

ENERGY METERING PROJECT

Leicester City Council's energy monitoring systems have been based around billing data provided by the utilities. However this type of system can only detect an increase in consumption 2 or 3 months after it occurs. Also, the deregulation of the energy markets has made it more difficult to obtain accurate, reliable energy data and manual reading of meters presents a practical problem. Therefore the Energy Management Section investigated **intelligent metering systems** that could capture real time data.

The Data Bird System uses low power radio to automatically transmit meter readings to a central receiver/data logger, thus avoiding the need for conventional hard wiring. The meter reading data is then automatically downloaded to a PC at the Energy Efficiency Centre, where it is analysed.

The automatic meter reading package (DYNAMAT) provides the following:

Automatic data collection and validation

Highlights immediate problems
Indicates faults rather than excessive consumption.

Meter reading profiling and analysis

Shows day peaks and night / weekend lows
Reveals leaks /wastage.

Automatically read meters and analyses data

Monitoring against historical targets or theoretical guidelines. Consumption related to weather, occupancy, production or a signature of past consumption profiles.

Reports regularly and on an exception basis

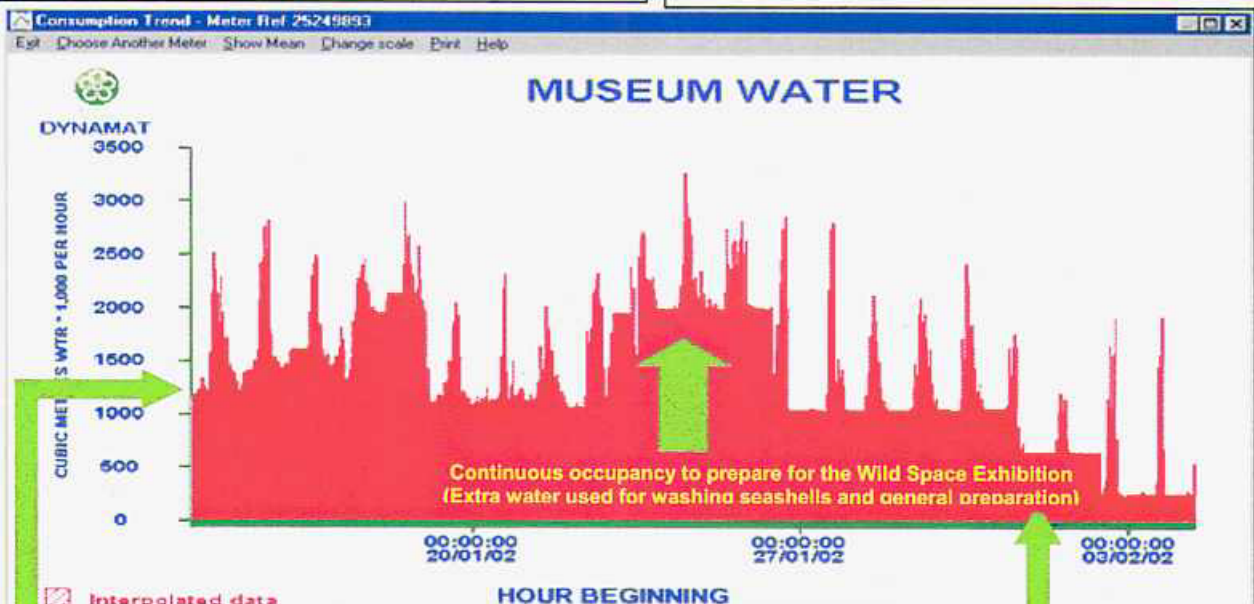
Trends that fall out of tolerance are immediately flagged up.

Easy import and export of data

Data and reports can be saved in other formats enabling information to be sent electronically.

Finance module allows production of bills

Enables Leicester City Council to recharge tenants for their individual usage.



Site visit arranged to investigate high base load

SAVINGS

5 cubic metres * £1.24 = £6.20/day
£6.20 * 365days = £2,263.00 p.a.

Site visit identifies a faulty automatic cistern valve on a urinal