



SERVICE WATER PUMPS						
LOCATION	1-1		1-2		1-3	
	TE	T	TE	T	TE	T
MOTOR UPPER BRG. (THRUST BRG.)	1477A	922	1478A	925	1479A	930
MOTOR STATOR	1477D	921	1478D	925	1479D	929

DILUTION PUMP		
LOCATION	1-1	
	TE	T
MOTOR STATOR	3612A	7974
MOTOR BEARING OT. (PUMP END)	3612B	7975
MOTOR BEARING OT. (MOTOR END)	3612C	7976
PUMP BEARING OT.		
THRUST BEARING		

- NOTES:**
- SYSTEM FUNCTIONS SHOWN ARE FOR NORMAL OPERATION UNDER FULL LOAD.
  - FOR GENERAL NOTES, PIPING SYMBOLS AND P & ID INDEX SEE DWG. N-001.
  - FOR INSTRUMENTATION SYMBOLS SEE DWG. M-002.
  - DELETED.
  - UNLESS OTHERWISE NOTED, ALL DRAIN CONN. ARE 1" AND ALL VENT CONN. 3/4" LINE IDENT. SAME AS HEADER.
  - OWNER PIPING TO BE ENGINEERED BY BECHTEL AND SUPPLIED BY GRINWELL.
  - DELETED.
  - FOR VLY'S REFERENCING THIS NOTE, ONLY THE LOCAL HANDWHEELS & LOCAL PUSHBUTTON STATIONS OF THESE MOV'S ARE LOCKED. OPERATION FROM THE MAIN CONTROL ROOM IS NOT LOCKED.
  - THIS INSTRUMENT IS SEISMICALLY SUPPORTED BUT MAY NOT BE FUNCTIONAL FOLLOWING A SEISMIC EVENT.
  - THE ONLY VENT OR DRAIN LINE CAPS REQUIRED TO BE SHOWN ON PIPING AND INSTRUMENTATION DIAGRAMS ARE THOSE CONTROLLED UNDER 08-09-0005 (FORMER 40153-05). THE ACTUAL TERMINATION OF ALL OTHER VENTS OR DRAINS ARE NOT SHOWN AND INSTEAD, AN OPEN ENDED PIPE IS DISPLAYED.
  - REMOVAL OF THIS SPOOL PIECE REQUIRES INSTALLATION OF A TEMPORARY SPOOL PIECE IN ORDER TO MAINTAIN THE SEISMIC INTEGRITY OF THE SERVICE WATER SYSTEM. REFER TO HL-2410 DETAIL 3 FOR TEMPORARY SPOOL PIECE INSTALLATION DETAILS.
  - REMOVAL OF THIS SPOOL PIECE REQUIRES INSTALLATION OF A TEMPORARY SPOOL PIECE IN ORDER TO MAINTAIN THE SEISMIC INTEGRITY OF THE SERVICE WATER SYSTEM. REFER TO HL-2410 DETAIL 3 FOR TEMPORARY SPOOL PIECE INSTALLATION DETAILS.
  - ORIFICE PLATES IN FE908 AND FE909 ARE INTERCHANGEABLE.
  - DELETED.
  - FP9810/98910 ARE ABANDONED IN PLACE. THE ANNUAR IS UNABLE TO BE INSERTED (IT APPEARS THAT THE ISOLATION VALVE IS BROKEN). FP9814/98914 REPLACES THE ABANDONED COMPONENTS.
  - TO ADDRESS SINGLE ACTIVE FAILING CONCERN, THE AIR SUPPLY HAS BEEN DISCONNECTED FROM SW2945 AND THE VALVE SHALL REMAIN IN ITS FAILED OPEN POSITION. (REF. ECR 03-0087-001)

**LR NOTES:**

A. FOR GENERAL LICENSE RENEWAL NOTES REFER TO LR-M001-01.  
 B. COMPONENTS BEYOND THE PORTLIGHTING ARE LOCATED IN NON-SAFETY RELATED PORTIONS OF THE INTAKE STRUCTURE, BELOW GROUND, OR IN THE TURBINE BUILDING, WHERE (A)(2)-NSAS CONSIDERATIONS ARE NOT A CONCERN, AND ARE THEREFORE NOT IN-SCOPE.  
 C. COMPONENTS HIGHLIGHTED GREEN BEYOND THE Q-BOUNDARIES ARE IN SCOPE FOR (A)(3). THE MAIN FLOW PATH FROM THE DILUTION PUMP, AND ASSOCIATED BRANCH LINES TO AND INCLUDING THE FIRST VALVE, ARE IN SCOPE. COMPONENTS THAT ARE NOT HIGHLIGHTED ARE LOCATED IN THE NON-SAFETY RELATED PORTIONS OF THE INTAKE STRUCTURE WHERE (A)(2)-NSAS CONSIDERATIONS ARE NOT A CONCERN, AND ARE THEREFORE NOT IN SCOPE.

**LICENSE RENEWAL BOUNDARY DRAWING**  
 LR-M041A REV. 1

SYSTEMS SHOWN ON THIS DRAWING:  
 07: SERVICE WATER  
 24: NONSAFETY AFFECTING SAFETY

**BECHTEL ASSOCIATES**  
 PROFESSIONAL CORPORATION (OHIO)  
 641 THERMABURG, MARYLAND  
**DAVIS-BESSE NUCLEAR POWER STATION**  
 UNIT NO. 1  
 THE TOLEDO EDISON COMPANY

PIPING & INSTRUMENT DIAGRAM  
**SERVICE WATER PUMPS AND SECONDARY SERVICE WATER SYSTEM**

JOB NO.	DRAWING NO.	REV.
12501	M-041A	30

THIS DWG. REV. 0 SUPERSEDES IN PART DWG. M-041 REV. 31. WORK THIS DWG. WITH N-041B AND N-041C.

DATE: 08-28-07 14 3/4" X 11" SIZE  
 PSC 1 1 1

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