

Mr. Dermot Nolan
CEO
Ofgem
10 South Colonnade
Canary Wharf
London
E14 4PU

11 February 2019

Dear Mr. Nolan

Consultation on licence conditions and guidance for network operators to support an efficient, coordinated, and economical Whole System

The Institution of Engineering and Technology (IET) is taking the unusual step of writing directly to you in regard to a matter of fundamental concern raised by this consultation.

The IET welcomes the growing understanding, including within Ofgem, that to address Britain's energy challenges successfully, we have to understand and take into account the essential interactions between the components and sub-systems of our energy systems. This applies not only within each energy vector (e.g. gas, electricity, oil) but also between them. This is now commonly referred to as the Whole System challenge.

The IET's Core Concern

The IET has played a leading role in exploring and promoting Whole System thinking. In particular, it has worked in partnership with the Energy Systems Catapult through the Future Power System Architecture (FPSA) programme¹. The FPSA programme has proposed a definition of the Whole System in the context of the power system. This is provided in the notes of this letter alongside the definition proposed by Ofgem.

The FPSA definition includes every component of the power system including all the equipment on the customer's side of the meter. It also embraces the IT infrastructure supporting the system as well as the regulatory, commercial and market rules that facilitate its operation. Similar definitions can be applied to the gas system. In stark contrast, Ofgem's definition simply includes the transmission and distribution networks, but doesn't extend into adjacent and interlinked vectors such as heat or transport. A better term for this could be the Total Network System.

The IET considers it wholly inappropriate to use the term Whole System in such a narrow way. We consider it to be misleading. As stakeholders in the energy sector work to address the new challenges and complexities that we face, it is really important that we try to adopt a common language. While we accept that there is no single, recognised definition of the term Whole System, we have never seen it used simply to describe a transmission and distribution system.

¹ <https://es.catapult.org.uk/projects/future-power-system-architecture-fpsa/?EKXSHOW=SHOW>

Further, we are concerned that adoption of this definition will have seriously adverse outcomes. We accept that the remit of the network owners is limited by their licences. But it seems short-sighted and inappropriate to further lock these restrictions in when we should be encouraging the network owners to develop genuine Whole System innovations.

Ofgem's narrow definition of Whole System has implications deeper than simply matters for clarification in the glossary. For example the RIIO-2 methodology policy consultation proposes only to fund investments that support the narrowly defined Whole System; it proposes to reward the network companies whose business plans focus on the delivery of Whole System solutions; and it proposes to target future innovation incentives on the narrowly defined Whole System.

Our understanding is that by writing this narrow definition of Whole System into regulated company licences, it effectively makes the definitions 'law' and greatly diminishes the scope for any flexible interpretations to customers' benefit.

Governing the Whole System

This debate about the definition of the term Whole System in reality reveals a bigger and more fundamental issue. We recognise that Ofgem does not, and indeed should not, regulate the true whole system; this responsibility rests, by default, with government. We intend to write to government separately on this point.

Conclusion

The IET recommends the following:

- Ofgem should **reconsider its use of the term Whole System** in transmission and distribution network licences and associated RIIO-2 policies;
- Ofgem should give further consideration to the ways in which **the RIIO-2 framework can encourage the regulated companies to play their part in genuine Whole System solutions**, while respecting the formal boundaries of the companies; and
- Ofgem should actively support **wider consideration by government and stakeholders in developing mechanisms to ensure Britain has the necessary coordination across the true Whole System** as this underpins the context within which Ofgem operates and its policies will be implemented.

We have discussed these issues with Ofgem in a number of forums previously and we would be pleased to meet again to further explore these important questions and expand upon the findings from the FPSA programme. Please contact James Robottom, Energy Lead at the IET on jrobottom@theiet.org or call on 07841 865 354

Yours faithfully,



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Chair, IET Energy Policy Panel
Chair, FPSA Programme Delivery Board



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Notes

FPSA Definition of Whole System

Whole System includes:

- The physical energy system equipment;
- Consumers and the equipment they control;
- The touch points with other energy vectors e.g. gas, heat and transport;
- Associated communications, data and digital platforms;
- Energy system regulations and market rules;
- Commercial transactions, business models and contracts.

Ofgem Definition of Whole System

In contrast, Ofgem's consultation offers a quite different definition of Whole System to be used in the proposed new licence condition. This alternative definition, which is widely applied in Ofgem's recent RII0-2 policy methodology consultation, is as follows:

Whole System: For the purpose of this licence condition, means the national electricity transmission system and the distribution systems of all authorised electricity operators which are located in the national electricity transmission system operator area.