP
X-207D	1"	878'-0"	157'30'	1"	1 VENT LINE DRAIN	LOCATED AT LOW POINT OF EACH VENT LINE									APPLICABLE ONLY 1-C RV DISCHARGE
X-207E	1"	878'-0"	202'30'	1"	1 VENT LINE DRAIN	LOCATED AT LOW POINT OF EACH VENT LINE								(0.77,	FOR RHR-FLG-12RV
X-207F	1"	878'-0"	247'30'	1"	1 VENT LINE DRAIN	LOCATED AT LOW POINT OF EACH VENT LINE			X-225C	20"	864'-2 1/2" 8'-7 3/4" FROM 315°	20" 1	1 RHR SYSTEM PUMP 1-B SUCTION	(SEE NOTE 2)	DOUBLE O-RING RHR-MO13B; RHR-RV-11RV FOR RHR PUMP
X-207G	1"	878'-0"	292*30'	1"	1 VENT LINE DRAIN	LOCATED AT LOW POINT OF EACH VENT LINE									APPLICABLE ONLY 1-B RV DISCHARGE
X-207H X-208A	10"	878'-0"	337°30'	10"	1 VENT LINE DRAIN 1 RELIEF VALVE DISCHARGE FROM MAIN STEAM HEADER	LOCATED AT LOW POINT OF EACH VENT LINE			V 225D	20"	004' 0 4 /0" 7' C" FDOM 745'	00"	1 RHR SYSTEM PUMP 1-D SUCTION	(SEE NOTE 3)	FOR RHR-FLG-11RV DOUBLE O-RING RHR-MO13D; RHR-RV-13RV FOR RHR PUMP
X-208B	10"	879 - 11 1/2	22°30' 22°30'	10"	1 RELIEF VALVE DISCHARGE FROM MAIN STEAM HEADER				X-225D	20"	864'-2 1/2" 3'-6" FROM 315°	20" 1	RAR STSTEM PUMP 1-D SUCTION	(SEE NOTE 2)	APPLICABLE ONLY 1-D RV DISCHARGE
X-208B	10"	879'-11 1/2"	157'30'	10"	1 RELIEF VALVE DISCHARGE FROM MAIN STEAM HEADER										FOR RHR-FLG-13RV
X-208D	10"	879'-11 1/2"	157'30'	10"	RELIEF VALVE DISCHARGE FROM MAIN STEAM HEADER				X-226	16"	864'-2 1/2" 4' FROM 292'30'	16"	1 HPCI PUMP SUCTION	(SEE NOTE 2)	HPCI-MO58
X-208E	10"	879'-11 1/2"	202*30'	10"	RELIEF VALVE DISCHARGE FROM MAIN STEAM HEADER				X-227A		864'-2 1/2" 8'-9 3/4" FROM 135'	16"	1 CORE SPRAY PUMP SUCTION	(SEE NOTE 2)	DOUBLE O-RING CS-MO7A; CS-RV-10RV FOR CS PUMP A
X-208F	10"	879'-11 1/2"	202'30'	10"	1 RELIEF VALVE DISCHARGE FROM MAIN STEAM HEADER						,			,	APPLICABLE ONLY SUPPLY RV DISCHARGE
X-208G	10"	879'-11 1/2"	337'30'	10"	1 RELIEF VALVE DISCHARGE FROM MAIN STEAM HEADER	R									FOR CS-FLG-10RV
X-208H	10"	879'-11 1/2"	337*30'	10"	1 RELIEF VALVE DISCHARGE FROM MAIN STEAM HEADER	R			X-227B	16"	864'-2 1/2" 8'-9 3/4" FROM 225°	16" 1	1 CORE SPRAY PUMP SUCTION	(SEE NOTE 2)	DOUBLE O-RING CS-MO7B; CS-RV-12RV FOR CS PUMP B
X-209A	1"	882'-8"	1' FROM 135°	1"	1 AIR TEMPERATURE		DOUBLE O-RING								APPLICABLE ONLY SUPPLY RV DISCHARGE
							& TEMP. ELEMENT								FOR CS-FLG-12RV
