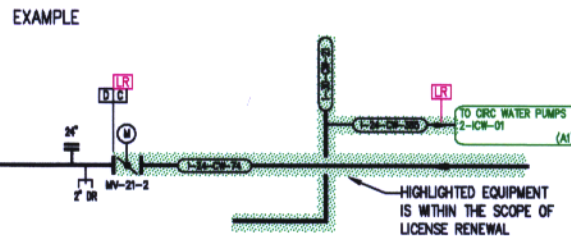
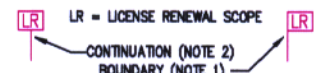


### LICENSE RENEWAL CATEGORY

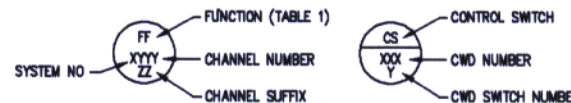


### SWITCH POSITIONS & ABBREVIATIONS



- A - AUTO
- B - BOTH
- BP - BYPASS
- C - CLOSE
- I - ISOLATE
- LC - LOCKED CLOSED (KEY)
- LO - LOCKED OPEN (KEY)
- LR - LOCKED REMOTE
- M - MANUAL
- N - NORMAL
- O - OPEN
- OFF - OFF
- ON - ON
- OR - OVERRIDE
- PB - PUSHBUTTON
- RS - RESET

### INSTRUMENT AND SWITCH IDENTIFICATION

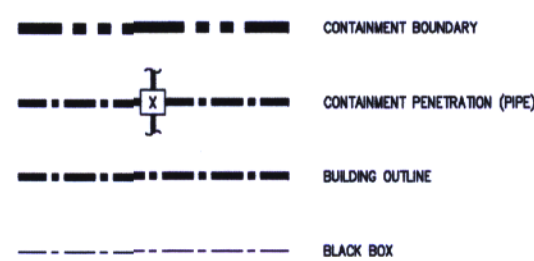


- MEASUREMENT CHANNELS ARE SUFFIXED AS FOLLOWS:
- 1 - SAFETY CHANNEL NUMBERS ARE SUFFIXED BY A, B, C, AND D ETC
  - 2 - SIMILAR MEASUREMENT CHANNELS ARE SUFFIXED BY X, Y, Z, ETC
  - 3 - "H" AND "C" WHEN USED IN INSTRUMENTATION CHANNEL SUFFIXES DENOTE HOT AND COLD

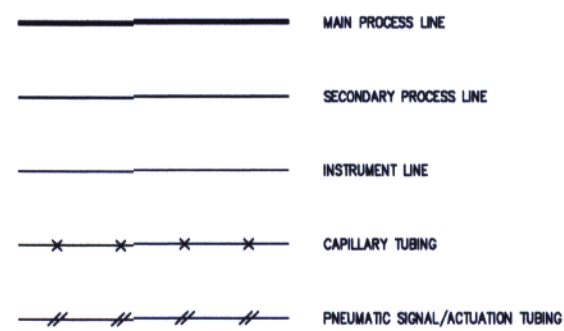
TABLE 1 INSTRUMENT IDENTIFICATION LETTERS DENOTE CHANNEL FUNCTION, NOT SPECIFIC EQUIPMENT

FIRST LETTER	SUCCESSING LETTERS
MEASURED OR INITIATING VARIABLE	READ OUT OR FUNCTION
A AIR	ALARM
C CONDUCTIVITY (ELECTRICAL)	CONTROL
D DENSITY	DIFFERENTIAL ELEMENT
F FLOW RATE	GLASS
G	
H HAND (MANUALLY INITIATED)	
I CURRENT (ELECTRICAL)	INDICATOR
J POWER	
K TIME OR TIME SCHEDULE	LIGHT
L LEVEL	
M MOISTURE OR HUMIDITY	
N VIBRATION	
P PRESSURE	CONVERTOR
Q QUANTITY NUMBER	INTEGRATOR OR TOTALIZER
R RADIATION	RECORDER
S SPEED OR SELECTOR	SWITCH
T TEMPERATURE	TRANSMITTER OR TRANSDUCER
V VALVE	WELL
W WEIGHT	
X	TEST POINT OR MISC POWER SUPPLY
Z POSITION	

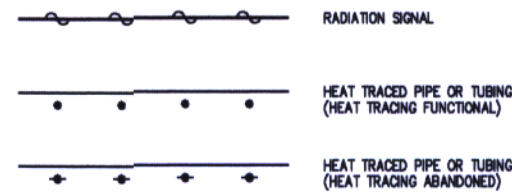
### BUILDING AND EQUIPMENT BOUNDARY LINES



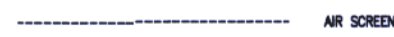
### PIPE AND TUBING LINE TYPES



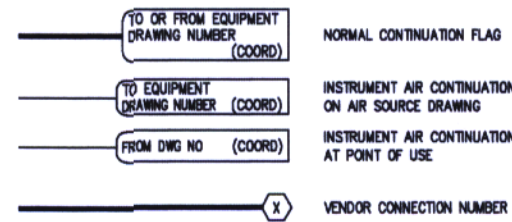
### ELECTRICAL LINE TYPES



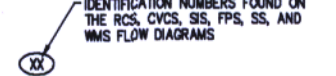
### MISCELLANEOUS LINE TYPES



### REFERENCE TO CONNECTING DRAWINGS



### PROCESS DATA POINTS



PROCESS FLOW DATA AT NUMBERED LOCATIONS ARE DEFINED IN THE SAFETY ANALYSIS REPORT



### SAFETY CLASS AND SEISMIC CATEGORY

- A, B, C, D = SAFETY CLASS (QUALITY GROUP)
- (REF: TABLE 3.2-1 OF FSAR)

