



TABLE I: PRESSURE INSTRUMENT CONTACT UTILIZATION

TRANSMITTER	MECH DIV	ELEC DIV	TRIP UNIT	SYSTEM
PT N078A	1	1	PIS N678A	RPS(A)
PT N078B	2	2	PIS N678B	NS(A) (RHR ISOL)
PT N078C	3	3	PIS N678C	RPS(C)
PT N078D	4	4	PIS N678D	NS(D) (RHR ISOL)
PT N058A	1	1	PIS N658A	RPS(A)
PT N058B	2	2	PIS N658B	RPS(B)
PT N058C	3	3	PIS N658C	RPS(C)
PT N058D	4	4	PIS N658D	NS(D) (RHR ISOL)
PT N094A	1	1	PIS N694A	RHR(A) (RPS/AD(S)A)
PT N094B	2	2	PIS N694B	RHR(B) (RPS/AD(S)B)
PT N094C	3	3	PIS N694C	RHR(C) (RPS/AD(S)C)
PT N094D	4	4	PIS N694D	RHR(D) (RPS/AD(S)D)
PT N068A	1	1	PS N680A	PRESS RELIEF
PT N068B	2	2	PS N680B	PRESS RELIEF
PT N068C	3	3	PS N680C	PRESS RELIEF
PT N068D	4	4	PS N680D	PRESS RELIEF
PT N067A	1	1	PS N670A	PRESS RELIEF
PT N067B	2	2	PS N670B	PRESS RELIEF
PT N067C	3	3	PS N670C	PRESS RELIEF
PT N067D	4	4	PS N670D	PRESS RELIEF
PT N067E	1	1	PS N670E	PRESS RELIEF
PT N067F	2	2	PS N670F	PRESS RELIEF
PT N067G	3	3	PS N670G	PRESS RELIEF
PT N067H	4	4	PS N670H	PRESS RELIEF
PT N075A	1	1	PIS N675A	NS(A)
PT N075B	2	2	PIS N675B	NS(B)
PT N075C	3	3	PIS N675C	NS(C)
PT N075D	4	4	PIS N675D	NS(D)
POT N032	-	-	-	CORE PLATE CP

TABLE II: WATER LEVEL INSTRUMENT CONTACT UTILIZATION

TRANSMITTER	MECH DIV	ELEC DIV	TRIP UNIT	SYSTEM	LEVEL TRIP POINT
LT N027A	2	1	-	SHUTDOWN LEVEL	-
LT N027B	2	2	-	SHUTDOWN LEVEL	-
LT N040C	4	1	-	FUEL ZONE	-
LT N044D	2	2	-	FUEL ZONE	-
LT N091A	1	1	LIS N691A	AD(S)A (RHR) (RPS)	1
LT N091B	2	2	LIS N691B	AD(S)B (RHR) (RPS)	2
LT N091C	3	3	LIS N691C	AD(S)C (RHR) (RPS)	3
LT N091D	4	4	LIS N691D	AD(S)D (RHR) (RPS)	4
LT N091E	1	1	LIS N692E	RHC	1
LT N091F	2	2	LIS N692F	RHC	2
LT N073C	3	3	LIS N673C	HPSS	2
LT N073D	3	3	LIS N673D	HPSS	3
LT N073E	3	3	LIS N673E	HPSS	4
LT N073F	3	3	LIS N673F	HPSS	5
LT N073G	3	3	LIS N673G	HPSS	6
LT N073H	3	3	LIS N673H	HPSS	7
LT N073I	3	3	LIS N673I	HPSS	8
LT N099A	1	1	LIS N699A	RPS(A)	2
LT N099B	2	2	LIS N699B	RPS(B)	2
LT N099C	3	3	LIS N699C	RPS(C)	2
LT N099D	4	4	LIS N699D	RPS(D)	2
LT N099E	1	1	LIS N699E	RPS(E)	2
LT N099F	2	2	LIS N699F	RPS(F)	2
LT N099G	3	3	LIS N699G	RPS(G)	2
LT N099H	4	4	LIS N699H	RPS(H)	2
LT N099I	1	1	LIS N699I	RPS(I)	2
LT N099J	2	2	LIS N699J	RPS(J)	2
LT N099K	3	3	LIS N699K	RPS(K)	2
LT N099L	4	4	LIS N699L	RPS(L)	2
LT N099M	1	1	LIS N699M	RPS(M)	2
LT N099N	2	2	LIS N699N	RPS(N)	2
LT N099O	3	3	LIS N699O	RPS(O)	2
LT N099P	4	4	LIS N699P	RPS(P)	2
LT N099Q	1	1	LIS N699Q	RPS(Q)	2
LT N099R	2	2	LIS N699R	RPS(R)	2
LT N099S	3	3	LIS N699S	RPS(S)	2
LT N099T	4	4	LIS N699T	RPS(T)	2
LT N099U	1	1	LIS N699U	RPS(U)	2
LT N099V	2	2	LIS N699V	RPS(V)	2
LT N099W	3	3	LIS N699W	RPS(W)	2
LT N099X	4	4	LIS N699X	RPS(X)	2
LT N099Y	1	1	LIS N699Y	RPS(Y)	2
LT N099Z	2	2	LIS N699Z	RPS(Z)	2
LT N099AA	3	3	LIS N699AA	RPS(AA)	2
LT N099AB	4	4	LIS N699AB	RPS(AB)	2
LT N099AC	1	1	LIS N699AC	RPS(AC)	2
LT N099AD	2	2	LIS N699AD	RPS(AD)	2
LT N099AE	3	3	LIS N699AE	RPS(AE)	2
LT N099AF	4	4	LIS N699AF	RPS(AF)	2
LT N099AG	1	1	LIS N699AG	RPS(AG)	2
LT N099AH	2	2	LIS N699AH	RPS(AH)	2
LT N099AI	3	3	LIS N699AI	RPS(AI)	2
LT N099AJ	4	4	LIS N699AJ	RPS(AJ)	2
LT N099AK	1	1	LIS N699AK	RPS(AK)	2
LT N099AL	2	2	LIS N699AL	RPS(AL)	2
LT N099AM	3	3	LIS N699AM	RPS(AM)	2
LT N099AN	4	4	LIS N699AN	RPS(AN)	2
LT N099AO	1	1	LIS N699AO	RPS(AO)	2
LT N099AP	2	2	LIS N699AP	RPS(AP)	2
LT N099AQ	3	3	LIS N699AQ	RPS(AQ)	2
LT N099AR	4	4	LIS N699AR	RPS(AR)	2
LT N099AS	1	1	LIS N699AS	RPS(AS)	2
LT N099AT	2	2	LIS N699AT	RPS(AT)	2
LT N099AU	3	3	LIS N699AU	RPS(AU)	2
LT N099AV	4	4	LIS N699AV	RPS(AV)	2
LT N099AW	1	1	LIS N699AW	RPS(AW)	2
LT N099AX	2	2	LIS N699AX	RPS(AX)	2
LT N099AY	3	3	LIS N699AY	RPS(AY)	2
LT N099AZ	4	4	LIS N699AZ	RPS(AZ)	2

