

Project ID	DIP001		
Long Title	1MW Shetland NaS Battery		
Short Title			
Keywords	Single Site; Multi-sector/Grid; Electricity; Direct Electric Storage; Power Quality & Grid Integration; Smart Grids; Demand Response; Active Network Management; Smart Devices;		
Location (Town, Region, Country)	Lerwick	Shetland	Scotland
Latitude and Longitude	60.15N	1.14W	
OSGB code	HU 4746 4143		
Status	Complete		
Start Date	2010		
End Date	2014		
Description	<p>This Project involves installing a 1MWe connected battery at the Lerwick Power Station on Shetland and will provide learning regarding the operation of the battery and its integration with local Demand Side Response to remove station peaks providing additional demand capacity (in a similar way to managing a network load constraint).</p> <p>This project also secured funding from the Department of Energy and Climate Change (DECC) Smart Grid Demonstration Capital Grant Programme. The aim is to install a grid scale energy storage device on the Shetland network with a power conversion system and local controller providing a choice of modes of operation. A Sodium Sulphur (NaS) battery system was selected through a tender process.</p> <p>Linked to NINES project (precursor).</p>		
Sectors	Grid		
Funding Sources	Low Carbon Network Fund		
Budget £	£1 million		
Partners	Smarter Grid Solutions		
Energy vectors	Electricity		
Scale (lab/site/ small/community/region/national)	Site		
Technologies demonstrated	Smart controls, demand response devices, active network management, battery storage		
Economic models demonstrated	Grid services		
Other concepts demonstrated	Grid constraint mitigation, demand response		
Industry engagement			
Consumer engagement			
Project Reports (incl. links)	https://www.ssepd.co.uk/WorkArea/DownloadAsset.aspx?id=7303		

	Library: http://www.smarternetworks.org/project/sset1001/documents
Datasets (incl. links)	
Website/social media	
Information sources	http://www.smarternetworks.org/project/sset1001