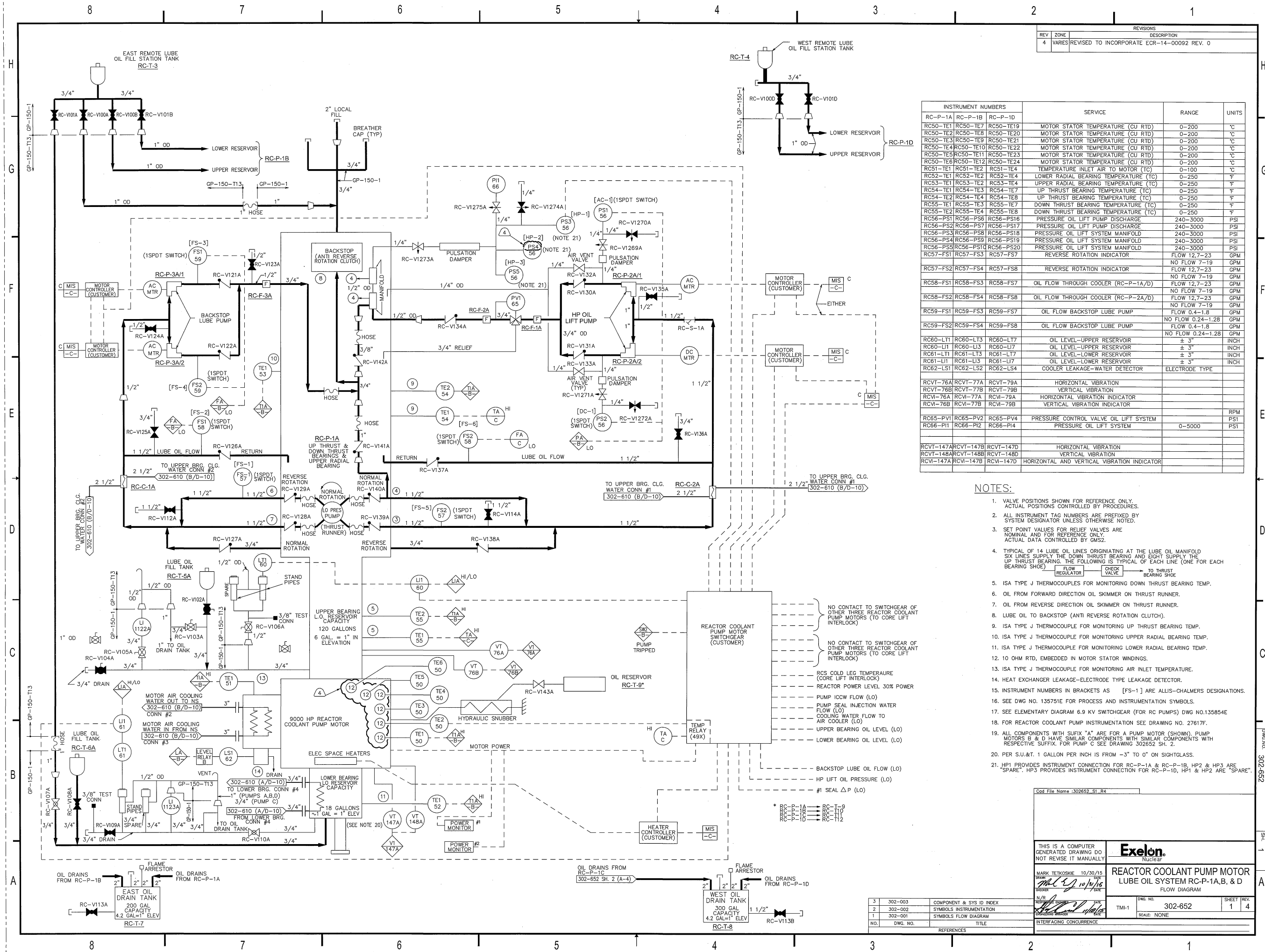




INSTRUMENT NUMBERS			SERVICE	RANGE	UNITS
RC-P-1A	RC-P-1B	RC-P-1D			
RC50-TE1	RC50-TE1	RC50-TE19	MOTOR STATOR TEMPERATURE (CU RTD)	0-200	°C
RC50-TE2	RC50-TE8	RC50-TE20	MOTOR STATOR TEMPERATURE (CU RTD)	0-200	°C
RC50-TE3	RC50-TE9	RC50-TE21	MOTOR STATOR TEMPERATURE (CU RTD)	0-200	°C
RC50-TE4	RC50-TE10	RC50-TE22	MOTOR STATOR TEMPERATURE (CU RTD)	0-200	°C
RC50-TE5	RC50-TE11	RC50-TE23	MOTOR STATOR TEMPERATURE (CU RTD)	0-200	°C
RC50-TE6	RC50-TE12	RC50-TE24	MOTOR STATOR TEMPERATURE (CU RTD)	0-200	°C
RC51-TE1	RC51-TE2	RC51-TE4	TEMPERATURE INLET AIR TO MOTOR (TC)	0-100	°C
RC52-TE1	RC52-TE2	RC52-TE4	LOWER RADIAL BEARING TEMPERATURE (TC)	0-250	°F
RC53-TE1	RC53-TE2	RC53-TE4	UPPER RADIAL BEARING TEMPERATURE (TC)	0-250	°F
RC54-TE1	RC54-TE3	RC54-TE7	UP THRUST BEARING TEMPERATURE (TC)	0-250	°F
RC54-TE2	RC54-TE4	RC54-TE8	UP THRUST BEARING TEMPERATURE (TC)	0-250	°F
RC55-TE1	RC55-TE3	RC55-TE7	DOWN THRUST BEARING TEMPERATURE (TC)	0-250	°F
RC55-TE2	RC55-TE4	RC55-TE8	DOWN THRUST BEARING TEMPERATURE (TC)	0-250	°F
RC56-PS1	RC56-PS6	RC56-PS16	PRESSURE OIL LIFT PUMP DISCHARGE	240-3000	PSI
RC56-PS2	RC56-PS7	RC56-PS17	PRESSURE OIL LIFT PUMP DISCHARGE	240-3000	PSI
RC56-PS3	RC56-PS8	RC56-PS18	PRESSURE OIL LIFT SYSTEM MANIFOLD	240-3000	PSI
RC56-PS4	RC56-PS9	RC56-PS19	PRESSURE OIL LIFT SYSTEM MANIFOLD	240-3000	PSI
RC56-PS5	RC56-PS10	RC56-PS20	PRESSURE OIL LIFT SYSTEM MANIFOLD	240-3000	PSI
