

# Keeping the lights on and homes warm

Over the next few years we will face a reduction in nuclear power as older stations are closed, well before a new large nuclear power station comes on line. We will experience growing demands for electrical power as more people switch to electric cars and electric heating, and as the economy and the population continues to grow creating more need. There will be a further major increase in wind power, which will cover the days when there is the right level of wind to maximise turbine output without needing to shut them down through too high a wind speed. The question remains, what is the back up plan for days of high demand when the wind does not blow and when solar output is also low?

In the short term the government has brought three coal power plants back on stream to deal with shortages. These have to be kept, and perhaps could be converted to biomass to make them more reliable and popular contributors to our power output. The country relies heavily on its remaining combined cycle gas stations which produce less carbon dioxide than the coal stations per unit of output. It would be a good idea to bring several old retired gas stations back into a state of readiness to be available to produce power when the wind drops. These are matters which our managed system of generation can commission by offering capacity payments to the owners to make the facilities available.

The government should also look at how it can increase domestic gas output. Currently half the gas we use is imported. Some of this is dependent on paying high and wildly fluctuating spot market prices. Some of it is shipped long distance on tankers. If we produced more domestic gas this could pass to users via pipeline and could be purchased under contract at more stable and lower average prices. Immediately the government could allow Shell to progress the Jackdaw field, which can use the existing Shearwater platform and the existing gas and liquids pipes into St Fergus/Cruden Bay for onward distribution by the existing pipe network. This would be a greener method of supplying gas than the imports and provide us with more national resilience in energy provision. The government should review its other options for producing more UK gas as a transition fuel whilst it puts in place much more reliable renewable electricity and better storage for variable wind power.