X-209B	1"		2' FROM 135'	1"	1 SPARE	TYPE "A" TESTED			X-228	10"	883'-4" 9' FROM 90°	10" 1	1 SPARE	TYPE "A" TESTED	
X-209C	1"	882'-8"	1' FROM 225'	1"	1 AIR TEMPERATURE		DOUBLE O-RING		X-229A	<u> </u>	877'-7 1/2" 6" FROM 22'30'	1" 1	1 VACUUM BREAKER ACTIVATING AIR		PC-569, PC-570 FOR PC-A0-NRV21
L	. 22		-1	. "	4 00405	7,05 7,7 750750	& TEMP. ELEMENT		X-229B	1"	877'-7 1/2" 6" FROM 22°30'	1" 1	1 VACUUM BREAKER ACTIVATING AIR		PC-571, PC-572 FOR PC-A0-NRV20
X-209D	1"	882'-8"	2' FROM 225'	1"	1 SPARE	TYPE "A" TESTED	DOUBLE O BING	POIG MOOT POIG 170V FOR POIG MIN	X-229C	1"	877'-7 1/2" 6" FROM 67'30'	1"	1 VACUUM BREAKER ACTIVATING AIR 1 VACUUM BREAKER ACTIVATING AIR		PC-573, PC-574 FOR PC-A0-NRV23 PC-575, PC-576 FOR PC-A0-NRV22
X-210A	18"	883'-4"	3' FROM 90°	18"	1 RHR LOOP A SYSTEM PUMP TEST LINE			RCIC-MO27, RCIC-13CV FOR RCIC MIN.	X-229D	1 "	877'-7 1/2" 6" FROM 67'30'	1 1 1			·
		+ +		-		+		FLOW (SEE NOTE 2); RHR-M021A FOR RHR HX A DRAIN (SEE NOTE 2);	X-229E X-229F	1 "	877'-7 1/2" 6" FROM 157'30' 877'-7 1/2" 6" FROM 157'30'	1"	1 VACUUM BREAKER ACTIVATING AIR 1 VACUUM BREAKER ACTIVATING AIR		PC-577, PC-578 FOR PC-A0-NRV25 PC-579, PC-580 FOR PC-A0-NRV24
		+ +				+		RHR-M016A FOR RHR PUMP MIN. FLOW	X-229F X-229G	1"	877'-7 1/2" 6" FROM 157'30"	1"	1 VACUUM BREAKER ACTIVATING AIR 1 VACUUM BREAKER ACTIVATING AIR		PC-581, PC-582 FOR PC-A0-NRV27
								(SEE NOTE 2); RHR-MO57, RHR-MO67	X-229H	 1"	877'-7 1/2" 6" FROM 202'30'	1"	1 VACUUM BREAKER ACTIVATING AIR		PC-583, PC-584 FOR PC-A0-NRV26
							, , , , , , , , , , , , , , , , , , , ,	FOR DISCHARGE TO RADWASTE (SEE NOTE 3);	X-229J	 1"	877'-7 1/2" 6" FROM 247'30'	1" 1	1 VACUUM BREAKER ACTIVATING AIR		PC-585, PC-586 FOR PC-AO-NRV29
								, , , , , , , , , , , , , , , , , , , ,	X-229K	1"	877'-7 1/2" 6" FROM 247'30'	1" 1	1 VACUUM BREAKER ACTIVATING AIR		PC-587, PC-588 FOR PC-A0-NRV28
									X-229L	1"	877'-7 1/2" 337'30'	1"	1 VACUUM BREAKER ACTIVATING AIR		PC-589, PC-590 FOR PC-AO-NRV30 &
								RHR-RV-14RV FOR RHR LOOP A SUPPLY							PC-AO-NRV31
								RV DISCHARGE (SEE NOTE 2); RHR-RV-17RV		1"	877'-7 1/2" 1' FROM 337°30'	1" 1	1 SPARE	TYPE "A" TESTED	
								FOR RHR SHUTDOWN COOLING SUPPLY	X-230	12"	885'-7 1/2" 8' FROM 112 : 30'	12" 1	1 LOW VOLTAGE POWER TO TORUS		ELEC. PENETR.
