

MAIN FEEDWATER PUMP

MAIN FW PUMP NO. 2		
DESCRIPTION	INSTR. NO.	COMP PT NO
THR. BRG OIL	TE-479A	T-647
O/B BRG OIL	TE-479B	T-645
T/E BRG OIL	TE-479C	T-646
LWR CASE TEMP.	TE-479D	T-644
UPR CASE TEMP.	TE-479E	T-644
THR. BRG. (INBOARD SHOES)	TE-479F	T-648
CASING	TT-479A	T-648
LWR CASE TEMP	TT-479B	T-644
CASING	TDY-479	T-644
T/E BRG VIB	ZY-788A	V-646
O/B BRG VIB	ZE-788A	V-646
T/E BRG VIB	ZY-788B	V-645
O/B BRG VIB	ZE-788B	V-645

MAIN FEEDWATER PUMP TURBINE

MAIN FEED PUMP TURBINE SUPERVISORY INSTRUMENTS		
NO. 2 TURBINE	NO. 2 TURBINE	NO. 2 TURBINE
EXHAUST CASING	ZE-2701	ECCENTRICITY DETECTORS
PS-2536B	ZE-2701	ACTIVE THRUST BRG. MT.
PS-2536A	TE-2877	TE-1293
HP CONTROL-STOP VALVE	TE-2877	TE-1293
PS-2730	TE-2764	INACTIVE THRUST BRG. MT.
ZS-2532A	TE-2764	TE-1296
ZS-2532A	TE-2764	TE-1296
ZS-2750	HS-2776	ACTIVE THRUST WEAR TEST
ZS-2751	HS-2776A	HS-2776
OPERATING CYLINDER	SV-2776	IL-2716
ZI-5486B	PS-2716	IL-2716
SERVO VALVE	IL-2716	P-668
ZI-5487B	P-668	INACTIVE THRUST WEAR TEST
PSH-5485B	HS-2778	HS-2778
IL-5485B	SV-2778	SV-2778
F70-02	PS-2718	PS-2718
P-665	IL-2718	IL-2718
LP CONTROL-STOP VALVES	HP CONTROL-STOP VALVES	
ZS-2534A	HS-2770	HS-2770
ZS-2534C	IL-2770	IL-2770
ZS-2747A	SV-2770	SV-2770
ZS-2747A	PSL-4534A	PSL-4534A
HS-2768	PSL-4534B	PSL-4534B
SV-2768	PSL-4534C	PSL-4534C
	PSL-4534D	PSL-4534D

MAIN FW PUMP TURBINE		
DESCRIPTION	COMP PT NO	INSTR. NO.
BRG OIL TEMP		TI-1292
		TI-1293
BFP END	T-661	TE-1295
MFP END	T-667	TE-1296
THR BRG OIL TEMP		TI-1294
		TE-1297
STOP VLV CHEST TEMP	T-663	TE-2766
CONTROL STOP VLV		
HP CLOSED	Z-640	ZS-2532B
LP CLOSED	Z-640	ZS-2534B
BRG VIBRATION		
BFP END	V-661	ZI-2704
		ZE-2704
MFP END	V-667	ZI-2706
		ZE-2706
SHAFT SPEED		
SHAFT SPD	S-667	SI-2708C
		SI-2708A
		SI-2708B
ZERO SPEED	S-666	NOTE
ZERO SPEED	S-666	7
TURBINE TRIP	Q-634	ZS-2753
TURN. GEAR		HIS-1221A
TRN GR ENG		IL-1221B

VIBRATION MONITORING		
DESCRIPTION	COMP PT NO	INSTR. NO.
BRG VIB MONITOR	V651	ZSH-788
NO. 2 MAIN PUMP VIB		
T/E BRG VIB	ZSH-788A	ZSH-788A
O/B BRG VIB	ZSH-788B	ZSH-788B
NO. 2 GEAR REDUCER		
LSS BRG T/E	ZSH-790	ZSH-790
HSS BRG P/E	ZSH-808	ZSH-808
NO. 2 BOOSTER PUMP VIB		
O/B BRG VIB	ZSH-809A	ZSH-809A
T/E BRG VIB	ZSH-809B	ZSH-809B
NO. 2 AUX TURB/PUMP VIB		
VIB MONITOR	V003	ZSH-621
NO. 2 AUX PUMP VIB		
T/E BRG VIB	ZSH-621A	ZSH-621A
O/B BRG VIB	ZSH-621B	ZSH-621B
NO. 2 AUX TURB VIB		
P/E BRG VIB	ZSH-818A	ZSH-818A
O/B BRG VIB	ZSH-818B	ZSH-818B