- NOTES:
- FOR ADDITIONAL NOTES SEE DRAWING M-1077A.
  - ALL PIPING 2" & SMALLER IS CLASSIFIED AS 1" E" RADIATION LEVEL, EXCEPT AS NOTED.
  - DELETED.
  - PIPING IS USED FOR INSTRUMENT LINES WITHIN THE DRYWELL. ALL INSTRUMENT LINES PENETRATING THE DRYWELL AT OR ABOVE ELEVATION 135'-4" SHALL HAVE ROOT VALVES LOCATED AS CLOSE AS PRACTICAL TO THEIR PENETRATIONS ON CONTAINMENT SIDE. ALL INSTRUMENT LINES PENETRATING THE DRYWELL BELOW ELEVATION 135'-4" SHALL CONFORM TO INSTRUMENT INSTALLATION DETAIL J-0130C. INSTRUMENT TUBING SHALL BE RIGID BETWEEN THE ROOT VALVES AND INSTRUMENTS LOCATED OUTSIDE THE DRYWELL.
  - A SPECIAL COUPLING WITH 1/4" DIAMETER ORIFICE SHALL BE INSTALLED AS CLOSE AS PRACTICAL TO WHERE THE INSTRUMENT LINE CONNECTS TO THE REACTOR COOLANT SYSTEM OR DRYWELL ATMOSPHERE.
  - ROOT VALVE STEM BLOCKED IN OPEN POSITION.

COMPONENTS SUBJECT TO AMR

033	AS-BUILT PER DRN 8984	WE	N/A	N/A	N/A	N/A	7-8	84
032	AS-BUILT PER PER SWD	WE	N/A	N/A	N/A	N/A	7-18	2003
031	AS-BUILT PER DRN 8482	WE	N/A	N/A	N/A	N/A	7-18	2003

GRAND GULF NUCLEAR STATION  
UNIT 1  
NUCLEAR PLANT ENGINEERING  
**UPDATED FINAL SAFETY ANALYSIS REPORT**  
FIGURE NUMBER - 5.2-007

P & I DIAGRAM  
NUCLEAR BOILER SYSTEM  
UNIT 1

SCALE: NONE DRAWING No. M-1077B REV. 033

DATE: 10-11-2011

NO.	DATE	DESCRIPTION	BY	ENG	CHK	APP
REVISIONS						
LRA-M-1077B						
m1077b.DGN						

- COMPONENTS SUBJECT TO AMR
- REACTOR VESSEL AMM01
  - REACTOR COOLANT SYSTEM
  - PRESSURE BOUNDARY AMM03
  - NON-SAFETY RELATED SYSTEMS & COMPONENTS AFFECTING SAFETY RELATED SYSTEMS AMM02

DATE: 10-11-2011

NO.	DATE	DESCRIPTION	BY	ENG	CHK	APP
REVISIONS						
LRA-M-1077B						
m1077b.DGN						