RC57-FS1	RC57-FS3	RC57-FS7	REVERSE ROTATION INDICATOR	FLOW 12.7-23 NO FLOW 7-19	GPM
RC57-FS2	RC57-FS4	RC57-FS8	REVERSE ROTATION INDICATOR	FLOW 12.7-23 NO FLOW 7-19	GPM
RC58-FS1	RC58-FS3	RC58-FS7	OIL FLOW THROUGH COOLER (RC-P-1A/D)	FLOW 12.7-23 NO FLOW 7-19	GPM
RC58-FS2	RC58-FS4	RC58-FS8	OIL FLOW THROUGH COOLER (RC-P-2A/D)	FLOW 12.7-23 NO FLOW 7-19	GPM
RC59-FS1	RC59-FS3	RC59-FS7	OIL FLOW BACKSTOP LUBE PUMP	FLOW 0.4-1.8 NO FLOW 0.24-1.28	GPM
RC59-FS2	RC59-FS4	RC59-FS8	OIL FLOW BACKSTOP LUBE PUMP	FLOW 0.4-1.8 NO FLOW 0.24-1.28	GPM
RC60-L1	RC60-L13	RC60-L17	OIL LEVEL-UPPER RESERVOIR	± 3"	INCH
RC60-L11	RC60-L13	RC60-L17	OIL LEVEL-UPPER RESERVOIR	± 3"	INCH
RC61-L1	RC61-L13	RC61-L17	OIL LEVEL-LOWER RESERVOIR	± 3"	INCH
RC61-L11	RC61-L13	RC61-L17	OIL LEVEL-LOWER RESERVOIR	± 3"	INCH
RC62-LS1	RC62-LS2	RC62-LS4	COOLER LEAKAGE-WATER DETECTOR	ELECTRODE TYPE	
RCVT-76A	RCVT-77A	RCVT-79A	HORIZONTAL VIBRATION		
RCVT-76B	RCVT-77B	RCVT-79B	VERTICAL VIBRATION		
RCVI-76A	RCVI-77A	RCVI-79A	HORIZONTAL VIBRATION INDICATOR		
RCVI-76B	RCVI-77B	RCVI-79B	VERTICAL VIBRATION INDICATOR		
RC65-PV1	RC65-PV2	RC65-PV4	PRESSURE CONTROL VALVE OIL LIFT SYSTEM		RPM
RC66-PI1	RC66-PI2	RC66-PI4	PRESSURE OIL LIFT SYSTEM	0-5000	PSI
RCVT-147A	RCVT-147B	RCVT-147D	HORIZONTAL VIBRATION		
RCVT-148A	RCVT-148B	RCVT-148D	VERTICAL VIBRATION		
RCVI-147A	RCVI-147B	RCVI-147D	HORIZONTAL AND VERTICAL VIBRATION INDICATOR		

