

Oxford Energy Comment

April 2013

UK Electricity Market Reform and the EU

Malcolm Keay¹

A series of earlier OIES Comments has looked at the proposals for UK Electricity Market Reform from a national perspective – how effective will they be in promoting the low carbon investment needed to meet the government’s climate change targets? This Comment looks at a different aspect – the European dimension. This has not received very much attention to date but could turn out to be important. The reforms have been designed around the UK’s targets and the UK electricity market, but of course we are now operating in a wider European context where, with UK backing, the Commission has been promoting a single European market. Is it possible to introduce fundamental reforms within only one part of this wider market? This Comment explores some of the issues.

The tension between national and European goals

At the heart of the issue is what is at least a tension, and possibly an incompatibility, between the idea of separate national energy and emissions goals and the single European electricity market. As has been pointed out in earlier Comments, in its electricity market reforms the UK is effectively subordinating liberalisation to environmental concerns, accepting a considerable degree of government intervention and a reduction in the role of market forces as a necessary step to meet its very stringent (and legally underpinned) carbon targets. The effect of the UK reforms is that the government (rather than markets) will determine the composition of the UK generating mix. Intervention in the market in order to support particular forms of generation is needed because the low carbon sources the government wants are in general higher cost and higher risk than conventional generation. But the concept underlying the single market is that the lowest cost sources, whatever their country of origin, should be able to compete on a level playing field across the European market, subject to common standards. Other European countries also have carbon and renewables targets but in most cases they are not as stringent as those of the UK – the UK’s renewables targets are generally seen as more ambitious than those of most other EU countries and its carbon targets are enshrined in law. At any rate, other EU countries have not so far felt it necessary to make

¹ With thanks to my colleagues David Buchan, Etienne Durand and David Robinson of the OIES and Angus Johnston of Oxford University for their very helpful comments. Any remaining errors are due to the author alone.



such major reforms as the UK is proposing. The result is that the operation of the single market is likely to be complicated at best and at worst compromised.

There are also potential legal issues. This Comment does not give legal advice and makes no attempt to analyse the legal implications of the UK reforms or to judge their conformity with EU law. Nonetheless, it is relevant to note that a number of possible legal questions arise from the reforms, in particular given that they are designed to support particular forms of generation². In principle, State aids (subsidies or other systems of support) for particular producers are not in compliance with European law (though in practice the position is much more complicated – a few of the complications are discussed below). Member States are supposed to notify to the Commission measures which may qualify as state aids and wait for the response before introducing them – if they do not do so there is a risk that the measures concerned will be disallowed (and aid paid out unlawfully may be required to be returned). The Commission can reject the proposed measures, or approve them, perhaps with modifications, even if they constitute a State aid, where the measures help promote an objective accepted under EU law.

So this raises two questions about the proposed UK reforms – do they constitute a State aid and, if so, will they be approved by the Commission? The answer to these questions is unclear but the problem is one the government has recognised. It comments that:

“We are working closely with the Commission on the interaction of EMR with the wider EU context, and to ensure EMR policies are consistent with European legislation, subject among other things to the necessary powers being included in the legislation and any necessary state aid decisions being made.”³

Little has been said publicly about the progress of these discussions, however, perhaps unsurprisingly, since it is likely that some sensitive and difficult issues are involved.

Feed-in Tariffs – general issues

The possibility of a tension between renewables support schemes and European law has been obscured by the fact that Feed-In Tariffs (FITs) and other forms of support for renewable energy (like the Renewables Obligation in the UK) are so widespread that they appear to raise no particular legal issues. This is not however the full story. Renewables support systems are indeed widespread and most have not run up against European law. However, there are a number of complications. A significant precedent in this area, on which many have relied, is the so-called *PreussenElektra* case, which looked at whether a German FiT constituted a State aid. The European Court decided that it did not, but mainly on the

² In fact, there are many other issues, such as the position of Northern Ireland and EU procurement rules but this Comment focuses on the central question of support for particular sorts of investment.

