



GENERATOR SET MAINS FAILURE OPERATION

MAINS FAILURE

On mains failure (as detected by the phase failure relay in the main switchboard) the generator does not start immediately as there is an adjustable start time delay relay in the generator control panel that is normally set at 2 seconds.

After the 2 seconds has expired the engine commences cranking and runs up to full speed. Nominal voltage and frequency is achieved within 10 seconds.

The mains circuit breaker in the main switchboard is then opened and the generator circuit breaker is closed and the generator goes on load.

Depending on the nature of the mains failure the mains circuit breaker may open immediately on detection of a phase failure if it is fitted with a no-volt coil fed from one of the mains phases.

If the mains supply becomes available again before the generator circuit breaker has closed then the mains circuit breaker remains closed (or re-closes if it has opened) and the generator will not go on load.

MAINS RETURN

On mains supply becoming available the generator continues to supply the load as there is an adjustable mains return time delay relay in the main switchgear that is normally set at 10 minutes.

After the 10 minutes has expired the generator circuit breaker in the main switchboard is then opened and the mains circuit breaker is closed.

The generator runs on, off load, for a further 5 minutes and then shuts down.