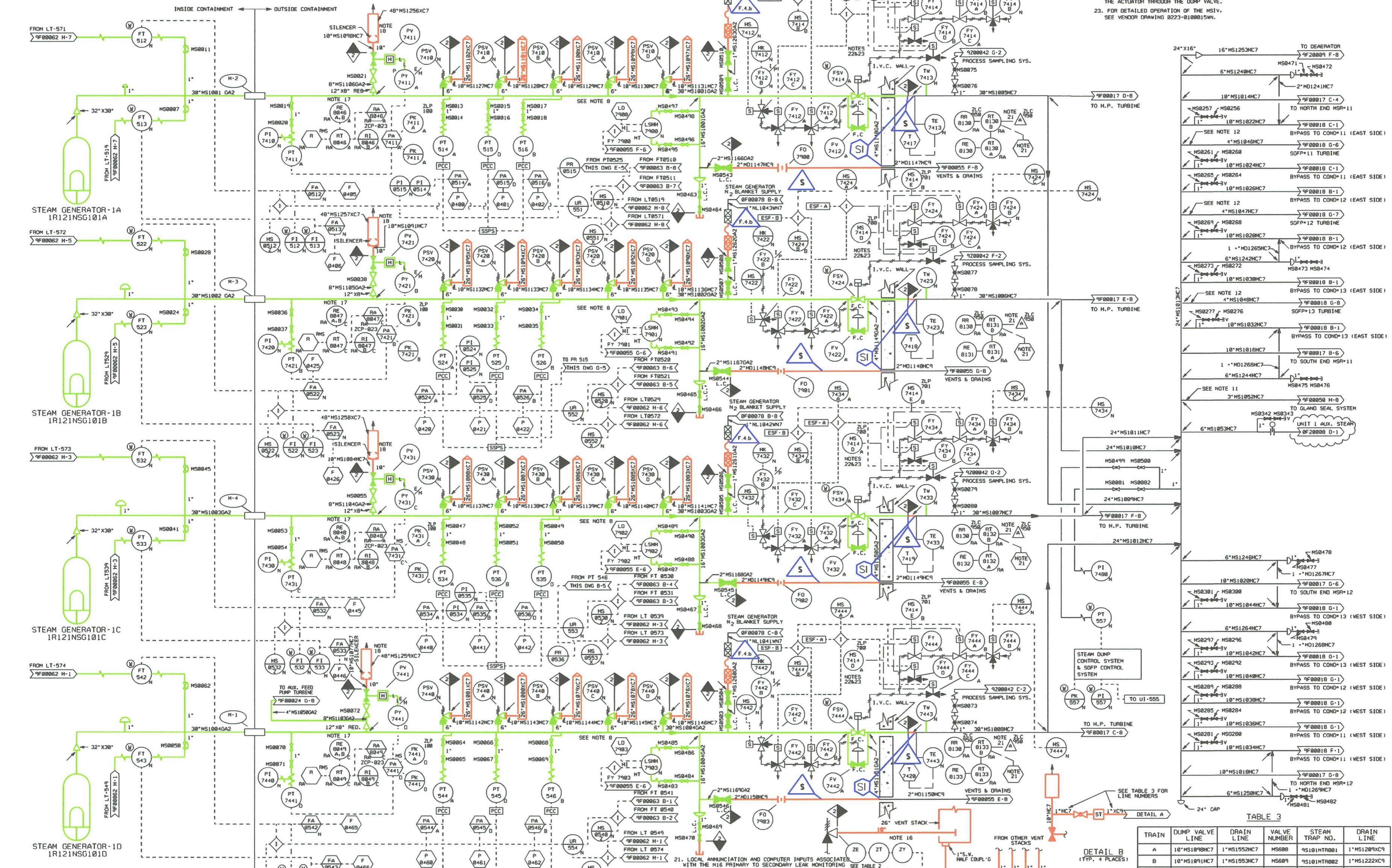


PSV	7410	7410A	7410B	7410C	7410D	7420	7420A	7420B	7420C	7420D	7430	7430A	7430B	7430C	7430D	7440	7440A	7440B	7440C	7440D
ZE	7410	7410A	7410B	7410C	7410D	7420	7420A	7420B	7420C	7420D	7430	7430A	7430B	7430C	7430D	7440	7440A	7440B	7440C	7440D
ZT	7410	7410A	7410B	7410C	7410D	7420	7420A	7420B	7420C	7420D	7430	7430A	7430B	7430C	7430D	7440	7440A	7440B	7440C	7440D
ZY	7410	7410A	7410B	7410C	7410D	7420	7420A	7420B	7420C	7420D	7430	7430A	7430B	7430C	7430D	7440	7440A	7440B	7440C	7440D
FF DMS	I/R	MS207410	MS207410A	MS207410B	MS207410C	MS207410D	MS207420	MS207420A	MS207420B	MS207420C	MS207430	MS207430A	MS207430B	MS207430C	MS207430D	MS207440	MS207440A	MS207440B	MS207440C	MS207440D



NOTES: CON'T  
 22. THE MAIN STEAM ISOLATION VALVES FAIL CLOSED ON LOSS OF AIR TO THE ACTUATOR. THE PILOT AIR SOLENOID ON THE HSIV ACTUATOR ARE ENERGIZED TO CLOSE THE HSIV BY SHUTTING SUPPLY AIR TO THE INLET CONTROL VALVE AND RELEASING AIR FROM THE ACTUATOR THROUGH THE DUMP VALVE.  
 23. FOR DETAILED OPERATION OF THE HSIV, SEE VENDOR DRAWING 0223-0100015N.

- NOTES:  
 1. THRU 5. DELETED  
 6. ALL INSTRUMENTS SHOWN ON THIS DIAGRAM ARE PREFIXED BY THE UNIT NO. 1 UNLESS OTHERWISE NOTED. SEE GENERAL NOTE D ON QP-000002.  
 7. DRAIN LINES FROM SAFETY RELIEF AND POWER OPERATED RELIEF VALVES SHALL BE PIPED TO A COMMON DRAIN HEADER, AND THE HEADER SHALL BE PIPED TO A FLOOR DRAIN. SEE DETAIL "A" AND TABLE 1 FOR DRAIN LINE NUMBERS.  
 8. MAIN STEAM PIPING IN I.V.C. MUST MEET SUPERHEAT CRITERIA.  
