

REVISION	
0-1	RE PUR 0296 SCANNED TO CADD BY: JB 08-01-00 APP'D: DAK 08-01-00
A	RE PUR 0296 COMPLETE SEE REV. 0-1 FILMED: (WPS)08-08-00
B	DCR 3609-1 ADDED VENTURI SYMBOL DRFT'D: JBS 04-22-08 APP'D: AJP 05-13-08
C	DCR 3718 ADDED NOTE 2. DRFT'D: AMH 05-19-08 APP'D: SPP 05-20-08

VALVE SYMBOLS

PIPE SIZE	VALVE TYPE
3/4-T58	
	GATE VALVE
	GATE VALVE (DOUBLE DISC)
	NEEDLE VALVE
	GLOBE VALVE
	BALL VALVE
	DIAPHRAGM VALVE
	BUTTERFLY VALVE
	STOP CHECK VALVE
	CHECK VALVE
	MOTOR OPERATED VALVE
	SOLENOID OPERATED VALVE
	AIR DIAPHRAGM OPERATED VALVE
	SELF CONTAINED REGULATOR
	STEM LEAKOFF
	EXTENSION STEM OPERATOR
	SAFETY AND RELIEF VALVE
	INSTRUMENT ACTIVATED OPERATOR WITH VALVE POSITIONER
	THREE WAY VALVE
	FLOAT CHECK VALVE
	BLACKED-IN VALVES ARE NORMALLY CLOSED
	VALVE INSTALLED WITH FLOW OVER THE SEAT.

LINE CODING

PIPE SIZE	SYSTEM	PIPE CLASS	LINE NUMBER
10-RC-2501R-1B			
			MAIN FLOW LINES (OUT OF SYSTEM DASHED)
			SECONDARY FLOW LINES (OUT OF SYSTEM DASHED)
			INSIDE / OUTSIDE
			SHIELD WALL PENETRATION
			FILLED BULB TEMPERATURE DETECTOR TUBE
			INSTRUMENT LINES
			TRANSITION PIECE
			ELECTRICAL HEAT TRACING

EQUIPMENT SYMBOLS

	WESTINGHOUSE SHAFT SEAL PUMP
	WESTINGHOUSE VERTICAL U-TUBE STEAM GENERATOR
	HEAT EXCHANGER (ANY TYPE)
	ACCUMULATOR
	BLENDER
	POSITIVE DISPLACEMENT PUMP
	CENTRIFUGAL PUMP
	SMALL CANNED MOTOR PUMP
	FAN, BLOWER, OR COMPRESSOR

	STRAINER
	Y-STRAINER
	FILTER
	OPEN DRAIN FUNNEL
	STEAM TRAP
	ATMOSPHERIC VENT
	VACUUM BREAKER
	CAPPED OR STUB END
	BLIND FLANGE OR TEMPORARY CONNECTION
	VESSEL MANWAY
	RUPTURE DISC
	NOZZLE OR ORIFICE (FLOW RESTRICTION)
	REDUCER
	THERMAL SLEEVE
	SPECTACLE FLANGE
	QUICK DISCONNECT COUPLING
	EDUCTOR
	HEATER (STEAM OR ELECTRICAL)
	LOOP SEAL (TRAP)
	SPARGER (INSIDE VESSEL)
	SPRAY NOZZLES (INSIDE VESSEL)
	MIXER (AIR OR ELECTRICAL)
	FLANGE CONNECTION (PIPING OR EQUIPMENT)
	JOHNSON SCREEN
	DIAPHRAGM SEAL
	VENTURI

REFERENCE:

1. INSTRUMENTATION & CONTROL STANDARDS
 © SYMBOLS AND APPLICATIONS FOR INSTRUMENT DIAGRAMS, SECTION I.1, ISSUED AUG. 12, 1966.

© INSTRUMENT INSTALLATION, SECTION 3.0, ISSUED NOV. 16, 1966

2. MATERIAL SPEC. AND FITTINGS

- © E SPEC G-677129 REV-1
- © E SPEC G-677034 REV-2
- © E SPEC G-676262 REV-2

REFERENCE DRAWINGS:

PIPING	SYSTEM
RCS -	RC - REACTOR COOLANT SYSTEM X-K100-10
SIS -	S1 - SAFETY INJECTION SYSTEM X-K100-28 & 29
CVCS -	CS - CHEMICAL & VOLUME CONTROL SYSTEM X-K100-35,36,37 & 38

ACS -	AC - AUXILIARY COOLANT SYSTEM X-K100-18,19 & 20
SS -	SS - SAMPLING SYSTEM X-K100-44
WDS -	WD - WASTE DISPOSAL SYSTEM X-K100-131 & 132

LEGEND:

RWST -	REFUELING WATER STORAGE TANK
SRFL -	SPENT RESIN FLUSH LINE
PRT -	PRESSURIZER RELIEF TANK
WHT -	WASTE HOLDUP TANK
ATM -	ATMOSPHERE
RMW -	REACTOR MAKEUP WATER
CCW -	COMPONENT COOLING WATER
F.A.I. -	FAIL AS IS
F.C. -	FAIL CLOSED
F.O. -	FAIL OPEN
L.C. -	LOCKED CLOSED
L.O. -	LOCKED OPEN
DH -	DRAIN HEADER
GA -	AUTOMATIC GAS ANALYZER
HT -	HOLDUP TANK
VH -	VENT HEADER
DW -	DEMINERALIZED WATER

D -	LOCAL DRAIN
V -	VENT TO ATMOSPHERE
N -	NITROGEN FROM WDS NITROGEN MANIFOLD
H -	HYDROGEN FROM WDS HYDROGEN MANIFOLD
T -	CONTAINMENT ISOLATION TRIP SIGNAL
RCOT -	REACTOR COOLANT DRAIN TANK

GENERAL NOTES:

1. ADDITIONAL VENTS AND DRAINS MAY BE REQUIRED BY THE PIPING LAYOUT. ON VENTS AND DRAINS WHERE A DOUBLE BARRIER IS REQUIRED (HIGH PRESSURE PIPING; CLASS 601 AND ABOVE) THE SECOND BARRIER CAN BE A 3/8 INCH CLASS 2505 TUBE WITH SWAGLOK CAP.

2. THE 3/4 INCH VENT AND DRAIN VALVES IN FLOW DIAGRAM XK-100-18, XK-100-28, XK-100-29 AND XK-100-35 WHERE A DOUBLE BARRIER IS REQUIRED (HIGH PRESSURE PIPING CLASS 601 AND ABOVE) THE SECOND BARRIER CAN BE A 3/4 INCH CLASS 2505 TUBE WITH SWAGLOK CAP.

C
DCR 3718

XK-100-45

DOMINION ENERGY KEWAUNEE, INC.
KEWAUNEE POWER STATION

LEGEND

DESIGNED BY
WISCONSIN PUBLIC SERVICE CORP.
GREEN BAY, WISCONSIN

HYBRID CADD	SCALE	DWG. NO.	REV.
N/A	NONE	XK-100-45	C