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By Email:
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Response to: Clean Growth Strategy
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Uniper

Uniper is an experienced international energy company focused on power generation, energy trading, transportation, and storage, as well as a provider of specialist power engineering services. In the UK we own seven power stations comprising over 6GW of flexible installed capacity, as well as Holford gas storage site. As such Uniper is the fifth largest generator in the UK. Our employees, our experience and our assets make us a well-established business that makes an important, tangible contribution to Britain's security of supply and contributes to a cost-effective transition to a low carbon society.

Our comments are focussed on the section of the strategy on delivering clean, smart, flexible power. In short, four elements are essential:

- Gas as the enabler of the energy transition;
- The capacity market as a central part of the market framework;
- Independent systems operation; and
- A market mechanism to drive carbon reduction.

Gas as the enabler of the energy transition

The pathways to 2032 and 2050 outline a declining use of gas, particularly under the electricity scenario. Gas is however an important fuel to enable the transition. Gas provides a reliable, flexible and efficient source of electricity to manage gaps in generation for a number of minutes, hours, or days. The Committee on Climate Change analysis suggests that gas generation will still account for 24% of generation by 2030[1] and analysis carried out on behalf of BEIS as part of the Smart Flexible Energy System call for evidence[2] suggests around 18GW of CCGT capacity by 2050, albeit with much reduced load factors by then. With the range of uncertainty regarding future sources of flexibility, if new build or replacement low carbon generation is delayed the need for gas generation could be higher in to the 2030's.

Decarbonising heat is a major challenge and decarbonising the use of gas, by utilising the existing gas networks, could make a cost-effective contribution to achieving this

[1] Figure 2.4, CCC, 2017 Report to Parliament – Meeting Carbon Budgets: Closing the policy gap, 29 June 2017
[2] Chart 6, page 14, An Analysis of electricity system flexibility for Great Britain, Carbon Trust and Imperial College London, November 2016

objective in combination with other solutions. More research will be required to investigate how lower carbon gas, such as hydrogen, can be utilised in gas turbines.

Gas fired generation provides flexibility, adequacy and resilience in partner to renewable generation. Technologies, such as batteries, are developing and could become more cost competitive in the future. However, it is not yet clear that these technologies will be able to provide sufficient energy for a prolonged winter period on their own. Gas fired generation can do this. Making better use of existing gas fired generation infrastructure, utilising existing fuel and power connections, as well as civil infrastructure, is an important part of ensuring a cost-effective energy transition.

The capacity market as a central part of the market framework

The capacity market will help to ensure sufficient capacity is available to secure supplies throughout the year and we welcome Government's recognition of this enduring long term mechanism in the strategy.

Removing market distortions is essential to ensuring competitive, dependable outcomes in the capacity market. The upcoming review of the capacity market provides an opportunity to do this. The contribution of interconnection in this regard should be re-assessed in the context of the energy and climate policies of the markets that they are connected to. As network assets, they cannot commit to provide capacity from these markets, which is dependent upon the availability of production capacity and market conditions.

Professor Dieter Helm's Cost of Energy review report raises areas for consideration with regard to the role of capacity markets, but there would need to be much more detail on how an Equivalent Firm Power auction would be designed before we could comment further. We have responded to the call for evidence separately.

Independent Systems Operation

The energy transition brings new challenges to grid operations and balancing supply with demand. Legal separation of National Grid's System Operator function by April 2019 allows for consideration of full separation of this activity by April 2021, in time for the start of the next price control period. Full separation would enhance confidence in future flexibility and capacity markets by removing any doubts in relation to conflicts of interest. It would also potentially enable a more holistic approach to systems operation to be considered, where synergies across the transmission and distribution boundary can be extended to efficiently integrate distributed generation, storage, demand side response and prosumers in to the market.

A market mechanism to drive carbon reduction

We would prefer to see carbon pricing through a market mechanism such as the EU ETS. There is a need to review the long-term suitability of the Carbon Price Floor, which was a tax introduced essentially to fill the gap and then transition to a more robust EU ETS. More consideration needs to be given to how the UK can achieve international climate change leadership without disadvantaging UK generation and industry either in the EU ETS or a traded scheme linked to the EU ETS and other emissions trading markets; the wider the system, the more cost-effective the decarbonisation.