

**DRESSER-RAND-POWER**

DR61G(000)-1-3

**CHAPTER 9**

**NORMAL STOP**

List of Contents

Para.	Title	Page
1	GENERAL	9-2
2	LOAD SHEDDING	9-2
3	STOP PROCEDURE	9-2

**DRESSER-RAND-POWER**

DR61G(000)-1-3-9

**1 GENERAL**

A normal stop will be instigated by the selection of the 'STOP' function from the CONTROL FUNCTIONS Screen and depressing the ENTER Key. This command can be issued from either the Turbine Control Panel in the Local Control Room or from the Remote Terminal Room dependent on the Turbine Control Panel MODE Switch setting.

The following descriptions relate to the functions and observations made at the functioning Display Panel.

**NOTE:** For full details of the operator facilities at the Main Computer Console refer to the installer's documentation.

It is assumed that, prior to initiating a Stop Sequence, the Gas Turbine Generator Unit is running normally under load with conditions as outlined in Chapter 7 of this Part of the Operating Manual.

**2 LOAD SHEDDING**

Instigating the Stop Sequence will commence with automatically reducing the load on the Generator prior to instigating the tripping of the Generator Circuit-breaker. This will avoid a sudden removal of input to the Main Bus System.

When operating the Gas Turbine/Generator Unit in the 'Local' mode from the Local Control Room and the Generator Control Cabinet MODE SELECTOR Switch is set to the 'Manual' mode the load shedding may be carried out by the Operator from the Generator Control Panels.

The load on the Gas Turbine Generator Unit should be reduced by the SPEED ADJUSTMENT Switch on the Control Panel. Once the load has been sufficiently reduced the Generator Circuit-breaker can be tripped without undue effect on the Main Bus. The Generator Circuit-breaker is tripped by turning the GENERATOR CIRCUIT-BREAKER Switch momentarily to the left.

The load may be reduced from the respective operational terminal by selecting the 'Power Factor Lower' function from the CONTROL FUNCTIONS Screen and depressing the ENTER Key. A secondary screen window will appear showing the current setpoint for the function. Enter a new value for the power factor using the Keyboard and depress the ENTER Key to instigate the change.

**NOTE:** If the load is reduced too far (below zero) the Main Grid will attempt to 'motor' the Generator. Under these circumstances the Circuit-breaker Protection Relays will trip the Circuit-breaker.

**3 STOP PROCEDURE**

1. The normal stop sequence is commenced at the active Operator Terminal by selecting the CONTROL FUNCTIONS Screen and aligning the screen cursor with the 'Stop' command and depressing the ENTER Key.
2. The 'Stop' indication on the screen will change colour to yellow to give an indication to show that the stop sequence has been initiated.
3. The load will be shed from the Turbine Generator Unit smoothly.

**DRESSER-RAND-POWER**

DR61G(000)-1-3-9

- X 4. Where the steam injection system was functioning as the load on the Generator drops below approximately seven megawatt the steam injection will be discontinued. *—— direct at stop sign*
5. The generator will be soft unloaded until the generator KW is at 500 KW. At this time the Generator Circuit-breaker will be tripped.
6. The Field Circuit-breaker will be tripped.
7. The Generator Space Heater is switched on. Observe the indication on the respective display screen.
8. The Turbine is reduced to an idle speed of 5000 rpm for the Gas Generator.
9. The idle speed is maintained for 6 minutes to reduce internal temperature in the Gas Turbine and Generator.

**NOTE:** The Stop Procedure will continue as detailed in the Run-Down Sequence as detailed in Chapter 11 of this Part of the Operating Manual.