

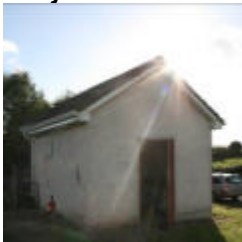
ENERinTOWN Case Study

Energy use in the Mullenbawn water supply station

Client South Tipperary County Council Water Services

Overall objective Implementing low cost measures to optimize the use and cost of electricity to facilitate pumping water supplies from the spring water source to the Fethard area distribution. In addition to this, recommend options to ensure next years upgrade is completed with energy efficiency in mind.

Object data

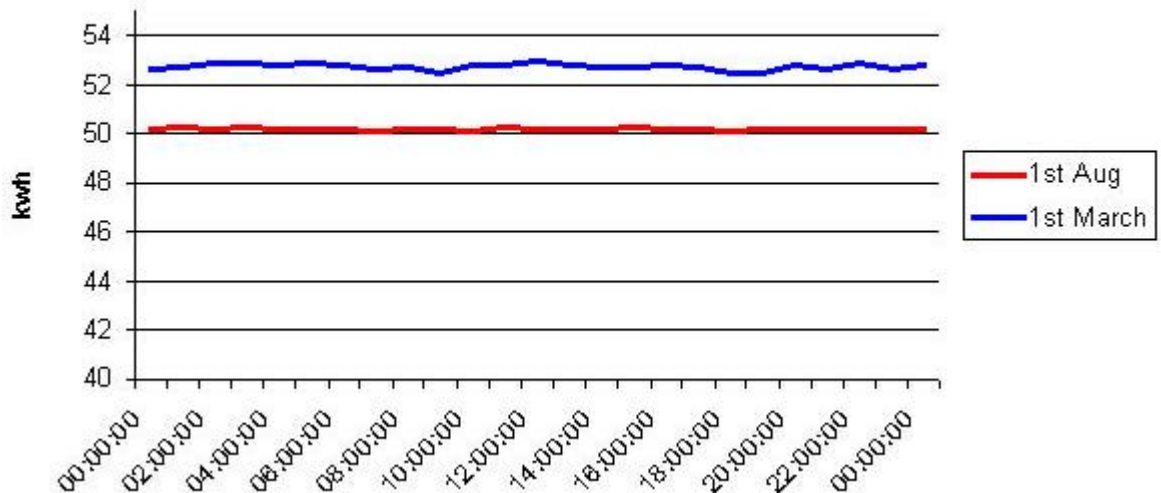


The station supplies water from 1 spring to a reservoir. This reservoir is part of a larger water scheme that supplies a large rural area. It pumps against a substantial head of 50 meters and pumps approximately 150 m³ per hour or 3600 m³ day into the reservoir. The two pumps are identical.

Initial Situation

- ? Poor Power factor.
- ? MIC penalties
- ? No control
- ? Excess water overflowing from reservoir

Mullenbawn Electricity consumption per hour



Measures implemented

- ? Full understanding of flow versus power established.
- ? Variable speed drive implemented and flow was balanced with the needs from the system.

Measures to implement

- ? Full analysis of entire region was completed.
- ? Significant savings (€30,000/ annum) identified for installation of further controls
- ? Pump replacement with high efficiency

ENERinTOWN Case Study

Results The Energy bill for this pumping station will be 7% less in 2008 in comparison to 2007. This equates to just over €5,000 Euro.

Benefits for the clients

- ? Decrease in price per M³ pumped.
- ? €5,000/ annum saved

Assistance provided Cantwell Electrical Services Ltd. (installation)
Bureascope Ltd (Energy Monitoring data)

Contact

Paul Kenny
Tipperary Energy Agency
Craft Granary
Church St,
Cahir,
Co. Tipperary.
+353 52 43090
pkenny@tea.ie