Ofgem chief executive Dermot Nolan's keynote speech:

'Regulation Fit For a Revolution' at Ofgem's Smart Futures Event, Edinburgh, November 14, 2017

Good morning.

I am here today to talk about how regulation needs to be fit for the energy revolution.

It's fair to say that the retail market, in particular price caps, have dominated the debate recently.

Last month, in my speech at the Energy UK conference, I warned suppliers not to resist changes to make the market work for all consumers.

My theme was "change is coming".

But when it comes to the energy system – which is what I want to focus on today – change is already here.

Revolution is a strong word. But I am not over-exaggerating the scale and pace of change that we are witnessing, particularly in how energy is generated.

Scotland is leading the way. Last year around 54% of electricity that was consumed here came from renewables, compared with just over 12% in 2000.

The move to a low carbon energy system is happening at a pace that nobody thought possible just a few years ago.

And there is no sign that this pace will slow down.

__

I've said many times that Ofgem does not have a crystal ball.

We can't predict what the system will look like 10 or 20 years from now.

Nor do we want to get in the way of these exciting changes.

But we are determined to make sure that the energy system of tomorrow works for all consumers.

That means keeping the costs to consumers of running the networks down.

And spreading those costs more fairly as the system changes

That means making the system smarter, and more flexible.

So that new technologies such as electricity storage can compete as equals against established players.

And using network capacity more efficiently.

And all the while, whatever new demands are placed on the system as we move to a low carbon, smarter system, one thing will remain non-negotiable: households will always be able to heat and light their home when they want to.

--

So what does this mean for regulation?

Well, many of the rules and regulations which govern the system are 20 years old and belong to a different era. They need to be re-written for a smart, digital age.

In August we published a new strategy for regulating for the energy transition which sets out these guiding principles in more detail.

The strategy brings together all the different work streams to make sure we have a coherent, joined up programme of work.

Separately, we are looking closely at the role that suppliers, as well as networks, play.

In particular, whether the current market arrangements which put suppliers at the heart of the energy system are still fit for purpose.

I will talk more about this towards the end of my speech.

--

We have made some progress this summer in overhauling outdated regulations.

We need a coherent and joined up work programme for this and in July Ofgem and Government jointly published the smart systems and flexibility plan.

Battery storage has significant potential to capture the savings for consumers from a smarter more flexible energy system.

But the current rules threaten to limit the roll out of storage.

Among the changes the plan sets out is a definition of storage as a distinct form of generation.

This will ensure that the charges storage batteries pay to use the networks are consistent across Great Britain.

We also want to licence storage as a specific type of generator, so that it doesn't have to pay the costs of Government environmental programmes which are charged to end users.

We have also moved to cut a specific payment to some small generators which we believe is distorting wholesale and capacity markets.

These generators receive this payment, the largest of the so called embedded benefits, for producing electricity at peak times.

But the payment has grown so large that it is now worth substantially more than the clearing price that generators and other parties get through the Capacity Market, undermining investment in new capacity.

Our decision has been appealed, however we are defending our case rigorously.

These changes are just the start.

Last Monday we published two working papers to help deliver against the principles we set out in August.

These documents are part of our fundamental re-think on how we pay for the network, how network capacity is allocated, and who to. The first is an update on our targeted charging review, which is aimed at ensuring that the costs of running the networks are spread fairly among consumers.

About half of customers' annual network charges are 'residual' charges, which cover historic or fixed costs for running the network.

Residual network charges are mostly based on how much electricity customers take from the grid.

But an increasing number of households and businesses are generating their own electricity on site, for example using roof-mounted solar panels.

It is perfectly reasonable and rational for customers to want to do this.

However, these "off grid" customers do not have to pay residual charges for the electricity they generate themselves.

Yet they still draw electricity from the grid when their on-site renewable generation isn't operating, during dark winter evenings when the wind isn't blowing.

And the majority who still draw all their electricity from the grid will have to pay an increasing share of the costs of maintaining and running the networks, as more go off grid.

