

Keeping the lights on when the wind does not blow

I have been warning of the dangers of relying on renewables for our electricity before there is sufficient battery storage, pump storage and green hydrogen production to make energy available when there is no wind or sun to power the grid.

Over the last year the government did listen. It has kept three coal power stations and given them contracts for when we need that back up power. They have opened Rough to give us a bit more gas storage for cold windless days. They have accepted that gas is an important transition fuel this decade, often providing more than half our electricity as well as heating most homes and energy intensive industrial processes.

Yesterday renewables contributed a small single figure percentage of our electricity as demand rose to combat dark and low temperatures. We needed the fossil fuel back up. The government needs to encourage further back up investment in pump storage and make sure we have sufficient gas burning generators all the time we need them to keep sufficient power in the grid.

The system operator and regulator also need to review the capacity of the grid and street cable system. We cannot keep adding new electrical demands to home and work without installing extra cables. Switching cars and heating represents big increases in electricity needed which is way beyond present cable capacity.

The difficulties of balancing a system with more and more interruptible power allied to the lack of capacity to handle more Scottish wind energy should lead to some new thinking. Energy policy used to worry about security of supply first, then price and green issues. There needs to be a stronger plan for security. Imports are not a reliable answer as we have seen with the EU gas problems and the shut down of many French nuclear plants.