

# LMC Central System

The Central system consists of the 1. LOAD MANAGEMENT CONTROLLER 2. MODBUS MODEM 3. VHF TRANSCEIVER



The Load Management Controller station executes the following functions:

Calculates within the integration period, the maximum demand, the demand rate, the projected demand end point; compares the demand end point with the shed level; calculates the required shed diversity and from this, the group codes to be shed.

Via the Modbus modem and VHF transceiver the Load Management Controller (LMC) transmits the “to be shed code address list” to all the Modbus outstations at the Repeater- and/or Sub Stations, for transmission of the shedding commands.

At the next measuring interval, within the integration period, the LMC calculates the new maximum demand rate and new demand end-point. It then compares the demand end-point with the shed level and calculates the new required diversity and from this the group codes to be shed or restored. The Load Management Controller also measures and calculates the measured code shedding diversity from the previous interval code shedding. This process continues until the end of the current integration period.

The LMC stores information of the integration period, the measured maximum demand, the codes shed / restored and the measured code diversity in the database for every minute of the day.

In parallel, but of higher priority to the algorithm shedding, the LMC can also continue shedding according to scheduled load-shedding schedules. These schedules form part of the total load management set-up schedule. It is generally accepted that Load Management generates demand/TOU savings by deferring load from the peak demand periods to the off-peak periods. By scheduled shedding of geysers for the remaining periods in the day, comparable consumption savings can also be achieved.

It also features:

- One or more code groups can be configured for streetlight operation
- Database for High and Low demand for Weekdays, Saturdays, Sundays, Group code diversity, Max daily shed time, Min restore time, Max continuous shed time per customer code group.
- Local and Remote database shedding parameters updates
- Displays Demand Curves, codes shed, shed level, measured diversity, alarms
- The LMC has different set-up menus for setting up of the load control algorithms. This is accomplished by updating the load control schedules.
- Access controlled log-in facility (Password).
- Change Logs with date/time stamps.
- Microsoft Access based report generation.
- The load management controller can be accessed via DCOM access to load management controller.

