

Load Management System

- Project Title:** Load Management System with Intermittent Power on the Grid
- Energy Type:** DSM – Demand Side Management
- Client:** DTI (in collaboration with De Montfort University and Findhorn Foundation Community)
- Location:** Scotland, UK
- Project Size:** Up to 1MW
- Project Scope:**
- Identify contractual requirements and commercial benefits of different load management systems under the Renewables Obligation and electricity trading arrangements.
 - Model economic benefits of load management to customers with intermittent generation on site.
 - Develop low cost load management system incorporating communication technologies and switching devices to maximise renewable energy use on a demonstration site.
 - Identify associated social and psychological aspects.
 - Identify and evaluate four potential control strategies for a load management system on the distribution network.
 - A solution to voltage rise problems caused by distributed generation ensuring zero export from a site with renewable generation.
 - Avoiding load demand discrepancies.
 - Creating an additional market for renewable energy.
 - Select one strategy suitable for application at the test site.
 - Demonstrate technical aspects of load management equipment.
 - Investigate the social aspects of the load management strategy.
- Key Achievements:**
- ☉ Identified several beneficial applications of load management in context of renewable energy
 - ☉ Extended application of Senergy Econnect’s load controllers from off-grid systems to grid-connected operation
 - ☉ Developed a load management system for implementation
 - ☉ Demonstrated successful technical operation of component parts
 - ☉ Identified issues which will make a system practicable and successful
- Completion Date:** 2006