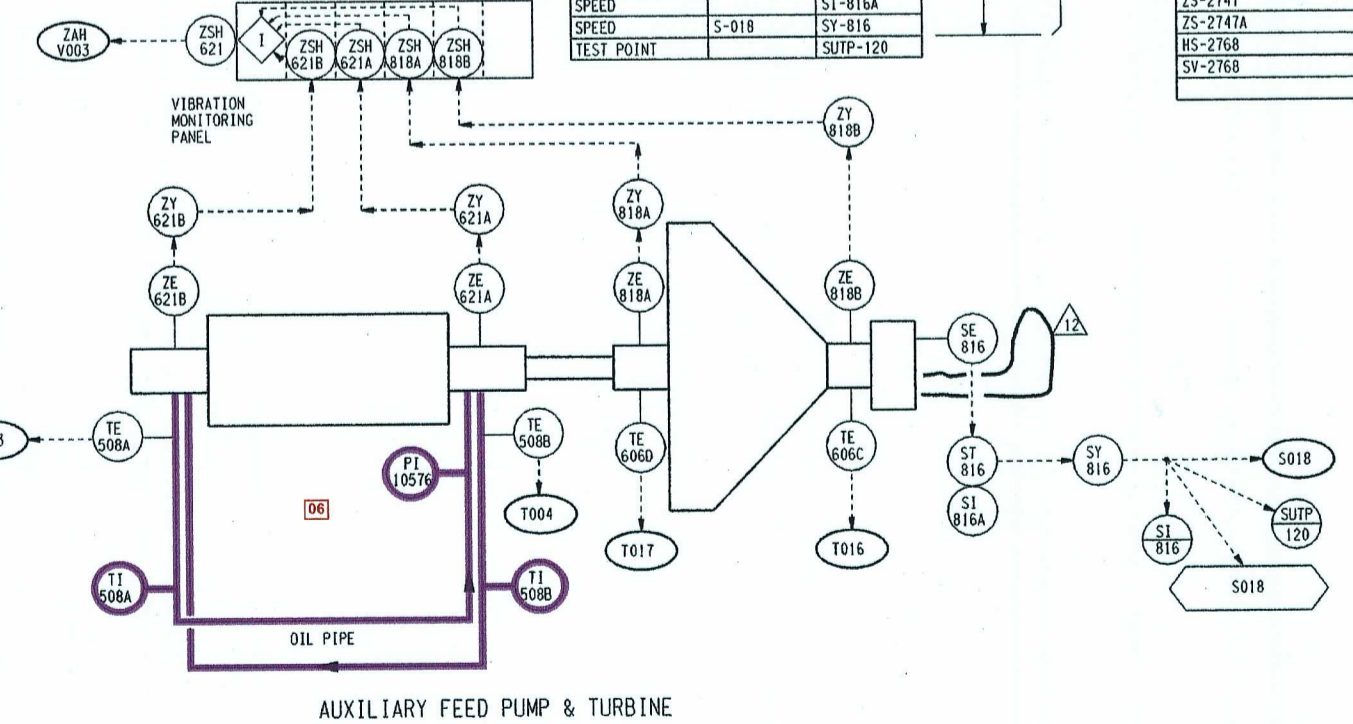
GEAR REDUCER		
DESCRIPTION	COMP PT NO	INSTR. NO.
HSS T/E	T-055	TE-1792A
HSS P/E	T-056	TE-1792B
LSS T/E	T-049	TE-1792C
LSS P/E	T-054	TE-1792D
NO. 2 PUMP VIB		
O/B BRG	V-049	ZY-809A
O/B BRG	V-050	ZY-809A
T/E BRG	V-048	ZY-809B
T/E BRG	V-052	ZY-809B
STUB BRG.	T-633	TE-6362

FW BOOSTER PUMP NO. 2		
DESCRIPTION	COMP PT NO	INSTR. NO.
THR BRG	T-053	TE-489A
THR BRG	T-054	TE-489B
O/B BRG	T-052	TE-489C
T/E BRG	T-050	TE-489D
NO. 2 PUMP VIB		
O/B BRG	V-049	ZY-809A
O/B BRG	V-050	ZY-809A
T/E BRG	V-048	ZY-809B
T/E BRG	V-052	ZY-809B

AUXILIARY FEED PUMP NO. 2		
DESCRIPTION	INSTR. NO.	COMP PT NO
O/B BRG OT	TE-508A	T-003
T/E BRG OT	TE-508B	T-004
O/B BRG OT	TI-508A	T-004
T/E BRG OT	TI-508B	T-004
BRG. VIB.	ZE-621A	NOTE 6
BRG. VIB.	ZY-621A	NOTE 6
BRG. VIB.	ZE-621B	NOTE 6
BRG. VIB.	ZY-621B	NOTE 6
BRG. LUBE OIL PRESS.	PI-10576	

AUXILIARY FEED PUMP NO. 2 TURBINE		
DESCRIPTION	COMP PT NO	INSTR. NO.
O/B BRG OT	T-016	TE-606C
P/E BRG OT	T-017	TE-606D
BRG. VIB.	ZE-818A	ZE-818A
BRG. VIB.	ZY-818A	ZY-818A
BRG. VIB.	ZE-818B	ZE-818B
BRG. VIB.	ZY-818B	ZY-818B
SPEED PICK-UP	SE-816	SE-816
SPEED (RPM)	SI-816	SI-816
TEST POINT	S-018	SI-816A
		SUITP-120

NOTE 6
NOTE 6
NOTE 6
NOTE 5
FRONT STD.



AUXILIARY FEED PUMP & TURBINE

LR.NOTES:
A. FOR GENERAL LICENSE RENEWAL NOTES REFER TO LR-M001-01

LICENSE RENEWAL BOUNDARY DRAWING
LR-M024H REV. 0
SYSTEMS SHOWN ON THIS DRAWING:
DS: MAIN FEEDWATER
DE: AUXILIARY FEEDWATER

DAVIS-BESSE NUCLEAR POWER STATION
UNIT NO. 1
THE TOLDO DESIGN COMPANY
PIPING & INSTRUMENT DIAGRAM
NO. 2 MAIN AND FEEDWATER
TURBINE DRIVEN FEED PUMPS

THIS DRAWING AT REVISION 0 SUPERSEDES
IN PART M-024B REV. 18 WORK
THIS DRAWING WITH M-024G & M-024J
DB 01-19-06
DRAWING NO. M-024H
REV. 12

01231