

RESPONSE TO PROJECT DISCOVERY

CE Electric UK welcomes the opportunity to comment on the conclusions from the Project Discovery work.

CE Electric UK is the distribution network operator for the north east of England, Yorkshire and northern Lincolnshire. As such, our main interest is in maintaining security of supply to our customers through operating a secure and reliable distribution network and we are not a participant in the wholesale electricity market. However, this could well change in the future with increasing amounts of distributed generation being connected to the network and the need to manage the distribution networks more actively. Our point of view is that of a well-informed energy sector company without vested interests in the supply chain relating to the trading and supply of energy. Our comments on the paper, while addressing the questions raised in each of the chapters, therefore focus on more general comments about the range of Ofgem's proposed policy packages together with the implications, as we see them, for the development of more active system operation at the distribution level.

In summary, we describe in this response our support for Ofgem's identification of the five key issues, the importance of ensuring that the financial markets will provide adequate capital for investment, and our concern that there is no guarantee that the current electricity market will produce the desired level of security of supply. Our strong preference is for a market-based approach, rather than a return to central planning. Investment is likely to be encouraged more by greater price predictability than by quantitative targets. Consideration needs to be given to how the proposed market changes impact on the means of balancing supply and demand and the development of demand side management. Taking these issues forward should be an early priority for an incoming Government following the General Election that is likely to be held in May 2010.

We agree with Ofgem's identification of the five key issues

In response to the consultation questions in Chapter Three, we would support Ofgem's assessment of the current arrangements and would agree with Ofgem's identification of the five key issues. From our perspective, encouraging investment and maintaining security of supply are particularly important and we offer further comments on each of these:

a) We need an energy framework (both market and regulated sector) that enables adequate investment to take place

We are pleased to see that Ofgem has recognised the need to ensure that financial markets will provide adequate capital to maintain security of supply into the future. Ofgem has suggested that up to £200 billion of investment might be needed in the UK alone by 2020. This will compete with other demands for investment in the UK and

abroad. In a market for capital that has been bruised by the credit crunch, opportunities for energy investment in the UK need to be at least as attractive as elsewhere. This means that a reasonably stable regime with reasonably predictable returns is vital to attract the necessary capital for this investment. This is important not only in absolute terms but also by comparison with other markets. Whilst it may be preferable to achieve this by encouraging overseas energy markets to become more like the UK market, it has to be recognised that this may not be achievable and it may be necessary to make changes to the UK market accordingly if we are not to lose out.

In principle, investment in the regulated network sector should be less of a problem than in the competitive sector, so long as investors have confidence in the stability of the regulatory regime and are adequately rewarded by regulatory price settlements. Investors will naturally seek returns on capital commensurate with the risks they face. We have argued to Ofgem for some years that regulatory risk is itself a major factor in establishing the long-term cost of capital. It is the long-term view that is relevant to investment decisions and so it is predominantly the long-term risks inherent in the regulatory regime itself that affect the relevant cost of capital that DNOs face. These risks have to be properly compensated if investors are to be content to provide the funds needed to finance investment in the regulated networks. It has been a major concern to us that regulators, and Ofgem in particular, have continually been reluctant to acknowledge this fact. We welcome the acknowledgement in the context of Project Discovery of the importance of providing sufficient certainty about the adequacy of long-term returns to the investor and look forward to this being reflected more clearly in activities relating to the regulated sector.

It is worth noting that the approach adopted in the recent distribution price control review, of a particularly low equity return supplemented by incentives for out-performance has the potential to run counter to this principle, since the signal has been sent that adequate long-term equity returns on investment are currently positioned to be reliant upon the calibration of a negotiated incentive regime at successive price control reviews over a 20-year period. It is implausible to suggest that this approach to setting equity returns has done anything other than increase the uncertainty to the investor. It remains to be seen whether this policy shift delivers the required results over the long term.

