

CHAPTER 4

ROUTINE GENERATING SET INSPECTIONS

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1 GENERAL

The following routine inspections should be made periodically during a lengthy period of continuous operation of the Unit, or more normally as an examination during periods of engine and system test.

Start the Turbine and allow it to run for at least 10 minutes to permit the Lubricating Oil Temperature to stabilize prior to checking the system.

WARNING: Always wear hearing protection when in the vicinity of an operating gas turbine. Failure to do so may result in an health risk due to the high frequency sound emanations.

2 OIL SYSTEMS

1. Check the systems for signs of leakage.
2. Check the level of the Turbine and Generator Lubricating Oil Reservoirs by means of the respective level gauge.
3. Check the differential pressure gauge for each of the Duplex Filters and note the indicated condition. If a clogged condition is indicated change the selector valve to divert the flow through the other filter. Advise Service Personnel to service the clogged filter at the next service period.
4. Check each of the dial gauges in the systems and compare the readings noted with those displayed by the control systems in the Local Control Room. If there are any discrepancies report them to the maintenance personnel for investigation.

3 FUEL SYSTEM

1. Apply a small quantity of liquid soap solution to each of the gaseous fuel pipework junctions. Observe if bubbles form in the soap solution at any of the junctions.
2. Check each of the dial gauges in the systems and compare the readings noted with those displayed by the control systems in the Local Control Room. If there are any discrepancies report them to the maintenance personnel for investigation.

4 STEAM SYSTEMS

Check the systems for signs of leakage.

WARNING: The pipework for the Steam Injection System carries superheated steam to maintain the pipes at a temperature to prevent condensation on commencing operation of the steam injection. Therefore the steam piping and manifolds will be maintained at a high temperature and precautions should be taken when in the vicinity of the system.

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5 GENERATOR COOLING WATER

The Generator Coolers should be inspected for signs of leakage. Should there be a leak within the enclosure the water will be trapped in the skid and a shut-down alarm instigated to prevent operation of the Gas Turbine.

To drain water from the Generator Skid it is required to remove an inspection panel from an aperture in the skid to gain access to the manual drain valve below the skid sump.

6 INSTALLATION

1. Examine the installation pipework for signs of chaffing or fretting.
2. Make a general examination for signs of corrosion, excessive condensation and vermin.

NOTE: Advise the Service Personnel of any indications (or discrepancies between indications) noted or of the resetting of the Duplex Filter Flow Control Handle so that the necessary action can be taken.