



# Engineering Solutions and Energy Demand Side Response

## Case Study

### The Herald subscribes to DSR

Unlocking smart grid revenue. ESE offers a 'Grid Ready' solution to fast track the opportunity available through National Grid.



A leading Scottish publisher has joined the growing number of virtual power stations helping to keep the lights on by allowing the National Grid access to its back up generation assets during times of peak demand.

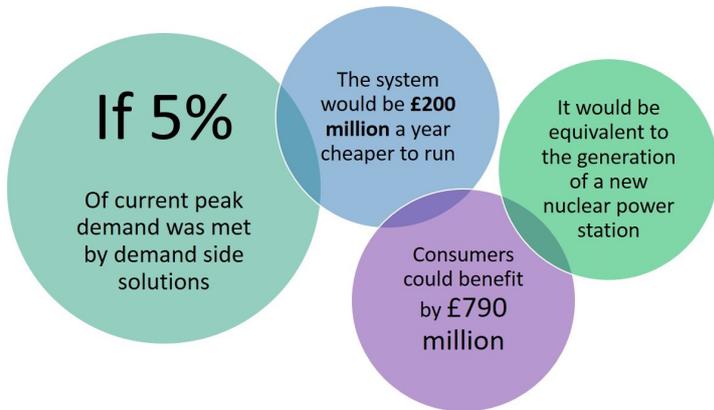
Demand Side Response is a source of reserve energy generation and balancing services for National Grid and is utilised to address a range of problems that affect the UK electricity distribution network.

Demand response provides an opportunity for Industrial and Commercial consumers to play a significant role in keeping the lights on by allowing the National Grid to utilise their idle generators, reduce or shift their electricity usage during peak periods and receive financial incentives.

ESE are UK leading power engineers, bringing a no risk revenue stream to your business while offering a massive reduction in carbon footprint from reducing grid demand on power stations.



**Contact us**  
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## Technical Solution:

**The site's existing package was utilised.**

By utilising the existing 1.6MW generator on site we were able to apply and connect up to the grid.

ESE modified the generator to allow safe operating and connection back to grid. G59 protection was installed ,

Every megawatt capacity connected to the smart grid is a megawatt that does not have to be held in reserve elsewhere.

This reduces the need to keep gas and coal stations on hot standby or running inefficiently at part load — reducing emissions by between 300 to 750 tonnes of CO2 per megawatt per annum.

## Client:

Glasgow Herald & Times Print, Glasgow

## Market:

Industrial & Manufacturing

## Project:

To provide reserve energy to National Grid, assisting in the UK capacity shortage, but ensuring it is supplied within the constraints of normal business operations and generate new revenues from the existing assets on site.

## Package:

The on-site standby diesel generator, which is capable of up to 1.6MW of electrical output, can power the entire site in a power cut.

## Revenue:

£250,000 over 5 year contract

## Key Facts:

Up to 1.6MW of electricity generation can be turned on automatically for short periods.

The Herald backup generators are now being utilised as an energy asset, helping to support Scotland's energy security.

New revenue being invested in new projects within the business.

Reduces national carbon dioxide emission levels.



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