In making these comments, we do not dismiss the DPCR5 approach out of hand, and we accept that some legitimate differences may exist between the various sectors in the overall energy supply chain. But we do not think that there is scope for these differences to be very large and certainly not for them to be fundamental. If the Authority is concerned about the level of certainty that is required to secure investment in an unregulated sector then it seems reasonable to expect that the same considerations

would have similar implications for other sectors that operate in the same capital market. Therefore we encourage the Authority to pay close attention to the overall position that it adopts in relation to capital market risks and returns in the various decisions that it takes. A degree of consistency is a reasonable expectation for investors to have and the conclusions reached in Project Discovery ought to be factored into future decisions, such as forthcoming network price control reviews.

b) There is no guarantee that the current electricity market will produce the desired level of security of supply

In the competitive market, there are issues other than access to capital markets that come into play in dealing with security of supply:

- Security of supply has some of the characteristics of a public good. Actions taken by generators and suppliers individually improve the security of all electricity and gas users, not just the customers of the supplier concerned, and so the rewards do not necessarily accrue to the supplier taking action, or to their own customers. Moreover, there is unlikely to be a convergence of view between suppliers and customers on an appropriate level of supply security, due to a misalignment of interests. This is because from a customer's point of view, the costs associated with over-supply of generation are much less than those of under-supply; whereas for a supplier, margins are better in times of scarcity than at times of over-supply.
- Whilst it is in the nature of a market for supply and demand to balance at some price and therefore for new investment to be encouraged, it may be that this would involve politically unacceptable levels of price volatility and even interruptions to supply before the generation gap is bridged.

All of this argues that there could well be a case for some form of intervention to ensure a higher level of plant margin than would be the case in a purely units-driven market. This is not to suggest a return to central planning as some commentators have proposed. We remain a strong supporter of a competitive energy market, which has delivered major benefits to the customer and which drives innovation and cost effectiveness. The issues to be addressed are, however, whether the current market has the right structure to deliver adequate security of supply, the nature of any intervention required and whether the cure is better than the ailment. We therefore support Ofgem's view that the five key risks identified are of sufficient concern to warrant an examination of possible remedies.

Greater price predictability is preferable to quantitative targets for attracting investment

Turning to the questions raised in Chapters Four and Five, we agree with Ofgem that there is at least a case for examining whether some form of intervention or change to the market structure would be desirable to help deal with the issues Ofgem has identified. But it is important to be clear that the primary objective is to promote investment in support of security of supply. In parts of the paper, Ofgem is not clear on the hierarchy of objectives, such that in Chapter Five this primary aim tends to get confused with other, important but necessarily secondary, targets such as delivering a particular year's low carbon target or avoiding possible unnecessary investment. Reducing carbon is a long-term aim and meeting a specific target in a particular year is less important than achieving the investment to drive the long-term trajectory. Similarly, given that customers are more concerned about lack of power than of overcapacity, it would be preferable to err on the side of certainty of investment even if this were to result in some "spare" capacity.

The need to prioritise the encouragement of new investment influences the choice of instruments to be introduced. Greater regulatory intervention in markets can take the form of setting quantitative targets (such as a particular level of capacity margin, which is then achieved through auctions or some other market mechanism) or setting predetermined price signals (for instance, a specified price for carbon). Quantitative targets, in theory, guarantee that the objective can be met but at the expense of likely volatility in prices and hence lesser predictability for investment purposes. This impacts both on the timing of investment and the cost of capital. Moreover, the target will only be met if rigidly enforced and pursued single-mindedly at the expense of all other policy objectives. The variations in the carbon price in the EU emissions trading scheme illustrate both of these problems (the recent fall in the carbon price due to the recession and the previous collapse in the price at the end of Phase 1 due to over-allocation of permits), and also the reason why some form of underpinning of the carbon price is now being proposed. On the other hand, fixing a price provides greater stability for investors and the greater likelihood of investment coming forward and at a lower cost of capital, but carries the risk that the price may have been set at the "wrong" level. However, given that there remains considerable uncertainty about what the "right" long-term level should be, we can follow the eminent Harvard economist, Martin Weitzman, in preferring greater certainty about cost than quantity.

