Department for
Business, Energy
& Industrial Strategy

Rt Hon Kwasi Kwarteng MP
**Minister of State for Business,
Energy and Clean Growth.**

**Department for Business,
Energy & Industrial Strategy
1 Victoria Street
London
SW1H OET**

T +44 (0) 20 7215 5000
E enquirles@beis.gov.uk
W www.gov.uk

Jonathan Brearley, CEO
Ofgem
10 South Colonnade
Canary Wharf
London **E14 4PU**

19 October 2020

Dear Jonathan,

The Government is committed to seeing the UK achieve Net Zero emissions by 2050. Electricity networks are a crucial enabler for this, with significant investment needed to accommodate increases in demand for low carbon technologies, such as electric vehicles and heat pumps, and to connect new sources of low-carbon generation. There is also an important opportunity for networks to support a Green Recovery through infrastructure investment, including investment in flexibility technologies, that develops skills, provides employment and boosts exports.

Because electricity networks' behaviour is governed by the regulatory environment, the price control process and charging regime is key, and the level of change required on the electricity distribution system in the coming years means that the next distribution price control, RIIO-ED2, is of particular importance. As you set out in your strategy earlier this year, Ofgem's statutory objective to act in the interests of all consumers means enabling the investment necessary for net zero at the same time as ensuring value for money and continued security of supply for consumers.

I am aware that you have recently consulted on the proposed methodology for RIIO-ED2, and that officials in Ofgem have very helpfully been keeping BEIS up to date on progress. The price control is rightly a matter for Ofgem as the independent regulator, but in setting that price control you will want to understand the Government's overall priorities for the future of the electricity system, and I therefore wanted to set out some observations.

Our work can be broadly divided into four layers of the system:

First, the energy system is changing, with the growth of newer and low carbon technologies, and more localised and distributed resources. The Smart Systems and Flexibility Plan, produced by Government and Ofgem together, outlines the new system operation roles and responsibilities which will need to develop at distribution level, including new roles in **flexibility markets.** These markets will need to develop and be in place during the next price control period. Consistent with the direction and the actions in the Smart Systems Plan, Ofgem will want to ensure these new roles and responsibilities are clearly defined in the regulatory framework, and that DNOs work together to define common, transparent and fair market parameters in such a way as to maximise competition and allow assets to provide muitiple system services at both national and local levels.

Second, we are clear that new ways of collecting, analysing and sharing **data** will be required to underpin markets and optimise the use of networks in the future system. The Energy Data Taskforce has developed important recommendations in this areai and my Department is working closely with Ofgem and others to take forward this work. I am sure you will agree that Ofgem should continue to build on its early guidance to develop network digitalisation strategies and action plans and specific licence conditions that promote the 'openness' and 'interoperability' of network data through the RII02 process. I think it is important that RII02 framework enables efficient investment in the appropriate digital technologies and processes as well as the pipes and cables that form our physical networks.

Third, the Government is committed to ensuring that the **institutional arrangements that govern the energy system** are fit for purpose it the longer term. BEIS officials are working closely with Ofgem on these issues, and it is important that a full suite of policy options remains on the table. These options range from continuation of the status quo institutionally to more radical reform. Whilst the Government has not yet set out a timetable for decisions in this area, it is important that the price control draws clear distinctions between network operation and system operation activities but does not pre-emptively exclude any particular future institutional model until such decisions are taken.

Finally, the Government will continue to take steps to promote electric vehicles and heat pumps which are a crucial part of the transition to Net Zero. Appropriate **investment in physical infrastructure** by distribution companies, including ensuring efficient and timely connection, will be important for the deployment of these technologies, and Ofgem's price controls will be fundamental to this, with RIIO-ED2 setting the methodology under which distribution networks will invest ahead of need. The challenge lies in setting a methodology that can support efficient spending and which stakeholders can engage with. An open and transparent methodology to agree when and where to invest in network projects, will be key. This will help ensure decisions for strategic investment are delivered openly and without undue delay, and enable the investment necessary for the projects to follow quickly. My officials are analysing different foresight options and would welcome further discussions if helpful to assist your decisions in this space.

I hope that this letter provides a helpful outline of our thinking in policy areas relevant to RIIO-ED2, more detail on all of which can be found inthe Annex. My officials will be glad to continue to engage as you finalise your methodology and develop the price control further.

