Limiting state intervention in Europe’s electricity markets

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On November 5 the European Commission published its overdue guidelines, aimed at the European Union’s 28 member states and aimed at preventing their national renewable and capacity subsidy schemes frustrating the goal of a single European electricity market. Overdue, because the Commission was slow to realise the impact of these forms of national state interventionism on its dream of building a geographically unified European energy sector through market liberalisation, and it then spent the past year pondering how to reconcile the two. It has now done so in a formal communication called “Delivering the internal electricity market and making the most of public intervention”.* It might, from the Commission’s viewpoint, have been called making the best of a bad job.

However, the Commission is playing catch-up in a way that emphasises the cost-effectiveness of a more European approach to ballooning national subsidies for renewables and their knock-on financial impact on other forms of electricity generation, and at a time of rising concern across Europe about the cost of going green. Subsidy-boosted renewable energy has, in volume terms, been the one successful element of the EU’s 2009 energy and climate change package. But all EU’s 28 EU member states are worried about the cost of their national renewable schemes. There is serious concern about the manner in which increasing surges of weather-dependent wind and solar power are pushing conventional generators out of the market and possibly out of business, when it is precisely these generators which are needed to provide back-up for intermittent renewables. So many governments also have, or are developing, ‘capacity mechanisms’ to ensure the availability of back-up capacity. The Commission paper cautions that, judging by international experience outside the EU, such capacity schemes can add 10-20 per cent to wholesale electricity costs.

End of the beginning for Europe’s renewables

Europe may be at a turning point in its approach to renewables. Not because of these Commission guidelines, but because they come after the puncturing of Europe’s leadership pretensions on climate change at Copenhagen, and because they coincide with the continued squeeze on living standards across Europe coupled with the prospect that, thanks to countries like Germany deploying cheap Chinese solar PV panels at scale, some renewables in some places are starting to look competitive or at least reaching commercial maturity. To borrow the wartime phrase used by Winston Churchill in 1942, this is “not the beginning of the end” for subsidised renewables – and the European Commission is certainly not advocating an abrupt end to subsidising renewables – but this may be “the end of the beginning” for renewables in Europe. Many of Europe’s renewable schemes were designed when renewables were in their infancy; Denmark’s scheme, for instance, dates back to 1978. Many have been based on fixed prices, in the form of feed-in tariffs that provide renewable producers with their entire income, and a guaranteed market with transmission system operators being required to give them priority dispatch to the grid and forbidden from curtailing their output to any significant degree.

But this ‘beginning’ phase is now ending. Many governments have seen the sense in exposing renewables more to the market. Most are now shifting subsidies from feed-in tariffs to feed-in

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premiums which top up whatever renewable producers can get from the market, except for the bizarre case of Spain which earlier this year abolished its premium and reverted to feed-in tariffs. Sixteen of the EU’s 28 member states now impose some form of balancing obligation on their renewable generators. In its new guidelines the Commission wants to generalise this shift to the market, calling for an end to feed-in tariffs and prescribing instead either premiums or quota obligations which also expose renewable producers to the market. The Commission also rightly questions whether priority dispatch or protection from curtailment – introduced as an EU legal requirement only in 2009 – are any longer either necessary or relevant to renewable generators which, because of their near-zero operating costs, get first place in the merit pecking order anyway.

How far the Commission will get in its aim to Europeanise or even regionalise renewable schemes is another matter. Most member states want to maintain control of their renewable schemes in order to meet their EU commitment to their respective national renewable targets. The Commission again complains that only Norway (part of the EU energy market through its European Economic Area membership) and Sweden have so far formed a joint renewable scheme. The UK and Ireland have a tentative agreement for Ireland to supply some Irish wind power to the British grid in return for the British subsidy, but this would not be a joint subsidy scheme.

Coordinated renewable investment across the EU would save Euros 16-30bn in the period 2015-2030, according to a study done for the Commission. But having had its proposals for an EU-wide renewable subsidy scheme twice rebuffed in the past by the Council of Ministers and the European Parliament, the Commission confines itself in its new guidelines to expressing the hope of “convergence” between national renewable schemes, based on member states adopting common methodology in calculating renewables as the basis of subsidies, on a general shift to market-based subsidies and on more harmonised energy trading arrangements. However, it is unclear how far convergence will get, as long as EU countries differ so much in their level of ambition on renewables. Some east European states like Poland and Czech Republic remain in passive revolt over EU renewable policy, while Germany is driven on by its abandonment of nuclear power into yet further renewable investment.