Many of these include vulnerable households. Therefore this does not seem right on grounds of fairness and efficiency.

To resolve this we are suggesting that residual charges are either fixed, or based on the amount of capacity a customer needs rather than how much they have consumed.

This will make it harder for off grid consumers to avoid paying their fair share for the main networks which are available to them all year round.

--

The second working paper we published last week is about ensuring fair and efficient access to networks which keeps costs down for consumers.

Some intermittent generators, may not need continual access to the grid and this leads to scarce capacity not being used efficiently. In other cases networks may be reinforced unnecessarily which drives up consumer bills.

We set out several options for resolving this including trading, auctioning or transferring capacity between users.

We also need to think again to make sure capacity is allocated fairly to households as the system changes.

New technologies such as electric vehicles, or heat pumps, will demand significant extra capacity.

Without reforming the regulations, people who don't use electric vehicles or batteries could end up subsidising this extra capacity to serve those that do.

We think that if someone wants to use a high capacity charger at peak times to top up their electric vehicle, or their household battery, it's only fair that they may need to pay an additional fee.

--

We are taking forward all this work in parallel with our preparations for the next network price controls starting in 2021.

Our network regulation is designed to provide companies with the right allowances and incentives to manage the transition to a low carbon economy.

However, we have made clear that the next price controls will be tougher, with lower returns.

Companies have a duty not only to their shareholders but to society at large.

This means that they must be seen to provide good value for money in order to retain their social licence to operate.

Alongside Government, we are also considering the findings of Dieter Helm's review on the cost of energy which was published last month.

His report is an important contribution to the debate on how to deliver an energy system which works for all consumers.

__

Now I want to talk about whether current arrangements – which put suppliers at the heart of the energy system are fit for the future.

Suppliers act as the primary interface or middleman between the customer and the energy system.

The supplier buys energy to match supply and demand; and passes on the costs of transporting that energy, together with Government environmental levies, to customers.

The supplier also owns the relationship with customers through billing, metering and other customer service.

This "supplier hub" model has been in place since privatisation in the 1990s.

It has tended to reinforce the market dominance enjoyed by the large suppliers.

We think that it has stifled competition in the retail market and is one reason why so many households remain on poor value deals.

There's never really been a viable alternative to this model.

But we are now moving towards a world of potentially multiple suppliers of energy and associated services.

New technologies and business models could smooth the transition to a smarter energy system.

They could provide consumers with an array of new products and services to choose from – helping them make big savings on energy bills in the process.

At the same time, some of the large suppliers are reconfiguring their businesses, for example by selling generation assets, or even by seeking to merge.

We have published a letter today asking whether these developments will make the role of suppliers as the middlemen less relevant, or even redundant in the future.

We are also asking whether the current regulatory framework is preventing new entrants from challenging established suppliers by offering customers exciting new ways to engage in the market.

--

I've outlined how a smarter, more competitive energy system offers real benefits to consumers.

But we accept that some households, particularly the vulnerable, may find it even harder to navigate a more complex market with more choice to find the best deals.

That's why we are extending our safeguard tariff for prepayment customers to 1 million vulnerable customers from February.

We have plans to extend it to an additional 2 million vulnerable customers next winter.

--

I said at the start that we are moving to a lower carbon energy system at a pace that nobody thought possible just a few years ago.

We are moving to a system with more renewable energy, community based generation, storage, and electric vehicles.

This revolution demands a fundamental overhaul of the regulatory regime.

Outdated rules must be reformed in order to create a level playing field where the most efficient ways of generating, supplying and using energy triumph.

This revolution also demands a step change in approach from the regulator.

We must stay ahead of the game by ensuring that the costs of the energy system are as low as possible and spread fairly.

Over the next five years protection for vulnerable customers will be increasingly important for Ofgem.

We will need to adopt a flexible approach to change so that innovation can challenge the status quo.

This will allow new innovative business models to flourish so that consumers can enjoy the full benefits of competition.

Because it is our goal to ensure that the energy system – as well as the retail energy market – works for all consumers.