

**Project Discovery**  
**Options for delivering secure and sustainable energy supplies**

**Electricity North West Response**

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### **Executive Summary**

Throughout its history, the energy industry has successfully responded to the various demands placed upon it by government, customers and resources, and has continued to do so as these objectives have changed over time. The Central Electricity Generating Board was created as electricity demand grew rapidly in the post-war years. The CEGB's role was to provide an adequate and secure electricity supply, rather than necessarily pursuing the cheapest generation route. This example of central Government planning was succeeded in the 1990s by the break up of the sector at privatisation. This was primarily driven by a desire to cut costs and to remove the liability of future investment away from the public purse. Over the past 20 years, the distribution sector alone has reduced its costs for consumers by 50% (as estimated in the RPI – X @ 20 consultation) and delivered billions of pounds of investment. The industry now finds itself with a new dilemma – how to balance a vastly increased environmental awareness with the maintenance of high standards of quality and security of supply, alongside a continuing desire to minimise costs.

Our view is that the market may well be able to deliver the desired outcomes, but that total reliance on this route would not deliver results in a sufficiently timely manner. The adoption of the urgent and essential emissions targets coupled with the commitment to deliver these via renewable power generation effectively limits the options available to the sector to deliver the obligations in the most efficient way.

We suggest that, as with any market system or mechanism, the result will only be as successful as the least effective segment, and that this requires a coordinated approach to ensure that potential constraints are addressed. Government, as the body responsible for policy, needs to ensure that clear targets and a consistent, long-term plan to achieve a low carbon economy is agreed and supported. Ofgem's responsibilities are to ensure that each sector will at least facilitate, and in some instances promote, the delivery of that plan and that interactions between sectors are optimised.

From our perspective as a distribution network owner, we suggest that the most appropriate response is to adopt Enhanced Obligations with Renewables Tenders. We suggest that the package of measures will allow Government to ensure that renewables targets are achieved (through the replacement of the renewables obligation with a centrally co-ordinated tender process for renewable generation) whilst allowing the remaining market elements to operate competitively.

The need for consistency and joined-up thinking between Ofgem's RPI –X at 20, Project Discovery and Financial Ringfence consultations is obviously vital in creating a co-ordinated drive to tackle the unprecedented challenges faced by the energy industries.

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## **1 Appraisal of current arrangements**

The current arrangements for the GB energy sector have delivered significant savings and an improved service for customers and industry, albeit through the application of different drivers along the value chain. The regulated elements of the sector have been squeezed by Ofgem over successive price controls and have been subjected to strong incentive mechanisms to deliver the requirements of the networks, whilst the natural competitive elements of the market (supply and generation) have been exposed to the normal competitive pressures for private sector companies.

To date, however, the market has not fully reflected the cost of the externalities associated with the generation of electricity. Arguably, Ofgem's identified objectives for the current arrangements have only recently included the requirement to reduce carbon dioxide emissions. Aside from that element, all other objectives have been met in an efficient and timely manner. Reflecting the carbon impact of generation in consumer prices (via market intervention) has so far failed to deliver the desired shift in investment decisions and the scale of investment in renewable generation assets and tight deadlines rightly raise concerns about whether it will be delivered without further market interventions.

If the current arrangements were allowed to continue, the true cost of energy supply would not be reflected in customer prices. This would result in inappropriate and inconsistent investment signals for the sector. The likely impact would be that future customers would be subjected to a significant price spike at the time when significant investments are needed to respond to an environmental or security of supply problem. The current arrangements have delivered a great deal for customers but several of the issues of tomorrow may have been avoided if a "guiding mind" had been co-ordinating a consistent and complementary energy policy.

There is a widespread concern amongst companies and investors at the lack of a cohesive and consistent energy policy. The concept of a guiding mind has been discussed at length over the past few years and explored closely by the ECC select committee. The concern for customers, companies and investors is that the body which is chosen to determine future energy policy adopts a path which is aborted at a later date with inefficient, potentially stranded investments. We suggest that only the Government can provide the appropriate long-term commitment required to ensure the success of a decarbonisation energy policy.

The notion of affordability is a very politically sensitive topic. The analysis suggests that current market prices are not reflective of the actual costs and yet there are concerns over the number of households spending a significant percentage of their income on energy bills. The sector needs to ensure that the vital infrastructure is in place for all customers (commercial and domestic) and needs to work with Ofgem to minimise and mitigate the impact of charges for such infrastructure. If, as a result of proactive and prompt investment the UK is able to secure a sustainable energy supply at a more efficient cost than other countries, the resulting charges may be relatively lower and the economy may be more efficient.

The specific concerns identified in the paper raise a number of important points. Ofgem correctly identifies that investor confidence is crucial to the decarbonisation of

the GB energy sector. The effects of the global recession are still being felt throughout the investment community; however the reduced returns for investors at DPCR5, coupled with the proposals put forward as part of the RPI – X @ 20 “Emerging Thinking” consultation, suggest that Ofgem are in danger of restricting rather than encouraging investment in the networks sector. A number of the proposals contained within the RPI-X @ 20 consultation on embedding financeability within the proposed regulatory framework will increase risk and uncertainty for the network companies, thereby increasing the cost to customers.

The consultation correctly identifies that under the current arrangements, the lack of investor confidence in the future requirements determines the investment profile of the sector ie reactive rather than proactive. That is the nature of a market based solution – competitive companies respond to demand signals. The market arrangements would respond to the requirements of a low carbon economy, but not in the timescales and by the generation mix implied by the various environmental commitments.

