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UK Electricity Market Reforms: Cash is King

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Introduction

The details of the Government's electricity market reforms are becoming clearer – the process has been slow but not always sure, as discussed in previous Energy Comments¹, and the latest announcement – a press notice from the Department of Energy and Climate Change on 23 November (2012/146) has been preceded by reports of difficult discussions and disagreements within the Coalition. So its appearance is to be welcomed, even if it does not really send “clear, durable signals to investors” as the Government hopes.

The agreement

The new agreement has three main elements:

- First, it makes the arrangements for the FiT CfDs clearer (see the Comments referenced in the footnote for an explanation of the various pieces of jargon surrounding the reforms). It has always been apparent that the Government would have to underwrite these contracts in some way and it has now accepted that this will be done via a new Government-owned company which will be set up under the Energy Bill to be introduced next week.

¹ *Return of the P-word: the Government's Electricity White Paper July 2011*; *Back to the Future: Electricity Market Reform Update December 2011*; and *Death by a thousand regulations: the new Energy Bill May 2012*

- Second, it sets a limit under the “Levy Control Framework” (see below) for the market support available for low carbon investment of £7.6 billion (in 2012 prices) for 2020.
- Third, it will take power in the Energy Bill to set a “decarbonisation range” for 2030 (this would be in addition to the targets and budgets set under the Climate Change Act 2008). However, a decision on whether to set such a range will not be taken until after the next election.

In addition, the Government has undertaken to publish a Gas Generation Strategy at the time of the Autumn Statement to show how gas fits into the picture.

The Levy Control Framework limits

The so-called Levy Control Framework is the means by which the Treasury sets a limit on total spending under the various levies (eg for the support of renewables) which the Government uses to fund investment in low carbon generation and energy efficiency measures. The Framework itself is not new but has hitherto been relatively obscure; the fact that the 2020 figure has been announced with such prominence is interesting – it suggests strongly that cash is now what matters. Normally, economists see two efficient options for promoting decarbonisation – an externality price (a tax that reflects the social cost of emissions) or a quantity limit (which can then form the basis of a carbon trading scheme)². The Chancellor seems to have added a new approach – the cash limit.

The political attractions of this approach are obvious – it limits the total cost of the transition and (probably) improves the Government’s negotiating position in relation to the FiT CfDs – as pointed out in earlier comments, the Government is in a weak negotiating position as the “demandeur” (the party which wants a particular result, which the other side is not obliged to provide). The Treasury obviously feels the need to make it clear that it is not offering a blank cheque; the limit should also encourage low carbon investors to push forward their proposals quickly so that they do not get crowded out by earlier commitments. It does, however, make the position of nuclear unclear, at least in principle – nuclear plants are so big that even a single plant would take up a disproportionate share of any cash limit, creating problems for smaller scale renewables investors as they try to gauge how much money is left for them. But it is likely that the Government has concluded that there will be no new large scale nuclear plants operating in 2020 and that this issue can therefore be deferred.

From an economic and environmental viewpoint, the limit is more problematic. It effectively substitutes a cash limit for a quantity or price target – there is no guarantee that the limit will keep the UK on track to its longer term decarbonisation goals; there is also a risk that if the quantity of low carbon investment is artificially limited in the shorter term, the result will be

² See the recent Oxford Energy Comment *Decarbonisation of the electricity industry – is there still a place for markets?* for a fuller discussion.

more fossil investment than would have otherwise occurred, potentially making the ultimate cost of the transition greater than it need have been. Indeed, the Government appears now to be qualifying its renewables forecasts – the EU target of 15 per cent of total energy from renewable sources implies that well over 30 per cent of electricity will have to be from renewable sources by 2020; the statement now only promises “around 30 per cent” – and that is probably an over-estimate of what will be achieved.

These problems could probably be regarded as an inevitable part of the process of political compromise. More questionable is the spin with which the Government has surrounded these limits, which is more likely to confuse than enlighten, particularly in relation to the impact on consumer bills. The Energy Secretary Ed Davey has suggested that the proposals would add around £100 to bills. But the £7.6 billion (£9.8bn in 2020 prices) represents something like £300 (£375 in 2020) per household (and is not the total policy cost). How does he produce such a low figure? The calculations are unclear but the issues appear to include the following:

- First, it seems that Mr Davey is focusing on household bills; households account for only a little over half of electricity consumption and will not themselves bear the full cost of the measures directly. Nonetheless, the £7.6 billion (or £9.8 billion in 2020) will have to come from somewhere – more specifically from UK consumers. The part of the cost borne by non-household consumers – industry and the public sector – will still affect households indirectly (for instance in higher prices, lower competitiveness or reduced public services) at least until the economy adjusts to the higher price environment.
- Second, the £7.6 billion refers only to the cost of the low carbon generation part of the Levy Control Framework. There are further levies (the Energy Company Obligation and Warm Home Discount) which will also affect bills. The cost of these obligations in 2020 is not yet clear but recent press reports have suggested that energy companies expect them to add a further £125 or more to household bills.
- Third, there are other costs associated with the low carbon transition and in particular the extra transmission costs associated with the connection of renewable sources to the system, costs which are not part of the Levy Control Framework. These costs represent around one third of the total investment required up to 2020 and will also add to household (and business) bills.
- Fourth, Mr Davey’s figures make the assumption that the Government’s energy efficiency programmes will work to reduce household energy consumption. Past experience³, and the wide criticism which the Government’s new scheme has attracted, make this seem unlikely. The costs are certain; the benefits less so and even if they are realised, different households will be affected differently and many, if not most, will pay the cost without receiving any benefit.

³ See, for instance, Oxford Energy Comment *Energy Efficiency – Should We Take It Seriously?* December 2011

So the impact on households will certainly be much greater than Mr Davey is suggesting. That is not necessarily a fundamental criticism of the proposals, if it is accepted that the process of decarbonisation is necessary; furthermore, it is arguable that the short term cost might be a price worth paying for protection against fossil fuel price volatility in the longer term. Nonetheless, the fact that the Government is constantly seeking to downplay the costs involved suggests that it feels itself on sensitive political ground.

The 2030 range

That suggestion can only be reinforced by the Government's unwillingness even to commit itself to setting a 2030 target for electricity, much less announce the target now. The strategy of looking to electricity as the first sector to decarbonise was proposed by the Climate Change Committee in 2008 – indeed, it argued that “Any path to an 80 per cent reduction by 2050 requires that electricity generation is almost totally decarbonised by 2030”⁴ – and underlay the Government's approach to meeting the 2050 targets. The unwillingness to set a 2030 target now casts doubt on the Government's commitment to that strategy; furthermore, the Chancellor of the Exchequer has been reported as arguing that it is wrong to commit to electricity decarbonisation since other sectors might offer cheaper abatement opportunities. While this argument has some validity, it goes against all the expert advice as well as the clear strategy which the UK had in place, raising further questions about the Government's commitment.

Conclusion

The Government's statement represents a useful step forward in clarifying its proposals; in particular, the acceptance that the Government will underwrite the FiT CfDs, even if it was probably inevitable, helps provide reassurance to investors. However, it is doubtful if the Government has really sent a “clear, durable signal” as it maintains. Its use of cash limits; the failure to come clean over costs; and the unwillingness to accept that there will necessarily be a decarbonisation target for 2030 all suggest that its commitment to the decarbonisation strategy is shaky at best. That is not the best basis for persuading investors that there is a clear way forward and that the risks of investment in expensive and capital intensive low carbon sources have been reduced.

⁴ Climate Change Committee *Building a Low Carbon Economy* 2008 p 173