

New Power

The New Power Interview

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Catherine Mitchell explains the thinking behind her comment that EMR needs to be revisited, telling Janet Wood the industry needs political buy-in

Catherine Mitchell had a difficult message recently for an energy industry just coming to grips with Electricity Market Reform (EMR). She said EMR needed to be rethought, and the industry restructured. Behind that statement is a fear that EMR is a step backwards; one that “doesn’t do what it is supposed to do” and does not equip the industry for the future.

Mitchell does not believe the energy industry can face its current transformation at arms length from gov-

ernment – and with a regulator that is also at arms length from policymaking. She believes it can evolve more flexibly under a new governance process which provides legitimate political direction.

“I know no-one will want this”, Mitchell acknowledges, “everyone has been working on this [EMR] since 2010. And at first I was quite optimistic, but it has ended up primarily as a vehicle for nuclear power. It's been going on for a long time and it's terrible for the

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industry [to change direction]. But we are just throwing good money after bad.”

She says that there is largely consensus on where the industry is going - legislation commits the UK to cut carbon emissions by 80% by 2050. But her fear is that the UK’s current institutional framework is not flexible enough to accommodate the changes that will hit the UK in the coming years. She gives as comparison the changes that are under way in Germany and says the UK is less well-equipped to deal with them.

Mitchell outlines the changes that the UK has to accommodate: “We need a new mindset for both system actors and stakeholders. We need a fundamental rethink of the role of the regulator, system operator, utilities, networks and market. We need a bottom-up system that is accessible for customers and incentives to make it easier for new entrants to become involved. And we need to stop taking energy policy decisions that we know won’t lead to our goals”.

Mitchell would like to see fundamental and wholesale changes to the energy regulatory and institutional landscape. She admits that this is probably too radical an approach for the new Conservative government, but she says we can take steps in the right direction.

Market needs close scrutiny Mitchell says some of the proposals made in the run-up to the general election were helpful. “The Labour Party was good in saying we need to rethink the regulation. But just saying we need a tough regulator – they only have one side of the story.” She says we need to tackle broader problems - the cost of energy, transfer pricing, and other issues that have been “left to competition and the market to sort out”.

The “reset the market” speech made by Labour Party leader Ed Miliband at the party’s 2013 conference “hit the zeitgeist and it caught Ofgem off balance because they had not sorted out this stuff,” she says. Of-

Biography

Catherine Mitchell has a degree in History, Masters in Energy and Environmental Studies and PhD in technology and innovation. She worked with the Energy and Resources Group, University of California, the Energy Group of the Science Policy Research Unit, University of Sussex and the Centre for Management Under Regulation at Warwick Business School, University of Warwick. She was a Lead Author of the IPCC WG3 Fifth Assessment report and is currently professor of energy policy at the University of Exeter.

gem “completely misjudged” the state of the market, although she admits “it’s not completely their fault.”

She explains: “energy is political, it can’t be left to Ofgem. The government has to tell the regulator what it wants it to do and if it’s not working it has to change things. Ofgem can’t change that.”

Nevertheless, she says the regulator should have been keeping a much more detailed watch on how the market was working: “They don’t know how much energy [is sold] via the bilateral market, so they can’t tell how much profit anyone is making. The regulator should have picked up on this because of the affordability issue, but because of competition it wasn’t really their role”.

The Competition and Markets Authority (CMA) inquiry cannot solve the problem, “The overall problem is that the institutional framework is not fit for purpose and does not suit the needs of this transition. Rather than thinking of it as a choice between competition or state control, it’s about constructing the institutional framework as you want it to be.

“Part of that will be state involvement through a state-owned system operator, part from competition and making the demand side the focus. It’s not just saying ‘let’s have competition’ and seeing if something sustainable comes out of it”.

Institutions that do not work Mitchell denies that her new model for the industry would dispense with the market. Far from it, she says – she wants more competitive markets: “We are not throwing out competition, but the current system is not very competitive. The incumbents are stopping lots of new entrants and non-traditional business models.”

She admits that looking at the last few years “On one level you can say it’s fine. You have non traditional companies coming in. But it’s all despite the system, not [with its help]. If you want it to really work, you have to be able to buy and sell electricity properly and have the demand side in there properly. Markets are all set up for supply, not in any way to reduce.”

She is surprised the CMA seems relaxed on self-dispatch, liquidity and vertical integration, suggesting: “they are seeing that in a very narrow competitive way, when you should have a demand-focused system.”