Don’t panic about capacity

The Commission’s message on capacity mechanisms is that governments should not let themselves by panicked into setting up expensive and unnecessary back-up arrangements (although some would say that a measure of panic is precisely what is needed in countries like the UK whose overall capacity safety margin is becoming dangerously thin). To incipient capacity panickers, the Commission ‘checklist’ prescribes a sequence of measures. First, governments should analyse the causes for inadequate generation to see whether any of their own distortions such as regulated prices are creating disincentives for investment in generation. Then, they should consider alternatives such as demand reduction and/or flexibility. The Commission guidelines cite an estimate that demand-side response could reduce the demand load by as much as 60GW or 10 per cent of total EU peak demand. Setting up a capacity mechanism should be something of a last resort, and should be designed to take into account the back-up that neighboring markets could provide.

Taking a regional approach to generation adequacy makes sense in theory, but not yet in practice, given the unfinished state of European energy market integration. Much progress has been made in harmonising trading arrangements through network codes and market coupling; a major step forward
is planned for later this month with the coupling of day-ahead power markets across north west Europe. But the Commission’s advice that capacity mechanisms should be open to “all capacity which can effectively contribute to meeting [a member state’s] required generation standard” is weakened by the relative paucity of cross-border interconnectors and the fact that 10 member states have interconnection capacity amounting to less than 10 per cent of their electricity consumption. “Effective” contribution would require foreign providers to permanently reserve interconnection capacity to be sure of delivering their promised back-up in times of emergency. Yet the Commission has complained in the past about such capacity reservations causing congestion at borders. The most that governments will probably be willing to do is to make some modest general allowance for imports in their capacity schemes, if only to conform to EU internal market prohibitions against trade barriers.

The follow-up

Member states are free to ignore these guidelines, but not if they want to get Commission approval for any new renewable and capacity supports that include state aid - and almost all such measures will include an element of such aid. The Commission made this clear in announcing its communication. “While the communication is not a legally binding act, it does set out the main principles which the Commission will apply when assessing state interventions relating to renewable support schemes, capacity mechanisms or measures to ensure consumer demand response. They are therefore relevant to the future enforcement of EU state aid rules or EU energy legislation”.

So these new guidelines provide the framework for the new set of energy and environment state aid rules that the Commission is currently revising and due to adopt in 2014. Even though the Commission is in general terms weaker politically than it is used to be – and likely to stay so in the present state of European politics - it retains a virtually autonomous legal power, subject only to challenge in the European Court of Justice, to rule on market-distorting state aids. This power extends to any capacity measure classed as a public service obligation imposed on companies, for which Brussels’ approval is also needed. So, for instance, the UK will have to heed the Commission’s guidance in order to get Brussels’ prior approval for the price guarantees and capacity market scheme contained in its planned electricity market reform. (The communication offers no guidance on state aid for nuclear power, nor will nuclear power figure in the forthcoming set of state aid rules; the Commission is to deal with UK state aid for new nuclear build on an ad hoc basis.) Therefore, state aid powers put something of an iron fist into the velvety glove of Commission guidelines.

However, the Commission’s best weapon is persuasion. Its guidelines will get most traction where they reflect plain common sense. Renewable support schemes have been through a chaotic period in several countries, most notably Spain. So governments will find it in their own self-interest to follow Commission guidance about reducing the cost of renewable schemes, making them more transparent and predictable to investors and avoiding retroactive changes to existing contracts.

But the Commission’s guidance about capacity mechanisms lacks any of the sense of urgency felt by most of Europe’s utilities. As the volume of renewables keeps increasing, irrespective of flat electricity demand, gas-fired generation in particular is being pushed out of the market. Utilities in Germany have asked permission to take no fewer than 28 conventional power plants with a capacity of 7GW offline. Europe’s big utilities have seen their share prices perform even worse than those of Europe’s banks. They are in no position to fund the big new investments that Europe’s policy-makers are expecting of them, unless and until they can stabilise the financial basis of some of their existing
assets through capacity mechanisms. The Commission is beginning to face up to this fact. But it characterises capacity mechanisms as a last resort, after all other means of balancing supply and demand have been found wanting. This gives the impression that approval of capacity measures will be a slow business. If so, this would open Brussels to the charge of fiddling while Rome burns.