 9. WESTINGHOUSE RECOMMENDATIONS TO MINIMIZE WATER DAMAGE TO STEAM TURBINES IN NUCLEAR PLANTS HAVE BEEN INCORPORATED. (REF. WESTINGHOUSE STEAM TURBINE INFORMATION CT-23973, MARCH, 1977).  
 10. MINIMUM RECOMMENDED SLOPE OF MAIN STEAM PIPING IS 6 INCHES PER 100 FEET, NORMALLY IN THE DIRECTION OF FLOW HOWEVER, ACTUAL PIPE SLOPE SHALL BE AS SHOWN ON ISOMETRIC DRAWINGS.  
 11. GLAND STEAM SUPPLY LINE TO BE TAKEN FROM TOP OF MAIN STEAM HEADER (IE-21).  
 12. SUPPLY TURBINE SUPPLY LINES TO BE TAKEN FROM TOP OF MAIN STEAM HEADER (IF-2-0224-21).  
 13. ALL INSTRUMENTS ON THIS DIAGRAM HAVE SYSTEM DESIGNATOR UNLESS OTHERWISE NOTED.  
 14. IDENTIFICATION NUMBERS FOR PIPING, VALVES, INSTRUMENTS, EQUIPMENT, ETC. REFER TO DRAWINGS 04310F00001 AND 04310F00002 FOR IDENTIFICATION NUMBER DETAILS.  
 15. DELETED  
 16. TYPICAL FOR ALL MAIN STEAM PSV'S.  
 17. RE'S MAIN STEAM LINE RADIATION DETECTORS ARE MOUNTED ADJACENT TO MAIN STEAM LINE. RT (MICROPROCESSOR) IS MOUNTED OUTSIDE OF I.V.C.  
 18. PROVIDE 1" MESP HOLE MINIMUM DISTANCE FROM EXHAUST SIDE OF THE PUMP DISCHARGE PIPING AND ONE 1" MIN. DIAMETER MESP HOLE IN THE STACK POSITIONED FACING THE ROOF RUN-OFF (NORTH).  
 19. "N" SYSTEM DESIGNATOR [NINHS01]  
 20. DELETED  
 21. LOCAL ANNUNCIATION AND COMPUTER INPUTS ASSOCIATED WITH THE N16 PRIMARY TO SECONDARY LEAK MONITORING SYSTEM ARE INPUT DEVICE  
 22. LOCAL ANNUNCIATION AND COMPUTER INPUTS ASSOCIATED WITH THE N16 PRIMARY TO SECONDARY LEAK MONITORING SYSTEM ARE INPUT DEVICE  
 23. LOCAL ANNUNCIATION AND COMPUTER INPUTS ASSOCIATED WITH THE N16 PRIMARY TO SECONDARY LEAK MONITORING SYSTEM ARE INPUT DEVICE