³ *Electricity Market Reform: Policy Overview* DECC May 2012.



grounds that, although the tariff was imposed by statute, it did not involve State resources (ie neither the State itself, nor any undertaking controlled by the State, had to spend money under the arrangements). That decision depended very much on the circumstances of that case. If, as in some countries, State bodies are involved, the situation gets a bit more complicated. In that case, the support scheme should in principle be notified as a State aid⁴ – for instance, in the UK the Renewables Heat Incentive, which provides top up payments to renewable heat generators, has been classified as a State aid.

In practice, such notifications are normally passed by the Commission, following one or other of the routes discussed below. But this does not mean that they never raise legal issues. For instance, there are two cases currently before the European Court which raise questions about the legal status of FiTs in certain circumstances. One concerns a challenge from a French anti-wind lobby group (Vent de Colère – wind of wrath). The case has been referred to the European Court because some of the companies involved (mainly EDF) are wholly or partly State-owned, making it possible to argue that State resources are indeed involved. The French FiTs were not notified to the Commission as a State aid, apparently because France thought the *PreussenElektra* case covered their scheme. (If it had been notified it would probably have been let through in line with the usual practice.) State involvement does not necessarily have to be a matter of ownership of electricity companies - in cases in Belgium and Austria the role of the State on the body which disbursed the support revenues amounted to sufficient State involvement to trigger the State aid rules.

The second current case of interest concerns the Åland archipelago, a Swedish speaking semi autonomous part of Finland. It has a grid connection to Sweden but not to Finland. However Sweden declined to offer support for a wind farm in Åland – on the grounds that it would be unfair to expect Swedish consumers to pay for meeting Finland’s wind power target. This raises the question of whether national support schemes can discriminate against producers from other Member States and whether that is a barrier to the free movement of goods.⁵ In the *PreussenElektra* case (2001) the FiT was not regarded as a trade barrier “in the current state of Community law concerning the electricity market”,⁶ and it is arguable that things have moved on since 2001.

UK FiTs

Given the background set out above there is some uncertainty about the UK EMR. The first question of course is whether the proposals would be regarded as a State aid. Although the *PreussenElektra* case implies that FiTs do not normally count as State aids, they are likely to do so in the UK. The government will own the CfD counter-party body and have a central

⁴ See Johnston & Block, *EU Energy Law* (Oxford: OUP, 2012), paras. 12.173–12.178.

⁵ In the context of internal taxation, the earlier case of *Outokumpu* (1998) showed that discrimination against a significant category of electricity imports would indeed be caught by EU law.

⁶ Discussed in Johnston & Block (2012), paras. 12.151–12.172.



role in decision-making on the FiTs. It will also control overall spending via the Levy Control Framework, which treats climate levies as a form of tax and spending. Indeed, the UK government appears to accept that FiTs could well count as State aids and (unlike in the French case above) is prepared to discuss this in advance with the Commission. The government is, in any event, unlikely to take the risk of failing to notify the FiTs, if there is any doubt over the matter, since this would create uncertainty for investors.

Of course, as noted above, this is not a bar to the use of FiTs, provided they pass muster on the various criteria used for such aids. One is a 2008 Regulation (800/2008/EC) declaring certain sorts of aid compatible with the common market (the “General block exemption Regulation”). This provides an exemption for “investment aid” (ie capital subsidies) for the promotion of renewables provided that certain conditions are met (eg on the amount of aid provided).

There are alternative routes to acceptance for schemes not covered by the block exemption. In particular, there are Guidelines about State aid for environmental protection⁷, which also cover renewables schemes. This allows support for renewables and other environmental measures, but the Commission has to apply a balancing test, considering among other things whether the proposed support is well targeted and proportionate to any trade- or competition-restrictive effects, and has a limited negative effect on competition and trade (Official Journal C82 of 1.4.2008). Finally, there are more general provisions in the Treaty on the Functioning of the European Union under which State aids may be declared compatible with the internal market.

So, even if the UK reforms are judged to be a State aid there are various routes by which they may still be regarded as compatible with European law. Nonetheless, the simple fact that the UK market reforms are in the form of FiTs does not of itself EU-proof them. Indeed, they potentially raise some fairly fundamental issues.

