

**Power Station****Condensate System Makeup****Initial Conditions**

1. All electrical and mechanical hold cards are released, and the equipment is in a safe condition to operate.
2. All rotating equipment guards and safety devices are installed.
3. The Breaker is racked in.
4. DC Control power is on.
5. Pump oil levels are within operational range.
6. Seal water is lined up.
7. Hotwell level is normal.
8. Battery Bank connections verified.
9. MPR Ready
10. Condensate level not low

**Precautions**

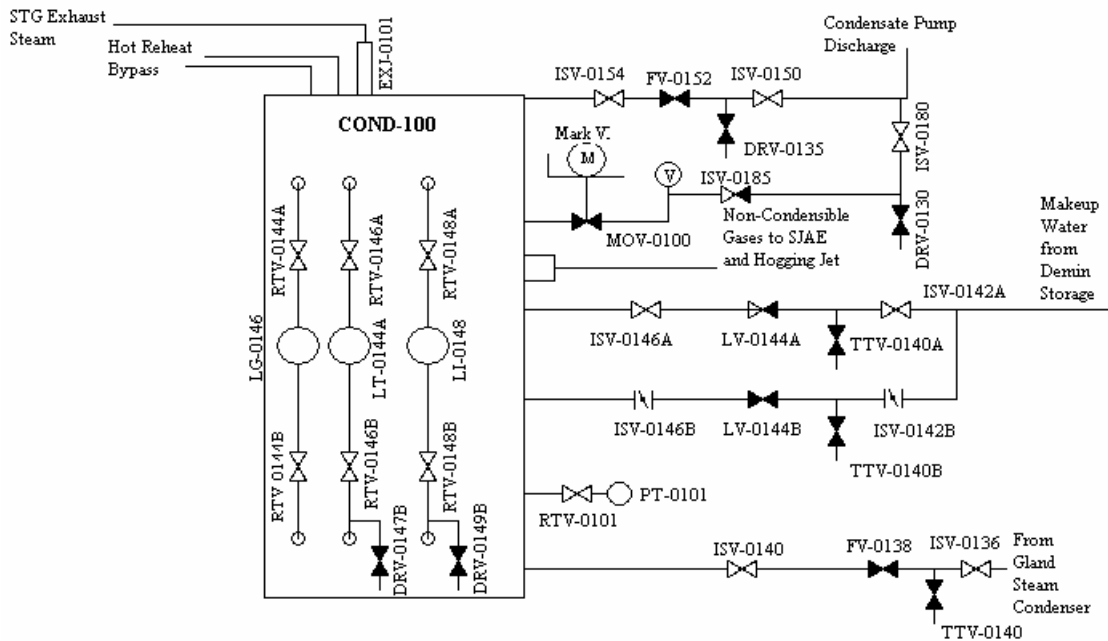
1. Obey all Entergy safety regulations.
2. Caution should be observed when working around the Condensate System valves and pumps.
3. Use extreme caution inside equipment modules where close quarters conditions exist.

