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Building our industrial strategy - ELEXON Response

We welcome the opportunity to comment on the Green Paper relating to building the industrial strategy.

ELEXON is at the core of the electricity market in Great Britain as manager of the Balancing and Settlement Code (BSC). We cover the wholesale market and govern the whole 'meter to bank' process. We compare how much electricity generators and suppliers said they would produce or consume with actual volumes. We establish a price for this electricity and settle around £1.5bn of funds accordingly. Our work ensures the smooth operation of the market, supports new entrants and innovative business models and ensures a level playing field for electricity wholesale market players. Our data supports wider industry cost recovery and validation mechanisms and is shared transparently and utilised to report on market trends. We also provide expert advice to Ofgem and BEIS to ensure the right solutions are considered to meet government/regulator policy decisions.

We agree that the ten pillars form a good basis for an industrial strategy and have specific comments on the pillars relating to infrastructure and energy.

General comment: Co-ordinating work on the future needs of an energy system to support industrial strategy

We note the proposals for an 'Industrial Strategy Challenge Fund' to help the UK capitalise on its strengths in science and innovation for areas such as clean energy. We also welcome the commissioning of a review into the case for a new research institution to act as a focal point for work on battery technology, energy storage and grid technology. We would expect that the work of this institution would align with existing work relating to storage/grids (whether through Ofgem/BEIS led groups and initiatives, National Grid's Future SO Programme, and various innovation funds). It should also give consideration to the wider needs of the energy system to support innovation and new markets. Ofgem and BEIS will be setting out their response to the joint call for evidence on a smart, flexible energy system this spring, which we expect would determine what action is necessary to transition to this future system.

ELEXON, in its critical, legally-mandated neutral and independent role facilitating energy markets, engages with new energy industry participants and technology providers. We are also helping Ofgem deliver the work to transition to half hourly settlement which will be the enabler for new energy services and innovation. We are liaising with storage providers and innovators of electric vehicle solutions to accommodate change within the existing industry frameworks. However, we would expect in the following years for greater market change to be necessary to accommodate new technology. We would welcome the opportunity to understand how we might help shape the thinking of the energy system will need to change to support the industrial strategy.

While ELEXON is eager to assist in shaping the future of the energy market, we strongly believe that ELEXON requires the flexibility to respond to new opportunities and compete to provide best-in-class services to the market and benefit customers. This flexibility will give us a more certain future,



enabling us to support developing energy markets in a way no other organisation can and ensuring we meet government priorities.

Question 16. How can local infrastructure needs be incorporated within national UK infrastructure policy most effectively? (our focus is on Energy)

Further to our comments above (on the need to co-ordinate future energy system needs) is our view that work should consider an end-to-end energy system. Historically, the energy system has been segmented between transmission, distribution and consumers, where supply shifted to meet demand. However, the increase in microgeneration, battery and other technologies and the emergence of smart solutions is driving towards a demand shifted to meet available supply and a more decentralised system. Within this system is an increasingly complex set of interacting markets including traditional wholesale power markets and emerging roles for new market actors, such as aggregation services and the need for localised markets.

Services across utilities (gas, water and potentially heat) are increasingly being bundled for consumers and energy has the potential to be traded and utilised more effectively at local level. The ambition for ULEVs and the potential to decarbonise heat, places additional interactions on an energy system. However, there does not yet appear to be a single binding vision for the future energy system or a single institution that understands and is responsible for design. The industrial strategy has the potential to create clarity on roles and responsibilities to match national needs of energy systems to emerging consumer and local needs. BEIS can align the work across departments, for example to ensure that DCLG, DfT (OLEV) policy can be brought together with a single design of the energy system against which policy can be tested. This would also allow for learning from regional and smart energy trials to be shared for the benefit of UK.

ELEXON can provide significant value to the future energy market by assisting potential new suppliers, generators, and storage providers to establish themselves, providing data and insight to a range of stakeholders in the sector, and delivering new services to provide better consumer outcomes. Question 27. What are the most important steps the Government should take to limit energy costs over the long term?

The consultation highlights affordability as a key consideration for energy policy. The government has placed consumers at the heart of their policy development. ELEXON can assist the government in meeting their consumer-focused goals. We believe there should be a mature public discussion about the cost of energy bills and how costs are recovered. Consumer bills contain a mixture of costs, such as pass through costs for the use of system services (e.g. for networks which are subject to Ofgem price control), policy costs (renewables schemes, smart rollout, EMR), costs to serve, wholesale costs and margins. Investment is required to transform the energy market and this is likely to create an increase in energy bills before consumers can reap the benefits. In the immediate future there is likely to be increasing debate on who should bear the costs of energy, as well as the treatment of new technology (e.g. battery storage) we need to consider how the fixed costs of existing infrastructure should be paid for in light of greater self-sufficiency by consumers.

At some point in the future electricity will become the 'green' first choice of energy source as the success of Government policies means it becomes less carbon intensive than other fuels or even completely decarbonised. The question should then arise as to whether the costs of decarbonisation should continue to be borne by electricity consumers. This will become more pressing if it pushes consumers who have a choice towards cheaper but less 'green' alternatives, and where the consumers of the alternatives are not bearing the policy costs of decarbonisation in the same way as electricity consumers.



Transparency over energy costs and cost allocation will be important in allowing consumers to understand what drives an energy bill. Advice and guidance will help consumers being able to manage their energy use in the period between now and when new smart infrastructure is in place to facilitate greater innovation in energy services and tariffs.

The consultation refers to the need for regulatory design to allow for investment. Regulatory design should seek to avoid further costs from any proliferation of the central services that support the energy market. Presently a number of service providers provide centralised, but essential services, that facilitate the competitive markets. Some of these services are modest but still run for a profit, whereas others are provided on a not for profit basis, for example ELEXON. Government and Ofgem have historically created new central services (e.g. Data Communications Company for the smart meter communications or Low Carbon company for Electricity Market Reform) when it adjusts the energy market design. However, this exacerbates an already complex market structure and creates additional interfaces for industry participants and complexity for new entrants. We believe consideration should be given to a holistic approach on market design, and this work could be the opportunity to ensure there is an end-to-end energy market that is fit for purpose for the new challenges and that is future enabled.

The views expressed in this response are those of ELEXON Ltd, and do not seek to represent those of the BSC Panel or Parties to the BSC.

If you would like to discuss any areas of our response, please contact David Jones, Head of Strategy, on 020 7380 4213, or by e-mail at david.jones@elexon.co.uk.

Yours sincerely,

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