								RV DISCHARGE (SEE NOTE 2)	X-300A		869'-8 1/2" 4'-3" FROM 22'30'	1 1/4" 1	1 TORUS TEMP. MONITORING		
X-210B	18"	883'-4"	3' FROM 270°	18"	1 RHR LOOP B SYSTEM PUMP TEST LINE			RHR-MO-57, RHR-MO67 FOR DISCHARGE	X-300B		869'-8 1/2" 5'-3" FROM 22'30'	1 1/4" 1	1 TORUS TEMP. MONITORING		
								TO RADWASTE (SEE NOTE 3); HPCI-MO25,	X-300C		869'-8 1/2" 4'-3" FROM 67'30'	1 1/4" 1	1 TORUS TEMP. MONITORING		
								HPCI-17CV FOR HPCI MIN. FLOW (SEE NOTE	X-300D		869'-8 1/2" 5'-3" FROM 67'30'	1 1/4" 1	TORUS TEMP. MONITORING		
		 					(SEE NOTE 2)	2); RHR-MO21B FOR RHR HX B DRAIN	X-300E		869'-8 1/2" 4'-3" FROM 112'30'	1 1/4 1	1 TORUS TEMP. MONITORING		
-		 				+		(SEE NOTE 2); RHR-MO16B FOR RHR PUMP MIN. FLOW (SEE NOTE 2);	X-300F X-300G		869'-8 1/2" 5'-3" FROM 112'30' 869'-8 1/2" 4'-3" FROM 157'30'	1 1/4	TORUS TEMP. MONITORING TORUS TEMP. MONITORING		
 		+ +		 		+		I ONIT WITH LOW (SEE NOTE 7);	X-300G X-300H	· · · · · · · · · · · · · · · · · · ·	869'-8 1/2" 4-3" FROM 15/30" 869'-8 1/2" 5'-3" FROM 157'30'	1 1/4	1 TORUS TEMP. MONITORING 1 TORUS TEMP. MONITORING		
		+				+			X-300H X-300I		869'-8 1/2" 4'-3" FROM 15/30	1 1/4"	1 TORUS TEMP. MONITORING 1 TORUS TEMP. MONITORING		
				+		+		RHR-RV-15RV FOR RHR LOOP B SUPPLY	X-3001 X-300J		869'-8 1/2" 5'-3" FROM 202'30'	1 1/4" 1	1 TORUS TEMP. MONITORING		
		† †						RV DISCHARGE (SEE NOTE 2)	X-300K		869'-8 1/2" 4'-3" FROM 247*30'	,	1 TORUS TEMP. MONITORING		
									X-300L		869'-8 1/2" 5'-3" FROM 247'30'	1 1/4" 1	1 TORUS TEMP. MONITORING		
									X-300M		869'-8 1/2" 4'-3" FROM 292'30'	1 1/4" 1	1 TORUS TEMP. MONITORING		
X-211A	6"	889'-11"	90 °	6"	1 CONTAINMENT COOLING	(SEE NOTE 6)		RHR-MO38A	X-300N		869'-8 1/2" 5'-3" FROM 292'30'	1 1/4" 1	1 TORUS TEMP. MONITORING		
								FOR RHR LOOP A SUPPRESSION POOL SPRAY	X-3000		869'-8 1/2" 4'-3" FROM 337*30'	1 1/4" 1	1 TORUS TEMP. MONITORING		
		889'-11"	270°	6"	1 CONTAINMENT COOLING	(SEE NOTE 6)		RHR-MO38B	X-300P		869'-8 1/2" 5'-3" FROM 337*30'	1 1/4" 1	1 TORUS TEMP. MONITORING		
X-211B	6"	1 000		. — —							i i i				
X-211B	6"	000 11						FOR RHR LOOP B SUPPRESSION POOL SPRAY							
X-211B	6"							FOR RHR LOOP B SUPPRESSION POOL SPRAY PC-1302MV, PC-1301MV DILUTION SUPPLY							

GENERAL NOTES:

- 1. BOTH ISOLATION VALVES ARE OUTSIDE OF TORUS CONTAINMENT.
- 2. THESE VALVES AND/OR FLANGES ARE NOT SUBJECT TO TESTING UNDER 10CFR50, APPENDIX J TYPE "B" OR "C" REQUIREMENTS DUE TO WATER SEAL.
- 3. THESE VALVES MUST BE LEAK TESTED. HOWEVER, SINCE THEY ARE DOWNSTREAM OF THE OUTBOARD CONTAINMENT ISOLATION VALVE THE LEAKAGE FROM THESE VALVES NEED NOT BE ADDED TO 0.6 LA REQUIREMENT.
- 4. ALL PENETRATION LOCATIONS SHOWN IN THE SCHEDULE ARE APPROXIMATE.
- 5. INSTRUMENT PORTION IS AN EXTENSION OF CONTAINMENT.
- 6. CLOSED LOOP PROVIDES THE SECOND BARRIER.

* THIS DRAWING CENERATED BY NORD

	* 7	HIS DR	AWING	GENE	RATED	BY N	NPPD			453	5243	228
	SIGNIFICANT NUMBER							DRAWN SPB	T DATE 3/22/96			
	GROUP	1	2	3	4	5	6	CHECKED	T DATE	*		
REVISIONS BY N.P.P.D.		CONTAINMENT SUPRESSION CHAMBER								BURNS &	& RO	E 8
NO. REVISIONS DFT CKD APP DATE												20
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	PENEIRALION SCHEDULE								1/31/97			
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	CR96-0160 (DCN97-0098) SPB JEH JRF 1-31-97 UCR BINDER 22A (DCN 00-0644) DLR RGA KG 8-2-00 CED 6005621 (DCN 01-1504) KG DLR RGA 12/18/01 CED 6029200 (DCN 09-0527) KG KG EMN 10/17/09 PENETRATION SCHEDULE SHEFT 2B							FILMED			REVIS	
NO4 CED 6029200 (DCN 09-1485) KG KPB DLR 10/23/0	9	CONTAINMENT SUPRESSION CHAMB PENETRATION SCHEDULE								260	INO	1518
NO5 EE 10-073 (DCN 11-0098) KZ KZ DJB 2/9/1	2								· •		1, 10	\mathbf{O}_{1}°