We understand that Ofgem proposes in the majority of the packages an underpinning of the carbon price. This is likely to provide greater certainty for investors. Indeed, in certain circumstances, carbon trading can have unwelcome consequences for participants and customers. This is why our parent company, MidAmerican Energy Holdings Company, has opposed the 'cap and trade' aspects of the US climate change bill. However, to provide an incentive for new capacity, some form of capacity tender is a feature of most of the packages. For the reasons given above, this may not provide the degree of certainty investors would

look for and could therefore be replaced by a capacity price, perhaps derived from a calculated value of lost load.

We think that there is a credible risk that jurisdictions that pursue carbon trading as a route to driving a transition to a low-carbon economy fail to make the progress that could otherwise be made. The fact that we are already considering the need to ensure that the market is distorted in its early years hardly seems to be a ringing endorsement of the approach. But given that it seems inevitable that European energy markets will operate on the basis of carbon trading, the right thing to do is to make sure that the measures that are in place have a realistic chance of delivering. Therefore we consider there is merit in the suggestion of creating a level of support for the carbon price.

But we are far from convinced that Ofgem can afford to leave it at that. We think that it falls to Ofgem and the Government to judge whether or not the economic measures and markets that are in place will deliver. Therefore Ofgem needs to examine as part of the continuation of Project Discovery further measures that provide greater price stability as well as those that are targeted on a quantitative outcome. The view of the financial markets should also be taken to understand what measures would best deliver the investment needed. Ofgem would then need to gain the support of Government in implementing such measures.

An increased system operator role can conflict with the obligation on suppliers to balance their supply and demand

Also in response to Chapter Four, and turning specifically to the impact of Ofgem's proposed policy packages on the distribution networks, we agree that increasing the role of the System Operators (SOs) is a valid approach. Specifically, we see some convergence between "enhanced obligations" on the SOs and the development of "smart grids". However, this does have implications for the role of suppliers.

Under NETA, and subsequently BETTA, suppliers have been established as the primary system balancers. This is an obligation explicit for the short term (i.e. day to day) and implicit for the long term (five to twenty years out), which is where many of the issues requiring Project Discovery's investigations have arisen. If enhanced obligations are placed on the SO to supplant the suppliers' balancing role in the long term, this risks conflicting with the suppliers' balancing role for the short term.

"Active management" of power flows across smart grids means influencing the amount and timing of customers' electricity consumption. If there is a strong role for the SO in active management, the disruption to planned power flows threatens suppliers' continued ability to balance their short-term positions.

This becomes particularly acute where such management does not involve actions taken through the balancing mechanism. As active management of constraints moves from a

handful of large customers and a handful of constraints to thirty million end users and thousands of constraints, the market-based approach currently operated by SOs could become unsustainable. It is more likely that we will need to have autonomous systems that act before suppliers become aware.

The clear priority is to ensure adequate investment to maintain security of supply. Nevertheless, in view of the significantly greater role that active network management and demand side management is likely to take as we progress into the low carbon economy, it is important that the market solution adopted does not make the development of the smart grid more difficult or is adopted without consideration of the implications for relationships with the customer. There may well be useful experience from the more recent development of energy markets abroad that should also be taken into account alongside the more theoretical analysis of how a market should behave. What we have learned to date is that markets seldom respond precisely as theory would suggest. Given the importance of getting the answer right, an evidence-based approach is desirable.

In summary, further work needs to be carried out within Project Discovery (or through some alternative Ofgem workstream) to test the various policy options against the objective of developing smart grids and demand side management to ensure compatibility with this aspect of developing low-carbon markets.

Taking these issues forward should be an early priority for an incoming Government

Chapter Six asks about Ofgem's assessment of timing issues. Ofgem has, in its Project Discovery, raised the profile of a range of extremely important issues related to future energy security of supply. The success of this initiative is clear in the emphasis given to the issues in both the Government's Energy Market Assessment published with the Budget on 24 March and the Conservative Party's policy paper "Rebuilding Security" published on 19 March. As paragraph 6.9 of the Project Discovery consultation makes clear, while some of these issues can be taken forward by the industry and Ofgem, others will need the Government to take the lead. Once the Project Discovery analysis is completed, Ofgem and an incoming Government need to move rapidly to reach a decision on a preferred approach and then take forward implementation of that approach. There must be no delay in tackling these issues and we stand by to help in whatever way we can.