In relation to the various routes described above, it is doubtful whether they would fall under the block exemption Regulation, given that they are not purely investment aids or capital subsidies as such but ongoing operational subsidies. As regards the general Guidelines on aids for environmental protection, the position is also unclear. The Guidelines against which the Commission currently considers State aids make extensive reference to the Union’s 20/20/20 targets and part, at least, of their aim seems to be to allow State aids which help the achievement of this “objective of common interest”. The Guidelines (and block exemption) are due to be revised; in any event, the Guidelines are not exclusively limited to the 2020 objectives and allow aids to achieve environmental objectives more widely. Nonetheless, most of the FiT schemes approved to date appear to be based around the 2020 targets, while

⁷ C82/12 April 2008.



the EMR is aimed more at 2030 than at any 2020 objective (and of course covers nuclear power as well as renewables – see below). It could therefore raise new issues as compared with earlier cases.

Furthermore, in considering whether the State aid is acceptable, the Commission has to balance its impact in promoting the common interest against the distortion of trade and competition and consider such factors as whether the aid is proportionate to the objective. Various aspects of the government’s reform proposals, as discussed below, could be regarded as excessive or distortive. Indeed, the package as a whole could be regarded as excessive – as pointed out in earlier Comments, the government appears to have adopted something of a “belt and braces” approach with several instruments aimed at essentially the same objective, increasing complication, arguably to an unnecessary degree.

More fundamentally, the package might be regarded as disproportionate in its effects on competition because it applies, at least potentially, to so much of the UK market. The prospect is that for future investment in the industry, not only will nearly all low carbon generation be funded through FiTs, but most conventional generation could be reliant on the new capacity market – the best way of lowering investment risk will be by getting support through one or other of these routes. It could easily be the case that nearly all future generation will effectively be remunerated under a contract determined by the government. It is difficult to see that as consistent with overall EU aims for a competitive single electricity market.⁸ Support for renewables is already raising difficulties in this regard – for instance, Commissioner Oettinger recently criticised Germany for “going it alone” and for the distorting effect of its FiTs on European wholesale prices. The scale of the UK proposals is only likely to increase such strains.

Specific EMR issues

In addition to the rather fundamental issues discussed above, a number of questions are also raised by specific elements of the proposals.

Contracts for Difference (CfDs) The UK proposals are based not on simple FiTs but on CfDs linked to market prices (see earlier Comments⁹ for explanations of this and other elements of the proposals). From the government’s perspective, this constitutes a useful linkage with actual markets and somewhat improves incentives for low carbon generators. There could also be advantages from the European point of view. In principle the link with market prices means that the support would cease once market prices reached the FiT level – indeed, the subsidy might then start being paid back. Nonetheless, the precise form of the proposed CfDs could entail problems if, as expected, they are based on a fixed price, without

⁸ See, eg, the EU Court of Justice’s judgment in *Federutility* (2010) concerning regulated electricity tariffs and the presumption of the EU’s internal energy market legislation that the market mechanism should be allowed to operate (discussed in Johnston & Block (2012), paras. 7.12 and 7.99).

⁹ In particular, *Return of the P-word* July 2011.



degressivity (ie a decline in the price over time). The normal principle for FiTs is that over time the price paid should fall – the logic is set out in the Commission Guidelines, which say that among other factors they will consider in assessing environmental operating subsidies are the following:

- “duration of the aid: if operating aid is granted for a long period, this is more likely to distort competition;
- gradual decrease of aid: if operating aid is reduced over time, the undertaking will have an incentive to improve efficiency and the distortion of dynamic incentives will therefore be reduced over time.”

The aim is to minimise the impact of the support arrangements on markets and ensure that it does not introduce permanent distortions. The UK proposals (and especially the possible nuclear FiTs, if they take the form being discussed in the press) do not appear to meet these criteria very effectively. Indeed, as previous Comments have pointed out, the UK approach does not offer any clear “exit strategy” – it implies permanent and widespread, if not comprehensive, government involvement in the electricity market.