**Power Station**

**Condensate System Makeup**



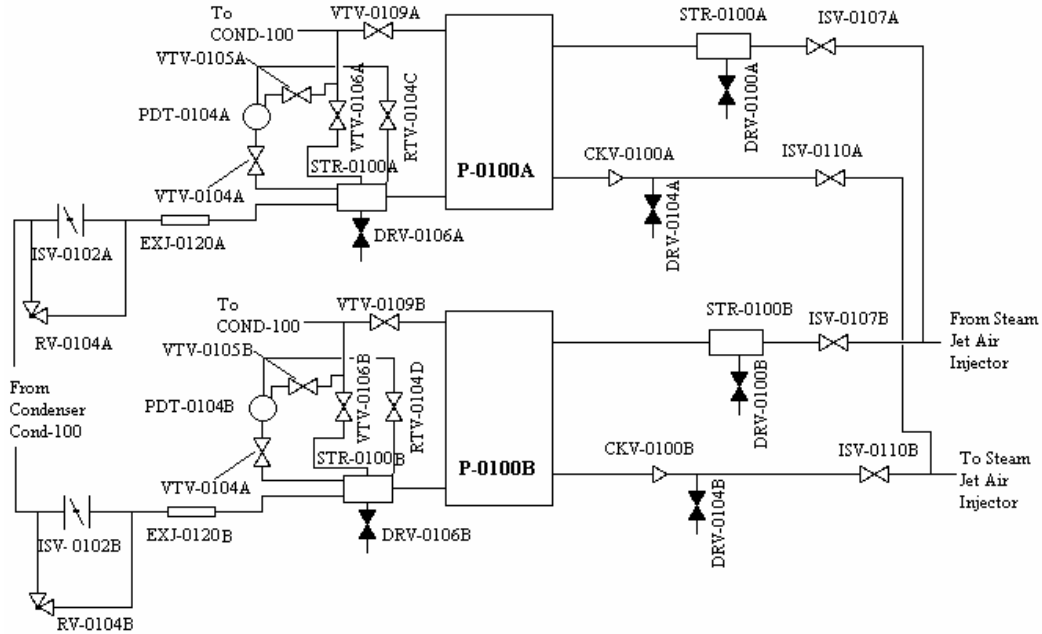
**Figure 1 - Condensate System Discharge Valve**



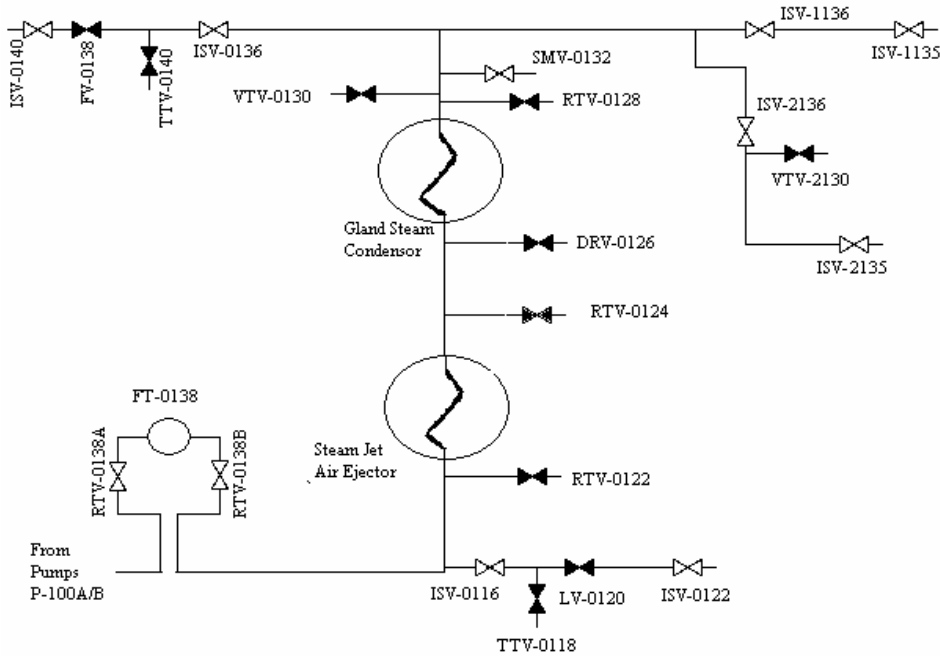
**Figure 2 - Condensate System Valve Lineup (1 of 3)**