The scale of the investment required is likely to increase the required cost of capital as the UK is competing globally for access to finance at a time when all major economies are looking to decarbonise. Confidence in the regulatory environment and returns on investments needs to be improved to minimise the eventual cost to customers. Investors chasing investments is a much more efficient solution than the other way around.

This consultation focuses on the need to encourage company investment behaviours. It must be recognised that whilst companies must change and develop their investment patterns and solutions, regulators and public bodies must also adopt more appropriate mindsets.

The RPI – X @ 20 review is considering the requirements of the future regulatory framework and specifically the incentives for investment by network operators. Ofgem must ensure that the proposed framework in RPI – X @ 20 provides added value for customers from the new arrangements and enhances the work conducted under Project Discovery. It is also important that the regulated networks are not, as the only directly controlled portion of the total energy bill, penalised because costs are perceived as too high in other parts of the energy value chain. Customer bills must be transparent and cost reflective.

One specific issue relating to demand side responses relates to the current market structure. The separation of the market elements has produced a number of positive elements, but the lack of contact between end customers and their distributor means that demand side responses are a more difficult proposition for network companies. Improving the visibility of the distributor, possibly by separating out the network operator charges in the final bill for large customers, may increase customer focus on each element of the bill and enable customer distribution interaction that will allow demand side response solutions.

## **2 Possible policy responses**

Ofgem's policy proposals cover ever increasing levels of intervention, reflecting the opinion that the current market based arrangements will not deliver the Government's targets. Whilst market mechanisms have delivered a number of positive elements in the development of the energy sector, it is now appropriate to consider whether a more interventionist approach is required to ensure delivery of the required targets.

Of the five potential policy responses suggested by Ofgem, the capacity tenders and central energy buyer responses will allow the guiding mind to deliver the required investment, but may do so in a comparatively inefficient manner. These solutions are also unlikely to provide appropriate short-term price signals to customers or investors. Conversely, there are benefits associated with the retention of a market based mechanism as this will balance the need for investment with the desire to do so efficiently. Our key conclusion is that an efficient market could deliver the future requirements; however, the core question is how much market "correction" is needed to ensure this happens in a timely manner.

The three remaining options (targeted reforms, enhanced obligations and renewables tenders) have the benefit of allowing Government to correct market inefficiencies and encourage investment whilst retaining the market discipline. Retaining a market based model is more likely to retain investor confidence, which is vital for gaining access to financial markets. It is also more likely to create the appropriate signals that support the efficient delivery of required solutions.

From our perspective as a distribution network owner, we suggest that the most appropriate response is to adopt Enhanced Obligations with Renewables Tenders. We suggest that the package of measures will allow Government to ensure that renewables targets are achieved (through the replacement of the renewables obligation with a centrally co-ordinated tender process for renewable generation) whilst allowing the remaining market elements to operate competitively. We recognise that there are significant issues surrounding the design of the framework but believe that this package provides the best elements of intervention and market solution. Our one remaining concern with this option is the potential for a change to the Renewables Obligation to give an indication of greater regulatory risk. The framework must be designed so that existing participants are not penalised and there is no perception of a retraction of previous regulatory commitments.

### **3 Assessment of the five packages**

We believe that the proposed assessment criteria capture most of the important issues; however, given the massive investment programme which will be required to fulfil the move to a low carbon economy, we suggest that the impact on investor confidence should also be included.

It may also be worth considering whether a relative priority rank should be included. As we have previously suggested, policy makers must make a conscious decision to either focus on investment or efficiency. With this in mind, it should be recognised that the sector has been operating competitively for twenty years and the scope for further efficiency improvements is very limited. We therefore conclude that the focus should be on the encouragement of investment. However it may be noted that our preferred option (Enhanced Obligations with Renewables Tenders) is most likely to deliver a relatively balanced solution against the identified criteria.

In commenting upon the assessment criteria analysis below we have primarily focused on the impacts on the network businesses.

Ofgem's key risks for the market-based packages relate to the availability of finance and the resulting impact on investment and security of supply. We agree with this view. The current pricing mechanisms have not adequately captured the whole life cost of generation and use of electricity and gas. Attempting to stimulate the correct price signals to encourage investment is much more attractive than the central buyer model or capacity tendering as markets are more likely to deliver solutions in the most efficient manner. We are also concerned that any policy proposal in Discovery does not have an adverse impact on investors across the sector. Wider impacts on utility investors will have a significant impact on the availability of finance for regulated networks.

The paper discusses a number of different elements but those of primary importance to networks are the availability of finance, the profile and location of the generation mix and demand side response measures. If demand side response measures are to become a long-term network solution, the network companies need to be able to communicate with users and have access to detailed information on demand patterns.

It is important to recognise that the major issue which Project Discovery is attempting to correct is the failure of markets to send appropriate price signals to generators to reflect the cost of carbon, and drive the desired mix of generation and scale of investment by a specific point in time. For the network companies however, the key issue is ensuring that the regulatory framework is sufficiently flexible to allow the appropriate responses to the developing mix of renewables and other low carbon initiatives. The network companies will also need to plan for the differing mix of generation and where the generators are likely to connect (both geographically and at which point of the distribution or transmission network).

Linked to the need to encourage renewable generators to invest is the long-term stability of the UoS charges. The current charging mechanism contains a level of inherent uncertainty which is likely to discourage investors. At a time where we need to prioritise investment ahead of efficiency, a more stable approach to charging may be appropriate.

## **4 Timing**

Ofgem's recognition that there is a need for a stable investment environment to enable the delivery of the low carbon energy sector is an important first step. From that point, we suggest that the future framework should be established as soon as practicably possible to prevent any further delays in investment.

From a network company point of view, future price controls need to incorporate a long-term view of energy policy which will allow early identification of investment needs, and hence ensure more efficient delivery.