For the trial at the Belfry three Vector BEM systems were fitted to 3 Atlantic 412Kw boilers in the Ballesteros boiler house complete with monitoring equipment. These boilers provided heating for the main reception areas and an accommodation block. The Monitoring involved taking readings from the Vector’s integrated elapsed time meters. One meter logs the demand hours, the other records actual/permitted burn hours.

Readings were taken with the Vector BEMS both switched on for a period and off for a period by way of comparison. The Boiler House gas meter was also read in conjunction with Vectors integral meters as part of the control. Monitoring was conducted over a period of 6 weeks. The results were as follows:-

When the Vector was on, even though the demand for heat was higher, the Vector average burn hours were 25% less. At no time during the trial was there any reduction in temperature, neither return flow nor air temperature. The result of the audit meant that the total savings achieved in 29 days was £736.43. The calculation is based on Number of boiler burn hours saved x the calibration of the Atlantic boilers (412KW) = the total number of KwHrs saved.

Total savings achieved in 29 days (Vector only ON for 29 days) was 82,408.28KwHrs, which at a cost then of .00893640p per KwHr is equal to £736.43.

Grant Stanton, the Energy Manager at the Belfry concluded,
“Installing the Vector BMS into our establishment has achieved savings as you’ve seen. Saving energy is very cost efficient. It is not difficult to convert energy and environmental issues into profit, thus creating greater cash flow, higher profits, improvements to the environment, and producing ongoing savings. I would recommend that installing Vector BEMS into other establishments within the DeVere group would have a significant impact on the group’s profitability.”