

# Commissioning Procedure

## 4.1 Cold commissioning

During this phase the Commissioning team will activate components and verify the correct operation thereof (e.g. pumps, electrical motors, etc). As well as fill the system with water and flush the pipelines of construction debris.

The team will further verify that the alarms and trips listed in the table below are functional prior to commencing with the commissioning activities listed hereunder.

### Electrical, Instrumentation and Control Requirements

- The **Electrical Contractor** must activate all equipment during tests/commissioning.
- The **C&I contractor** must supply the following Signals for the cold commissioning phase;

Signal	Action
Electrical activation signal to pumps	Start and stop pumps as below <ul style="list-style-type: none"> <li>• 6 OPGC10 AP001</li> <li>• 6 OPGC11 AP001</li> <li>• 6 OPGC12 AP001</li> </ul>
<p><b><i>The following trip signals are automatically bypassed on pump start-up, a 45 second delay is programmed into the DCS after which time the protection is reinstated.</i></b></p> <p><b><i>Refer to ALSTOM Document MED/06/G/---PGB--/OI/001 "TEMPORARY OPERATING INSTRUCTION (200-51344) - CLOSED CIRCUIT COOLING WATER SYSTEM" for the corresponding set points.</i></b></p>	
Pump Suction Header Pressure Low on pump (6 OPGC12 AP001)  Signal from pressure transmitter : PIT 6 0PGB12 CP001	a) Trip and inhibit the start-up of the pump 6 OPGC12 AP001 unless the suction pressure is sufficient b) Activate an alarm (visual/audio).
Pump Suction Header Pressure Low on pump (6 OPGC11 AP001)  Signal from pressure transmitter: PIT 6 0PGB11 CP001	a) Trip and inhibit the start-up of the pump 6 OPGC11 AP001 unless the suction pressure is sufficient b) Activate an alarm (visual/audio).
Pump Suction Header Pressure Low on pump (6 OPGC10 AP001)  Signal from pressure transmitter: PIT 6 0PGB10 CP001	a) Trip and inhibit the start-up of the pump 6 OPGC10 AP001 unless the suction pressure is sufficient b) Activate an alarm (visual/audio).
Pump Discharge Header Pressure high on pump (6 OPGC12 AP001)  Signal from pressure transmitter PIT 6 0PGB12 CP002	a) Trip and inhibit the start-up of the pump 6 OPGC12 AP001 if the pressure is excessive b) Activate an alarm (visual/audio).