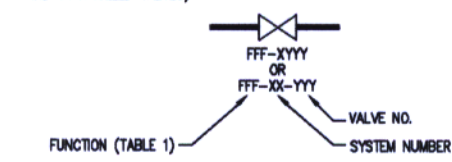
### ABBREVIATIONS

- SIGNAL**
- CIS - CONTAINMENT ISOLATION
  - CSAS - CONTAINMENT SPRAY ACTUATION
  - MSS - MAIN STEAM ISOLATION
  - RAS - RECIRCULATION ACTUATION
  - SAS - SAFETY INJECTION ACTUATION

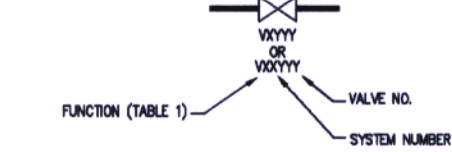
### EQUIPMENT

- BAMT - BORIC ACID MAKEUP TANK (CVCS)
- BAT - BORIC ACID BATCHING TANK (CVCS)
- CAT - CHEMICAL ADDITION TANK (CVCS)
- EDT - EQUIPMENT DRAIN TANK (MMS)
- FT - FLASH TANK
- HT - HOLD-UP TANK (MMS)
- QT - QUENCH TANK (RCS)
- RAT - RESIN ADDITION TANK (MMS)
- ROT - REACTOR OIL TANK (MMS)
- RWT - REFUELING WATER TANK
- ST - SAFETY INJECTION TANK (SIS)
- SRT - SPENT RESIN TANK (MMS)
- VCT - VOLUME CONTROL TANK (CVCS)
- AMP - AUTOMATIC CEA WITHDRAWAL PROHIBIT
- BHB - BACKUP HEATER BREAKERS
- BHC - BACKUP HEATER CONTROL
- CEDS - CONTROL ELEMENT DRIVE SYSTEM
- DR - DRAIN
- GA - GAS ANALYZER
- HPRP - HIGH PRESSURIZER PRESSURE RELIEF VALVE TRIP
- H2 - HYDROGEN
- LPRT - LOW PRESSURIZER PRESSURE RELIEF VALVE TRIP
- LS - LOCAL SAMPLE
- LSS - LOCAL SAMPLE SINK
- N2 - NITROGEN
- N/S - NITROGEN SUPPLY
- PHC - PROPORTIONAL HEATER CONTROL
- PLS - PROGRAMMED LEVEL SETPOINT (RIS)
- RPS - REACTOR PROTECTIVE SYSTEM
- RR - REVERSE ROTATION
- RIS - REACTOR ISOLATING SYSTEM
- SCR - PROPORTIONAL HEATER SCR CONTROLLERS
- SG - STEAM GENERATOR
- SIB - SAFETY INJECTION BLOCK
- SIL - SAFETY INJECTION LOGIC
- V - VENT TO ATMOSPHERE

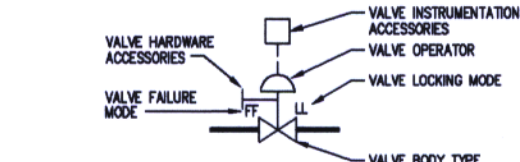
### AIR & MOTOR OPERATED VALVES (EXCEPT NON-PROPORTIONAL, REMOTELY HAND CONTROLLED VALVES)



### MANUALLY OPERATED VALVES (INCLUDES NON-PROPORTIONAL, REMOTELY HAND CONTROLLED VALVES)



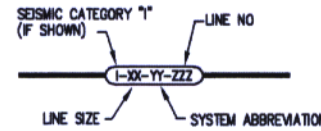
### VALVE DESCRIPTION



### VALVE MODE DESCRIPTION

- NORMALLY OPEN
- NORMALLY CLOSED
- NEXT PORT TO CLOSE INDICATED BY A DOT IN THE PORT
- BUTTERFLY VALVE (NORMALLY CLOSED)
- LOOKED OPEN (AT CONTROL ROOM)
- LOOKED CLOSED (AT CONTROL ROOM)
- LOOKED OPEN (AT VALVE)
- LOOKED CLOSED (AT VALVE)
- FAIL OPEN
- FAIL CLOSED
- FAIL AS IS