**Power Station**

**Condensate System Makeup**



**Figure 3 - Condensate System Valve Lineup (2 of 3)**



**Figure 4 - Condensate System Valve Lineup (3 of 3)**

CONDENSATE SYSTEM MAKEUP-FIELD OPERATING PROCEDURE

Page 4 of 8  
Date October 12, 2007  
Revision 0

**Power Station**

**Condensate System Makeup**

- NOTE:** Items listed within the procedure that are shown in **bold Red** are to be performed locally by the operator. Items that are shown in *black italics* are to be performed remotely by the Control Room Operator.
- NOTE:** This procedure defines the steps to bring the Condensate System on-line and, when necessary, off-line
- NOTE:** Place an **X** in the "Done" column to indicate that the step has been completed
- NOTE:** Remain in contact with Control Room while performing this procedure

**CONDENSATE SYSTEM**

**Valve Line-up**

	ACTION	DONE
1.	<b>CLOSE 1CO-DRV-0100A</b>	
2.	<b>OPEN 1CO-RTV-0100A</b>	
3.	<b>OPEN 1CO-RTV-0100B</b>	
4.	<b>OPEN 1CO-ISV-0102A</b>	
5.	<b>OPEN 1CO-ISV-0102B</b>	
6.	<b>OPEN 1CO-RTV-0104A</b>	
7.	<b>OPEN 1CO-VTV-0105A</b>	
8.	<b>OPEN 1CO-VTV-0106A</b>	
9.	<b>OPEN 1CO-RTV-0104A</b>	
10.	<b>OPEN 1CO-VTV-0105B</b>	
11.	<b>OPEN 1CO-VTV-0106B</b>	
12.	<b>OPEN 1CO-RTV-0104C</b>	
13.	<b>OPEN 1CO-RTV-0104D</b>	
14.	<b>CLOSE 1CO-DRV-0106A</b>	
15.	<b>CLOSE 1CO-DRV-0106B</b>	
16.	<b>OPEN 1CO-VTV-0109A</b>	
17.	<b>OPEN 1CO-VTV-0109B</b>	
18.	<b>CLOSE 1CO-DRV-0104A</b>	
19.	<b>CLOSE 1CO-DRV-0100A</b>	
20.	<b>CLOSE 1CO-DRV-0100B</b>	
21.	<b>OPEN 1CO-ISV-0107A</b>	
22.	<b>OPEN 1CO-ISV-0107B</b>	
23.	<b>OPEN 1CO-ISV-0110A</b>	
24.	<b>OPEN 1CO-ISV-0110B</b>	
25.	<b>OPEN 1CO-RTV-0112</b>	

## CONDENSATE SYSTEM MAKEUP-FIELD OPERATING PROCEDURE

Page 5 of 8  
 Date October 12, 2007  
 Revision 0

**Power Station****Condensate System Makeup**

ACTION	DONE
26. OPEN 1CO-ISV-0116	
27. OPEN 1CO-ISV-0122	
28. CLOSE 1CO-RTV-0122	
29. CLOSE 1CO-RTV-0124	
30. CLOSE 1CO-DRV-0126	
31. CLOSE 1CO-RTV-0128	
32. CLOSE 1CO-VTV-0130	
33. OPEN 1CO-SMV-0132	
34. OPEN 1CO-SHV-0134	
35. OPEN 1CO-RTV-0138A	
36. OPEN 1CO-RTV-0138B	
37. OPEN 1CO-ISV-0136	
38. OPEN 1CO-ISV-0140	
39. OPEN 1CO-ISV-1136	
40. OPEN 1CO-ISV-2136	
41. OPEN 1CO-ISV-1135	
42. OPEN 1CO-ISV-2135	
43. OPEN 1CO-RTV-0101	
44. OPEN 1CO-ISV-0142A	
45. OPEN 1CO-ISV-0142B	
46. OPEN 1CO-ISV-0146A	
47. OPEN 1CO-ISV-0146B	
48. CLOSE 1CO-TTV-0104	
49. CLOSE 1CO-ISV-0172	
50. CLOSE 1CO-DRV-0130	
51. OPEN 1CO-ISV-0162	
52. CLOSE 1CO-DRV-0135	
53. OPEN 1CO-ISV-0150	
54. OPEN 1CO-ISV-0154	
55. OPEN 1CO-ISV-0180	
56. OPEN 1CO-ISV-0185	
57. CLOSE 1CO-DRV-0203	
58. OPEN 1CO-RTV-0201	
59. CLOSE 1CO-DRV-0200	
60. CLOSE 1CO-ISV-0202	
61. OPEN 1CO-ISV-0212A	
62. CLOSE 1CO-ISV-0212B	
63. OPEN 1CO-ISV-0214A	
64. CLOSE 1CO-ISV-0214B	
65. OPEN 1CO-RTV-0207	