Similarly, she says other institutions are not focused on the right things. “Ofgem is primarily working to an economic focus, and it has no penalties for doing something society does not want.” She compares it >

to her preferred model – Denmark’s Energinet. That organisation “is tasked with both [energy] security and with the transition to get there. [But] the regulator is small and does analysis. [The responsibility] goes directly to the energy minister – it is not delegated as it is with Ofgem.” She says Ofgem is hampered because responsibility is delegated to it by government “through a five-year guidance note that doesn’t address the issue of how to get where the government wants.” What is more, “The regulator works to duties that don’t really deal with sustainability and assesses everything in an economic way. Even if they wanted to, they can’t do that [sustainability].”

National Grid also comes under fire from Mitchell, not least because it is has become the first port of call for many important market roles and centres of information. It is a private company, so she says that means it has the potential for conflicts of interest. At the same time it has to respond to requirements placed on it as a regulated body. She says “It has much too close a relationship with Ofgem.”

She says the company suffers from having a doubly-delegated duty, “They can say what they want to do but it still has to come back to Ofgem.”

That brings Mitchell back to her fundamental argument: “Instead of this completely economic focus of energy policy decision-making, you want to think about it as having a strategy and framework and

whether people want to pay for it.”

“It’s nonsense to say you can’t have political intervention - stick it in the economic regulator and economics are assumed to be objective. You are allowing this deeply conservative body, made up of incumbents, to make these subjective decisions. The route – what to pursue between nuclear, renewables etc, – is hugely important for society, it should be a political decision. There should be a direct link from the minister. The really big question is how you get the political direction right.”

“You are allowing this deeply conservative body, made up of incumbents, to make these subjective decisions”

I ask how Mitchell answers the criticism that among the industry’s biggest fears is political risk – something an arms-length regulator is said to limit. She admits “this remains a weakness” in her model but it is better than the current situation. She says there should be strategic policy statements clearly fitted into the vision to 2050. Then you can create institutions that know exactly what they have to do. Then you have got to get wider participation by reducing the importance of economics, so the system operator has to become more pro-active. That’s about getting >

A new framework?

Catherine Mitchell has set out a “straw man” institutional framework for a very different energy industry in a paper for iGov, written with Exeter University and EPSRC colleagues Bridget Woodman, Caroline Kuzemko and Richard Hoggett and is seeking comment, [see details here](#).

The framework has a single “overseeing body” – the Energy, Security, Sustainability and Affordability Board (Essab) - that provides expert advice to the secretary of state and Decc and has responsibility for delivering energy policy. Decc remains the fundamental energy policymaker and Essab may be within the Department or be an external body. It will go through a political process to set the framework.

Essab would have oversight of several functions, which may be within separate dedicated bodies. They are

- A System and Market Operator, government-owned or set up as a not-for profit company, responsible for the network’s technical transformation. This body would incorporate the “system architect” role put forward by the Institute for Engineering and Technology (IET) and widely discussed. It would be tasked with operating the system and market, treating demand and supply on an equal basis.
- A network codes and licensing body would manage a streamlined set of codes and one with approach to making code changes that gives new entrants as much weight in the process as incumbents.
- A market monitor that would hold information on all energy trades and publish anonymised prices and trends. It would also publish analysis for use by market participants including customers.
- A small economic regulator possibly based on Denmark’s version or US Public Utility Commissions.

All these functions or organisations would operate under Strategic Policy Statements set by Decc. The Statements would give general direction but with a long term view and the express aim to allow innovation and change, providing it fit with the spirit of the SPS and would support energy policy aims.

Alongside this group of organisations there would be a formal customer advocate or commissioner, and the Committee on Climate Change would continue to be to set out the science and mitigation options for climate change. Functions currently performed by Ofgem eServe may be performed by a separate body or by third party providers, with data transferred to the market monitor as appropriate.

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people involved.”

But she admits that setting up that long term vision and sticking to it is hard. She says it's a deeper problem: “The only way you can have a more legitimate and inclusive energy policy is if the government wants it to happen. I don't think there is a way to do it in our first past the post political system.”

Steps to a new industry? In keeping with her wish for clear direction Mitchell wants a discussion paper on the energy industry as soon as possible – a proposal that would have seemed more likely under a Labour government – and firm proposals within a year.

Mitchell has set up a “straw man” institutional framework (see box, below). She insists that far from being radical it is based on the experience of the Danish system.

I ask her what steps the new Conservative government should take to fix the system. The first is system operation. Mitchell wants the system operator role to be taken from National Grid. She says, “We have to separate it out and give it new incentives. It needs a not for profit state-owned company. National Grid would be required to disinvest.”

It's a tall order but Mitchell knows what should be in its place, and that means calling again on Denmark's model. “I would have it [the ISO] be similar to Energinet. They are tasked with the system transformation, and with security, with regard to carbon.”