TRAIN	DUMP VALVE LINE	DRAIN LINE	VALVE NUMBER	STEAM TRAP NO.	DRAIN LINE
A	10"MS1098HC7	1"MS1552HC7	MS688	9S101HTR001	1"MS1209XC9
B	10"MS1091HC7	1"MS1553HC7	MS689	9S101HTR002	1"MS1222XC9
C	10"MS1084HC7	1"MS1554HC7	MS610	9S101HTR003	1"MS1235XC9
D	10"MS1084HC7	1"MS1555HC7	MS611	9S101HTR004	1"MS1248XC9

VENT STACK (V.S.) DRAIN HEADER	MAIN STEAM LINE	MAIN STEAM LINE	MAIN STEAM LINE	MAIN STEAM LINE
2"MS1203XC9	30"MS1001HC7	30"MS1002HC7	30"MS1003HC7	30"MS1004HC7
V.S. DRAINS FOR PSV 7410-7440	1"MS1204XC9	1"MS1205XC9	1"MS1206XC9	1"MS1207XC9
V.S. DRAINS FOR PSV 7410A-7440A	1"MS1208XC9	1"MS1209XC9	1"MS1210XC9	1"MS1211XC9
V.S. DRAINS FOR PSV 7410B-7440B	1"MS1212XC9	1"MS1213XC9	1"MS1214XC9	1"MS1215XC9
V.S. DRAINS FOR PSV 7410C-7440C	1"MS1216XC9	1"MS1217XC9	1"MS1218XC9	1"MS1219XC9
V.S. DRAINS FOR PSV 7410D-7440D	1"MS1220XC9	1"MS1221XC9	1"MS1222XC9	1"MS1223XC9
V.S. DRAINS HEADER TO FLOOR DRAIN	2"MS1224XC9	2"MS1225XC9	2"MS1226XC9	2"MS1227XC9

NO.	ISSUE DATE	REVISION	ORIG	CHKR	REV	SE	NO.	ISSUE DATE	REVISION	ORIG	CHKR	REV	SE
29	4-20-06	REVISED PER CR# 06-5095-2.	JSH	ON	FILE								
28	11-14-05	INCCORP. DCN 0501570.	LNB	ON	FILE								
27	2-22-05	INCCORP. DCN 0400710.	JSH	ON	FILE								
26	10-22-02	INCCORP. DCN 0102586, 0102587, 0102588, 0102589, 0102590, 0102591, 0102592, 0102593, 0102594, 0102595, 0102596 AND 0102597.	JSH	ON	FILE								
B-25	10-29-02	ISSUED FOR CONSTRUCTION.											
31	6-8-06	REVISED PER CR# 06-16756.	VJM	ON	FILE								
30	6-8-06	REVISED PER CR# 06-6816-1.	JCL	ON	FILE								

**SOUTH TEXAS PROJECT**  
**NUCLEAR OPERATING COMPANY**

PIPING & INSTRUMENTATION DIAGRAM  
 MAIN STEAM

NO.	ISSUE DATE	REVISION	ORIG	CHKR	REV	SE	NO.	ISSUE DATE	REVISION	ORIG	CHKR	REV	SE
1							1	FJ182.311					

LR BOUNDARY DRAWING NO. LR-STP-MS-5S109F00016\*1 REV. 05

0220