Nuclear The guidelines and exemptions noted above are mainly aimed at the promotion of renewables and this has been the aim of other European FiT schemes. If a FiT for nuclear were regarded as a State aid it would raise major new issues of principle, even if it could be argued that it was promoting the same environmental objective. For instance, many, including many Member States, would argue that nuclear power does not benefit the environment. Furthermore, part of the underlying rationale for supporting renewables is to encourage the development and deployment of new technology, which is one objective envisaged in the environmental Guidelines. Nuclear power raises somewhat different issues,¹⁰ both because the technology is not novel and because of the sheer scale of the projects involved – for instance, a forty-year contract for a full size nuclear station, as currently being discussed in the press, would have very different impacts on competition from a small-scale wind farm, and could have the effect of foreclosing a significant part of the market.

Imports The Åland case mentioned above raises the question of imports and it is difficult at this stage to see how they will fit into the UK scheme, particularly in relation to nuclear (with renewables, there are arrangements under which generation can be sited in one Member State but be designed to supply another State – a proposal of this nature involving building wind

¹⁰ A recent Opinion prepared for the Green Group in the European Parliament by Steve Thomas and Dörte Fouquet concluded that it was unlikely that the nuclear CfDs would prove acceptable. There may also be uncertainty in this area because of the presence of two European-level regimes which might apply to competition in the nuclear sector: EU law under the TEU and the TFEU, and the Euratom Treaty. The relationship between the two remains as yet somewhat unclear: for discussion, see Johnston & Block (2012), paras. 14.14–14.20 and the references cited therein.



farms in Ireland to supply the UK has been under discussion). An earlier UK scheme for nuclear support – the Non Fossil Fuel Obligation – had to be adapted to cover imports from France, which ended up getting a considerable proportion of the support available. It might be more difficult to extend this approach to a FiT for nuclear if that meant contracting the output from a plant elsewhere in Europe (for instance, the government has already published a list of potential nuclear sites, all in the UK). However, arrangements which excluded imports could be regarded as a distortion to trade in themselves and would thus require justification under EU law; again, the question of the proportionality of such arrangements might prove difficult to answer given the scale and duration of the proposed UK scheme.

Capacity markets Capacity markets could run up against the same problem. An auction could in principle be extended to make capacity anywhere in Europe eligible, but it is difficult to see that the UK system would be prepared to rely to any extent on contracted capacity elsewhere in Europe. Some degree of reliance on domestic sources has been regarded as acceptable in the interests of energy security – for example, Article 15(4) of Directive 2009/72/EC says that:

“A Member State may, for reasons of security of supply, direct that priority be given to the dispatch of generating installations using indigenous primary energy fuel sources, to an extent not exceeding, in any calendar year, 15 % of the overall primary energy necessary to produce the electricity consumed in the Member State concerned.”

However, in the UK proposals the capacity market is not limited to that fuelled by indigenous sources or to 15% of primary energy for electricity. Furthermore, the very existence of a capacity market in one country could be regarded as inconsistent with the vision of a single European market. In the Commission’s eyes at any rate, the single market will be built on the basis of national power exchanges which are linked together via “market coupling”. In a consultation paper published in late 2011¹¹ the Commission set out various issues to be addressed before a “European solution” was achieved, focusing on the lack of harmonisation of national markets and power exchanges; in late 2012 it launched a consultation on the issue of capacity payments. National capacity markets are likely to run counter to the “European solution” both because of the possible dedication of particular capacity to particular markets but also because, by creating two separate income streams for generators (capacity payments as well as energy – kWh – payments) it will have the effect, as indeed it is designed to do, of smoothing prices in energy markets and, probably, lowering the average price. Market coupling between markets with and without capacity payments would create potential distortions. (In principle these can be neutralised by various offsetting mechanisms, but only at the cost of introducing significant complication.) The Commission has called on Member

¹¹ *Public consultation on the governance framework for the European day-ahead market coupling* DG Energy November 2011.



States to hold back from the introduction of capacity payments while these issues are being considered. While there are capacity markets elsewhere in Europe, it is not clear whether they offer firm precedents. For instance, the capacity payments in Ireland were approved mainly on the bases that they constituted reimbursement for the provision of a public service and that Ireland was a special case - see Commission document C(2003)4448fin.