**CONDENSATE SYSTEM MAKEUP-FIELD OPERATING PROCEDURE**

Page 6 of 8  
Date October 12, 2007  
Revision 0

**Power Station**

**Condensate System Makeup**

ACTION	DONE
<b>66. OPEN 1CO-RTV-0209</b>	
<b>67. OPEN 1CO-SHV-0210A</b>	
<b>68. CLOSE 1CO-SHV-0210B</b>	
<b>69. OPEN 1CO-ISV-0222A</b>	
<b>70. OPEN 1CO-ISV-0222B</b>	
<b>71. CLOSE 1CO-RTV-0230A</b>	
<b>72. CLOSE 1CO-RTV-0230B</b>	
<b>73. OPEN 1CO-VTV-0235</b>	
<b>74. OPEN 1CO-ISV-0244</b>	
<b>75. OPEN 1CO-ISV-0254</b>	

**Pre-start Checks**

ACTION	DONE
<b>1. Verify the breaker is racked in and closed</b>	
<b>2. Verify the DC Control power is on</b>	
<b>3. Verify the pump oil levels are within operating range</b>	
<b>4. Verify the valve line-up is correct</b>	
<b>5. Verify the seal water is lined-up</b>	
<b>6. Verify the Closed Cooling Water System is lined-up to the upper bearings on the condensate pumps</b>	
<b>7. Verify the hotwell is at the normal operating range</b>	

**System Start-Up**

ACTION	DONE
<b>1. Walk down the Condensate System</b>	
<b>2. Discharge Valve should be CLOSED on cold start (prevents hammering the system)</b>	
<b>3. Verify the Vent Pump is lined-up to the condenser</b>	
<b>4. Contact Control Room Operator for a Pump start</b>	
<b>5. <i>Start the Pump</i></b>	
<b>6. Verify the Pump starts and operates smoothly</b>	
<b>7. Open the Discharge Valve slowly until the system is pressurized</b>	
<b>NOTE:</b> You will be able to hear the system pressurizing. Listen carefully while system comes to full pressure.	
<b>8. Go to full OPEN on the Discharge Valve</b>	
<b>9. Verify flow through the Minimum Flow Recirc Valve</b>	

CONDENSATE SYSTEM MAKEUP-FIELD OPERATING PROCEDURE

Page 7 of 8  
Date October 12, 2007  
Revision 0

**Power Station**

**Condensate System Makeup**

**System Shutdown**

<b>ACTION</b>	<b>DONE</b>
<b>1. Contact Control Room Operator for a Pump shutdown</b>	
2. <i>Shut down the Pump</i>	

CONDENSATE SYSTEM MAKEUP-FIELD OPERATING PROCEDURE

Page 8 of 8  
Date October 12, 2007  
Revision 0

**Power Station**

**Condensate System Makeup**

**SIGN OFF AND RECORD OF REVISIONS**

\_\_\_\_\_  
REVIEWED BY: OPERATIONS

\_\_\_\_\_  
DATE

\_\_\_\_\_  
APPROVED BY: OPERATIONS SUPERVISOR

\_\_\_\_\_  
DATE

**RECORD OF REVISIONS**

<b>Revision</b>	<b>Explanation</b>	<b>Date</b>
Rev. 0	Initial Issue	