NOTES:

1. VALVE POSITIONS SHOWN FOR REFERENCE ONLY. ACTUAL POSITIONS CONTROLLED BY PROCEDURES.
2. ALL INSTRUMENT TAG NUMBERS ARE PREFIXED BY SYSTEM DESIGNATOR UNLESS OTHERWISE NOTED.
3. SET POINT VALUES FOR RELIEF VALVES ARE NOMINAL AND FOR REFERENCE ONLY. ACTUAL DATA CONTROLLED BY GMSZ.
4. TYPICAL OF 14 LUBE OIL LINES ORIGINATING AT THE LUBE OIL MANIFOLD SIX LINES SUPPLY THE DOWN THRUST BEARING AND EIGHT SUPPLY THE UP THRUST BEARING. THE FOLLOWING IS TYPICAL OF EACH LINE (ONE FOR EACH BEARING SHOE)

FLOW
REGULATOR

CHECK
VALVE

→ TO THRUST
BEARING SHOE
5. ISA TYPE J THERMOCOUPLES FOR MONITORING DOWN THRUST BEARING TEMP.
6. OIL FROM FORWARD DIRECTION OIL SKIMMER ON THRUST RUNNER.
7. OIL FROM REVERSE DIRECTION OIL SKIMMER ON THRUST RUNNER.
8. LUBE OIL TO BACKSTOP (ANTI REVERSE ROTATION CLUTCH).
9. ISA TYPE J THERMOCOUPLE FOR MONITORING UP THRUST BEARING TEMP.
10. ISA TYPE J THERMOCOUPLE FOR MONITORING UPPER RADIAL BEARING TEMP.
11. ISA TYPE J THERMOCOUPLE FOR MONITORING LOWER RADIAL BEARING TEMP.
12. 10 OHM RTD, EMBEDDED IN MOTOR STATOR WINDINGS.
13. ISA TYPE J THERMOCOUPLE FOR MONITORING AIR INLET TEMPERATURE.
14. HEAT EXCHANGER LEAKAGE—ELECTRODE TYPE LEAKAGE DETECTOR.
15. INSTRUMENT NUMBERS IN BRACKETS AS [FS-1] ARE ALLIS—CHALMERS DESIGNATIONS.
16. SEE DWG NO. 135751E FOR PROCESS AND INSTRUMENTATION SYMBOLS.
17. SEE ELEMENTARY DIAGRAM 6.9 KV SWITCHGEAR (FOR RC PUMPS) DWG NO.135854E
18. FOR REACTOR COOLANT PUMP INSTRUMENTATION SEE DRAWING NO. 27617F.
19. ALL COMPONENTS WITH SUFFIX "A" ARE FOR A PUMP MOTOR (SHOWN). PUMP MOTORS B & D HAVE SIMILAR COMPONENTS WITH SIMILAR COMPONENTS WITH RESPECTIVE SUFFIX. FOR PUMP C SEE DRAWING 302652 SH. 2.
20. PER S.U.&T. 1 GALLON PER INCH IN FROM -3" TO 0" ON SIGHTGLASS.
21. HP1 PROVIDES INSTRUMENT CONNECTION FOR RC-P-1A & RC-P-1B, HP2 & HP3 ARE "SPARE". HP3 PROVIDES INSTRUMENT CONNECTION FOR RC-P-1D, HP1 & HP2 ARE "SPARE".

Cod File Name :302652_S1_R4

THIS IS A COMPUTER
GENERATED DRAWING DO
NOT REVISE IT MANUALLY

Exelon
Nuclear

REACTOR COOLANT PUMP MOTOR
LUBE OIL SYSTEM RC-P-1A,B, & D
FLOW DIAGRAM

TMI-1	DWG. NO.	302-652	SHEET	1	REV.	4
	SCALE: NONE					

3	302-003	COMPONENT & SYS ID INDEX
2	302-002	SYMBOLS INSTRUMENTATION
1	302-001	SYMBOLS FLOW DIAGRAM
NO.	DWG. NO.	TITLE

REFERENCES