Consultation on electricity regulation

The UK government has recently published a consultation document on possible reform of the management and regulation of the UK electricity industry.

The UK fell under the EU system of control and regulation, which was progressively tightened and embodied in the 71 page 2019 Regulation. This Regulation wished to achieve two main aims, the integration of a Europe wide system of power provision and rapid progress to decarbonise the electricity used. The two aims were self reinforcing. The Regulation warned that as more power came from interruptible renewable sources there would be more need for interconnectors to allow the import and export of power across national boundaries to compensate for shortfalls in supply. The UK duly obliged even though we were in the process of exiting the EU, continuing its drive to rely more on interconnectors to the continent and very willing to add large extra volumes of wind energy to the system.

In line with other European countries the UK had developed twin market interventions to bring about the net zero progress. More low carbon power was attracted by offering long term contracts at guaranteed prices. In the early days of renewable power and for nuclear these were at premium prices to the then market wholesale price. The investors putting in the new capacity agreed to pay back any money earned over the contract price were energy prices to rocket, whilst requiring a subsidy all the time the contract prices remained above the wholesale price. The grid operator also had to hold capacity auctions, offering money to owners of stand by plants that would work in periods of low wind or little solar to keep their capacity ready to run. As they hoped these plants were not going to run that often they needed to offer sufficient money to make it worthwhile maintaining , staffing and fuelling the plants ready to run. Gas plants ended up running a lot to keep the system going with more than half our electricity coming from gas on a typical light wind day.

The consultation document does not give a clear steer of what would be a better system to guarantee security of supply whilst also providing plenty of competitive pressure to keep prices under control. The original regulatory system set up by the UK in the 1980s before the EU took over was a simple one of generators bidding into the system their price offers. The grid manager always took the next cheapest offer when having to scale up the output, and dropped off the dearest when cutting supply. The system was sufficiently attractive for there to be spare capacity so we never ran out of power even on cold dark windless busy day. Most of the power came from coal and gas, with a useful contribution from nuclear.

The immediate issues are the way some providers of renewable power can receive the elevated gas based price despite having much lower costs, and the lack of margin in our capacity for when the wind does not blow and the sun does not shine. The UK has also to prepare for a reduction in output from nuclear this decade, which is planned to see the closure of all but one of the existing nuclear stations. What are your thoughts on the changes we need?