### PIPING LINE DESIGNATION



### VALVE BODY TYPES

- GATE
- BALL
- BUTTERFLY
- CHECK
- STOP CHECK
- SPRING CHECK
- FLAPPER
- ANGLE
- 3-WAY
- 4-WAY
- PILOT VALVE
- GLOBE
- NEEDLE
- DIAPHRAM
- BALL CHECK
- LIFT CHECK
- EXCESS FLOW CHECK
- FLOAT VENT
- FLOAT CHECK
- SAFETY AND RELIEF

### VALVE ACCESSORIES

- STEM LEAKOFF
- BELLOWS SEAL
- CAPPED STEM
- EXTENSION HANDWHEEL (ON DIAPHRAM OPERATOR)
- HANDWHEEL (ON DIAPHRAM OPERATOR)
- FLOW INDICATING NEEDLE

### VALVE OPERATORS

- DIAPHRAM (PNEUMATIC)
- ELECTRIC MOTOR
- PISTON (PNEUMATIC)
- EXTENSION STEM
- SELF ACTUATED PRESSURE REGULATING
- SOLENOID
- PISTON (HYDRAULIC)
- POST INDICATOR

### PIPE AND EQUIPMENT ACCESSORIES

- ANNULAR TYPE FLOW ELEMENT
- RESTRICTION (SO) OR FLOW MEASURING (FE) ORIFICE
- LONG BORE ORIFICE
- FLANGED SPOOL PIECE FOR STARTUP SUCTION STRAINER
- INLINE STRAINER
- BASKET STRAINER
- JET PUMP
- SIGHT FLOW GLASS
- FILTER
- SUCTION STABILIZER
- STRAP ON OR IMMERSION HEATER (ELECTRICAL)
- ACCUMULATOR
- FLANGED CONNECTION
- EXPANSION JOINT
- RUPTURE DISK RELIEF TO ATMOSPHERE
- QUICK CONNECT COUPLING FOR SECONDARY SYSTEMS
- PLUG OR CAPPED STUB
- BLIND FLANGE
- SPECTACLE BLIND NORMALLY OPEN
- SPRAY NOZZLE HEADER
- SPRAY NOZZLE
- LOOP SEAL
- STRAIGHTENING VANES
- VENTURI TYPE FLOW ELEMENT
- STRAP ON ACCOUSTICAL FLOW SENSOR
- SURFACE TYPE GAS VENT (V)
- STEAM TRAP (T) OR TEMPERATURE ELEMENT
- "Y" TYPE STRAINER
- DUPLEX STRAINER
- EDUCTOR
- SIGHT LEVEL GLASS
- FILTER REGULATOR
- SPHERICAL TYPE PULSATION DAMPER
- CONDENSATE POT
- FLAME ARRESTOR
- DIAPHRAM CONNECTION
- FLEXIBLE CONNECTION
- RUPTURE DISK RELIEF TO SYSTEM
- QUICK CONNECT COUPLING FOR PRIMARY SYSTEMS
- WELDED CAP
- REDUCER
- SPECTACLE BLIND NORMALLY CLOSED
- THERMAL SLEEVE
- SPARGER
- OPEN DRAIN FUNNEL
- COOLING FINS

### EQUIPMENT

- CONDENSER
- TANK
- SINGLE FLOW TURBINE
- STRAIGHT TUBE HEAT EXCHANGER
- CENTRIFUGAL PUMP
- POSITIVE DISPLACEMENT PUMP
- SUMP PUMP
- CENTRIFUGAL FAN OR COMPRESSOR
- ATMOSPHERIC TANK
- PRESSURIZER VESSEL
- VANE AXIAL FAN
- U-TUBE HEAT EXCHANGER
- CANNED CENTRIFUGAL PUMP
- VACUUM PUMP
- VERTICAL PUMP
- COMPRESSOR
- MANWAY OR ACCESS HATCH
- BOTTOM LOADED FILTER
- TANK STRAINER
- UNDER DRAIN DISTRIBUTOR
- FIRE HYDRANT
- FIRE HOSE STATION
- STATION NUMBER
- STEAM GENERATOR
- MIXER

### GENERAL NOTES:

- DENOTES PRESSURE BOUNDARIES (PROCESS PIPING / TUBING / COMPONENTS) FOR SYSTEMS WITHIN THE SCOPE OF LICENSE RENEWAL.
- DENOTES "IN PROCESS" PIPING / TUBING / COMPONENTS WITHIN THE SCOPE OF LICENSE RENEWAL.
- QUALITY GROUP A, B OR C BOUNDARIES WITH UNTAGGED CLASS D COMPONENTS SHALL BE CONSIDERED AS A LICENSE RENEWAL BOUNDARY ALTHOUGH NOT IDENTIFIED WITH A LICENSE RENEWAL BOUNDARY FLAG.

NOTE:  
\* QUICK DISCONNECTS ARE OPTIONAL ITEMS, WHICH MAY BE INSTALLED FOR CONVENIENCE, BUT ARE NOT REQUIRED FOR DESIGN FUNCTIONS.

FLORIDA POWER & LIGHT  
ST. LUCIE NUCLEAR UNIT 2

**GENERAL NOTES AND LEGEND**

LICENSE RENEWAL BOUNDARY DRAWING  
DRAWING NUMBER: 2-NOTES-01  
REVISION: 0