Yours sincerely,

RT HON KWASI KWARTENG MP
Minister of State for Business, Energy and Clean Growth

Annex

i) Markets: flexible, innovative and competitive markets to support lowering of consumer network costs

Government and Ofgem have worked together on both the Smart Systems and Flexibility Plan, and our subsequent joint letter setting out detailed actions for network and system operators. As set out in that letter, we expect DNOs to compete flexibility with all new network requirements, as well as delivering significant improvements in coordination with the Electricity System Operator. We also expect DNOs to consider other alternatives to network build options, for example using energy efficiency to deliver demand reductions.

Whilst we have seen some progress from DNOs, further rapid improvements will be required during the next price control period. In particular, networks will need to ensure that new markets are not undermined by concerns around potential conflicts of interest. Clearly defined DSO responsibilities, supported by clear incentives in the next price control, will help to ensure that new markets have the confidence of market participants. Flexibility can be delivered through market arrangements and network price signals, and it will be important to ensure the balance between network price signals and market arrangements result in the best outcomes for consumers.

ii) Data and Digitalisation: Unlocking System Knowledge and Management capabilities during R/1O ED2

The collection and sharing of electricity system data will be key to the transition to a smarter, flexible, Net Zero system, that enables network operators to better understand their systems, forecast accurately and balance and enable flexibility markets.

RIIO ED2 can help with this by requiring collection of data about the nature and capability of network assets and the distributed energy resources connected to the networks. To create the right evidence for transition to efficient distribution system operation, RIIO ED2 could also require data about the operational performance of these assets. This would need to be to an appropriate level of granularity to support DNOs to operate their systems effectively and enable innovative third-party business models on the electricity system. We understand, however, that digital transformation is a journey and will need the right guidance frameworks. Key to this will be adherence to common standards that Ofgem will establish through the feedback it provides on digitalisation strategies, and its Digitalisation Strategy and Action Plans Guidance and the Energy Data Best Practice Guidance. Adherence to those new obligations will also ensure that distribution network companies use data in ways that help to unlock the path to Net Zero and a green recovery.

iii) Institutions and Governance

It is key that network regulation frames networks in such a way that we both make progress in removing known institutional barriers to a more flexible system and leaves open the choices between different future system scenarios. This could include separating out system operation from traditional network ownership roles,

which we have already done at the transmission level. Separation at distribution level would need to be considered in the context of net zero and whether this would better facilitate our legal obligations together with our broader priorities for the energy system. Identifying the costs of DSO activities would help to inform the case for separation and any future separation options. I think that networks expect that regulation should provide a clear expectation of system operator activities as far as possible, including through license conditions where appropriate. In addition, coordination between transmission and distribution system operation will be important as we move to a more flexible system. The price control could support this with appropriate incentives and obligations.

iv) Physical Infrastructure: enabling system capacity for Net Zero, taking account of consumer costs

We know that consumers will expect new technologies such as EVs and heat pumps to be 'plug and play' and that networks will need to be ready ahead of need to deal with the additional demand they will require and to ensure the efficient and timely connection of consumers.

We see benefits of the price control taking a two-pronged approach to address the uncertainties associated with the increased demand on the network necessitated by Net Zero. This would take the form of automatic reserved allowances for low-carbon technologies joining the system and developing a regulatory environment that supports longer-term, more strategic net zero investment decisions. A key consideration for the framework for strategic investment will be to minimise disruption and cumulative increasing costs for consumers paying for upgrades, so a 'touch the network once' approach to investment should be used wherever possible. Preliminary BEIS analysis suggests that early investment into Great Britain's electricity distribution networks could potentially lead to savings of up to £6bn by 2050 through more efficient network reinforcement, which could also reduce disruption costs to society by an estimated **£3bn - £8bn** by 2050 and decrease the length of network reinforcement cabling by an estimated **20,000 - 80,000 kilometres.**[1]

Key to selecting the right methodology to support strategic investment will be the type of planning model used: centralised or decentralised. Subject to an appropriate consideration of trade-offs (for example, alignment with national targets, policy and/or funding commitments from regional authorities, and cross-subsidisation), we want to see the electricity networks supporting local energy ambitions and plans, including where particular local partners wish to accelerate the transition to net zero in their areas. One way to ensure this support is for DNOs to be encouraged to actively participate in these local plans, to help shape them from a system perspective, and to gather evidence to support robust network investment business cases.

As we move towards Net Zero and the electrification it will require, new innovative solutions should be encouraged, including smart, flexible solutions. We will continue to work with Ofgem to put in place competition in onshore networks to enable such

[1] Undiscounted, 2012 prices. BEIS will be happy to share more detail of this analysis , as is helpful to Ofgem.

solutions. We will· also continue to work with · Ofgem to enable whole system innovation to help meet the challenges the network will face coming up to 2050, including legislating where necessary.