



Market structure developments

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Aim of presentation

- To look at how the structure of the GB wholesale electricity market is likely to change over the next few years, mainly as a result of EMR
- (Analogous issues in the gas market, not least in relation to emergency arrangements – but currently likely changes are arguably less momentous)
- To examine (briefly) implications of the changes for the current industry structure, dominated by six vertically integrated (VI) companies



What is market structure about?

- Lots of things but, in context of GB wholesale electricity, it is particularly about
 - who decides what?
 - who bears what risks?
 - who are the counterparties?
 - what is the nature of the contracts/risk sharing between them?
 - what is the nature and extent of competitive pressures on risk takers?



Existing market structure

- Renewables apart (and renewables still a small part of the market)
 - dominated by six vertically integrated companies
 - much wholesale 'contractual' activity intra-company
 - risks managed, at least in part, through vertical integration and the mutual hedging afforded by having supply and generation businesses
 - reflects that vertical integration is an efficient way to handle investment in long-life, specialised assets like power stations



Pressures for change

- Decarbonisation targets and the associated beliefs that
 - VIs cannot do it on their own
 - the key cost issue is risk/cost of capital and new arrangements must reduce both of these
- Security of supply issues, (at least partly) linked to decarbonisation and the implications of larger amounts of intermittent and/or inflexible generation
- Worries about effectiveness of wholesale (and retail) market competition – which increase belief that VI is part of the problem, rather than part of the solution



Resulting initiatives

- Liquidity proposals ('Mandatory Auction' and 'Mandatory Market Maker') – explicitly aimed at easing entry by non-VIs and, therefore, an explicit challenge to VI dominance
- EMR a slightly less explicit but probably more fundamental challenge



What is EMR proposing?

- FITs for low-carbon power
 - perhaps with a government agency as the counterparty
- Capacity mechanism for flexible/peaking capacity
 - perhaps with National Grid as the counterparty



What do proposals imply for market structure?

- Unclear at this stage, but likely to involve
 - centralised decision-making further down the decision-making 'hierarchy' than now
 - not just about carbon or even renewables targets but also (even more than now) about plant mix
 - more counter-party centralisation than now for both
 - low-carbon plant
 - flexible plant (i.e., in time, potentially all plant)
 - competition increasingly for contracts with central counterparties



... which, in turn, implies

- reduced risk (especially market risk) borne by 'contracted' generators
- a reduced rationale for VI in terms of managing risk
- a reduced role for VIs
- a reduced role for 'the market' in taking decisions and managing risks
- greater ease of passing through (very high) costs to final consumers – the flip side of reduced risk borne by generation



In sum

- EMR is about delivering *volumes*
 - volumes of low-carbon generation which the underlying economics do not support
 - volumes of flexible (and low load-factor) plant whose underlying economics will be worsened by the subsidisation of low-carbon/inflexible/ intermittent generation
- The probable means of delivering those volumes will have the consequences which almost always follow from centralisation of decisions/lock-in to long-term contracts/easier pass-through of (at least some) costs
- In other words, a nice test for the Paul Samuelson aphorism that 'Every good cause is worth some inefficiency'