Mitchell says National Grid has passed through phases of being helpful and unhelpful to distributed generation and the low carbon agenda. That's partly because its focus as SO is the transmission level. With distributed generation more of the investment is lower down the scale. That's why she also wants to “a more pragmatic approach” on transmission and distribution networks and markets. She thinks distribution companies and local energy markets “could be very important within a flexible, adaptable, energy efficient and integrated system.”

The new ISO would not own networks, but it would have a very long reach. Mitchell would also bring some of the industry's other central bodies within its compass – notably those that deal with settlements in the electricity and gas systems, Elexon and Xoserve, respectively. She points out that “they are both subsidiaries [of National Grid] anyway”. This runs counter to the current direction of travel but Mitchell says you need to look at the end point: “you ...want a market system where balancing is much clearer and variable power is used in a demand-flexible system.”

There has been some buzz in the industry recently, led by the IET, around setting up a system architect to co-ordinate, and perhaps direct, development. Mitchell says part of this role would sit with her new SO, “but the word architect is rather static... you want an overseer that is changing to suit changing needs”. Interconnection is her example of where she says an architect would temper the power of the large incumbents: “The SO will have to take a view on whether we need interconnectors instead of generation.”

As well as settlements, Mitchell wants to bring the codes and licences that underpin the industry into a separate body, which works to the SO. When I ask how that would fit with a nimble and responsive SO she points out that codes in their current form are among the barriers to competition identified by the CMA. They are a “living document dominated by incumbents” with a cumbersome change process. The codes need to be slimmed down from thousands of pages to an enabling framework that fits the transition we are making. Once that is done it won't really matter whether the code administration is inside or outside the SO, she says, but it “has to reflect the needs of system operating.”

Fixing the market I think Mitchell's first step, to fix the system operator, is ambitious, but she says “I think that's quite an easy one”. She says step two is more tricky: “Fix the market. We need to move from a bilateral to a centralised market.”

“The market was set up for marginal cost fossil fuels. All we are doing is giving out more and more subsidy and there isn't enough money.”

She explains: “The market was set up for marginal cost fossil fuels. All we are doing is giving out more and more subsidy and there isn't enough money. We need to create a market that supports a sustainable future with a high proportion of zero marginal cost electricity.”

In her view the GB market should return to a pool. When I say we abandoned that system because it was prone to manipulation she says the situation is very different now. “The pool we used to have was dominated by two centralised generators,” and whatever the failings of the current market there are more players. What is more, “There weren't futures markets back then,” so the market options are very different.

“The fundamental difference between a pool and a >

bilateral market is that a clear price comes out," she says. "In a socialised pool 100% of trades go into that market. In a bilateral market you only know about 3%. But there is far more to it than that. It also sorts out the liquidity issue in the market." Mitchell adds "Most places have pools, it's us that is different."

I ask whether shifting all trades onto exchanges – of which there are several in operation in the GB market – will do the same job. But she wants a central point – at least in the medium term – so that it can provide the kind of reliable pricing information that allows new players to enter the market.

That brings us on to the role of the regulator. Mitchell has some sympathy with Ofgem, whose influence on the market is necessarily limited. Where she wants action is not getting directly involved in the market, but in keeping a close check on it and, crucially, abstracting information that helps new participants join.

Ofgem should be "about market monitoring, and giving companies access to the results".

It's about market monitoring, and giving companies access to the results, she says. This time her example is the PJM market in the northeast USA. "PJM has a market monitor that keeps track of trades between companies. You know what the price is, you know what demand side bids there have been, clip sizes, trades – so you know everything, but it is anonymous. It provides a market report for everyone. People have to know what is the basis for the price and [in the GB market] most people don't have any idea about that."

Mitchell says her structural change will reduce prices.

"Our retail prices are middling. We have a small additional cost that is the social and environmental cost. But our wholesale cost is high because of the bilateral market - we don't know what the cost is of that. And balancing costs are higher." Mitchell adds that "strangely ... There is total acceptance that balancing process will be passed on and that they are quite a bit higher than the actual cost of energy", but moving to a pool will remove that need – and the associated costs.

"Our wholesale cost is high because of the bilateral market - we don't know what the cost is of that."

Originally, in the bilateral market, it was thought that any disbenefit would be outweighed by innovation, "it was thought that if you have a bilateral market people would make alliances and do interesting things. In practice it's been used to make it more difficult for competitors to come in and has reduced liquidity."

How can Mitchell's new bodies act closely with government, and at the same time be able to provide a long term view for investors and the flexibility required as the situation evolves?

Mitchell says that can best be achieved by a body that works closely with but separate from the government. She is calling it by its roles: an Energy, Security, Sustainability and Affordability Board "that is the nimble body that can take decisions and keep up with change," she says. The difference between it and current bodies is that "Instead of duties, it is about questions on where you are going to. It should be trying to be progressive and enable new entrants to come in." ^{NP}

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