Minimum carbon price Taxes are of course largely a matter for Member States. Nonetheless, the proposed minimum carbon price appears to raise some questions at the political level. It will potentially lead to wide discrepancies between the carbon price for UK electricity and the carbon price for electricity elsewhere, and for other parts of the ETS. The table below shows the assumptions the government itself uses for its *Updated Emissions Projections*.¹²

Table 2.6 Carbon Prices assumed (£/tonne CO₂)²⁶

£/tCO ₂ , 2012 Prices	2011	2012	2013	2014	2015	2016	2020	2025	2030
Industry & Commerce (EU ETS price - no carbon price floor)	12.3	5.8	6.0	6.2	6.4	6.7	8.6	10.3	12.3
Electricity Supply Sector (with carbon price floor support)	12.3	5.8	9.6	14.2	19.9	23.6	32.4	54.0	75.6

While these figures are simply assumptions for the purposes of the projections, they show huge differentials. Already, the UK carbon price for electricity is shown as around 50% above the ETS price. By 2030 it could be six times as high. This could well be regarded as seriously distortive – for instance, it would push up electricity prices in the UK, making it attractive for European generators (if they can) to sell into that market rather than continental markets. Meanwhile, the high price for UK electricity would lower carbon emissions in this country, so creating headroom in the rest of the ETS and hence exacerbating the current problem of low carbon prices. It would also undermine the fundamental aim of the ETS, of sending out a clear Europe-wide price signal so that the most cost-effective opportunities for carbon reduction will be exploited, wherever they happen to be.

Emissions limits By comparison with the other elements of the package the proposed emissions limits are probably relatively uncontentious. Nonetheless, they also raise issues at the political level and could be regarded as un-European. The Industrial Emissions Directive (or ‘IED’, which incorporates and extends the old Large Combustion Plants Directive) sets

¹² DECC October 2012.



out the overall framework governing technology use in the industrial and electricity sectors. Article 11 of the IED requires that Member States ensure that the best available techniques (BAT) are applied; Articles 13 and 14 set up a procedure for deciding on BAT and for Member States to issue permits, including the appropriate emissions limits. It is true that Article 18 allows Member States to apply stricter limits if they wish, but the new UK emissions limits seem to depart rather fundamentally from the BAT approach in setting, not just “additional measures” (as Article 18 envisages), but a completely different standard. In other words, they effectively create a separate market for fossil fuel generation equipment in the UK with different standards from those obtaining elsewhere in Europe. While they may not be overly objectionable in themselves, the limits could fall foul of a proportionality criterion if that were held to apply to the whole EMR package, or even just with regard to free trade in such equipment between EU Member States.

Conclusions

The aim of this Comment is not to offer legal interpretations but to draw attention to the increasing tension in European energy between national targets for carbon reduction and the promotion of renewable sources on the one hand, and the development of a barrier-free single market on the other. The German *Energiewende* is already underlining some of these tensions but the UK electricity market reform proposals may present even greater challenges. At the least, many aspects of the reforms look un-European; at worst, they may run up against aspects of European law. It may be possible to find areas of compromise – for instance, it might be possible for the UK to drop one or more of the elements of its proposals (such as the emissions limits) and amend the other elements to reduce the impact on single market competition. However, there is a problem of timing. Although the UK target (effective decarbonisation of electricity by 2030) is medium term, immediate action is needed to meet it, because of the long investment cycles of the electricity sector. Yet developing a coherent and comprehensive European approach cannot be achieved overnight – it may well take some time even for the Commission to consider the State aids questions (eg the position of nuclear). So whether or not there is potential room for compromise on EMR itself, it may therefore be a harbinger of things to come; the current tensions may simply be revealing a more fundamental clash between liberalisation and decarbonisation agendas across the EU. As decarbonisation targets get tougher and more expensive, and momentum towards a single European market gets stronger, the strains are only likely to increase. Meanwhile, the cost of meeting decarbonisation targets is likely to increase if action is taken mainly at national level. As an earlier Comment¹³ pointed out, developing renewable sources on a Europe-wide basis would lead to significant efficiencies. Unless Europe as a whole can face up to, and reconcile, these challenges, the prospect of meeting either objective – liberalisation or decarbonisation – will be in serious doubt. It is critical for the development of the energy sector that European decision-makers respond quickly and effectively.

¹³ *Renewable Energy Targets: the importance of system and resource costs* February 2013.