

Cynulliad Cenedlaethol Cymru Pwyllgor Amgylchedd a Chynaliadwyedd	National Assembly for Wales Environment and Sustainability Committee
Dyfodol Ynni Craffach i Gymru?	A Smarter Energy Future for Wales?
Ymateb gan Grid Cenedlaethol (Saesneg yn unig)	Response from National Grid
SEFW 26	SEFW 26



Cynulliad  
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Cymru

National  
Assembly for  
Wales

# National Grid submission to the National Assembly for Wales' Environment and Sustainability Committee for its inquiry into 'a smarter energy future for Wales', September 2015

## National Grid's Role

1. National Grid's job is to connect people to the energy they use, safely. In providing this vital service we are acutely aware of the importance of delivering reliability and value for money for consumers. A focus on driving down costs whilst continuing to deliver greater service reliability sits at the heart of our business model. Since privatisation, network costs have fallen significantly in real-terms and reliability performance has improved as successful regulatory regimes have created the right incentives for networks to deliver more for less.
2. National Grid owns the high voltage electricity transmission system in England and Wales and as System Operator balances supply and demand in the short term for the whole transmission system. Over the next decade, we plan to invest around £20 billion to ensure that our electricity and gas networks continue to provide safe and reliable energy supplies to customers, as well as future-proofing against significant security and weather events.
3. National Grid holds licences under the Electricity Act and Gas Act for:
  - a) Electricity transmission (operation of the Great Britain transmission system and ownership of the high voltage assets in England & Wales),
  - b) Gas transmission (operation and ownership of the high pressure pipelines in England, Wales and Scotland), and
  - c) Gas distribution network serving approximately 11million customers in England, across four networks.

In Great Britain, National Grid does not own any electricity distribution assets (in Wales, these assets are owned by Western Power Distribution and Scottish Power Energy Networks) neither do we own any Scottish or offshore electricity transmission assets.

4. In planning and operating the UK's electricity transmission system, our duties under the Electricity Act, as detailed in our transmission licence, include the need to develop and maintain an efficient, co-ordinated and economical system of electricity transmission and facilitate competition in generation and supply. We are required by our licence to offer terms to those who wish to connect to our network and levy charges in accordance with a methodology approved by Ofgem. We are required to plan the system in accordance with the National Electricity Transmission System Security and Quality of Supply Standard (NETS SQSS).
5. In practice, we use the NETS SQSS to identify the minimum requirements for connecting generation and demand so that our connecting customers can choose between different design arrangements. The SQSS also guides the capacity and resilience of transmission that is needed between different parts of the network to facilitate an efficient energy market and maintain security of supply, for example, avoiding or minimising customer interruptions in the event of the loss of a transmission line or part of an electricity substation due to weather (storms) or interference by a third party.
6. In Wales, our transmission network meets the SQSS criteria for existing demands and generators. We have been seeking connection arrangements for new generators including those who sought connection in the TAN8 identified area where no existing transmission facilities exist.

## Network Regulation

7. Given the limited scope for competition in the transmission business, National Grid's transmission activities and charges are subject to regulation by Ofgem. Following an extensive review of the 20 years of network regulation following privatisation of the industry in 1990, Ofgem established the RIIO (Revenue = Incentives + Innovation + Outputs) price control framework for onshore transmission and distribution networks in Great Britain. This regime builds on the significant efficiency and quality improvements driven by incentive based regulation of privately owned companies<sup>1</sup> to ensure new challenges and the requirements of customers and consumers are met on a robust value for money basis. This regime is widely regarded as best practice and is being emulated by other regulators in the UK and other jurisdictions.
8. The RIIO regime encourages network companies to work with their stakeholders to develop robust business plans which will deliver required outputs at the most affordable prices. In the run-up to the setting of the new RIIO control for electricity transmission which commenced in April 2013, National Grid conducted an extensive consultation with all its stakeholders (including consumers, young and future bill-payers, consumer representative groups, government, other regulators (e.g. HSE), the energy sector, environmental organisations, and academic experts) to identify how we should deliver our main outputs of connections, reliability, safety and customer satisfaction at an affordable price while facilitating the transition to a sustainable low carbon economy in-line with government objectives.
9. Now that the price control is operating, National Grid's revenues adjust according to how much service our customers want. We have strong incentives to deliver our outputs at lowest cost and the benefits of outperforming plan targets are directly shared with customers. The regime encourages and supports innovation which is key to ensuring good service and lower future costs.
10. An important aspect of the regulatory regime is the confidence it engenders in investors that their investments will continue to be recognized and appropriately treated. On the basis of this investor confidence in the regime, National Grid is able raise finance for capital intensive network equipment at very competitive rates and thereby keep costs down for consumers.
11. The RIIO regime ensures significant levels of scrutiny and transparency are applied to our activities, including our investment plans and the charges on our customers that will be passed on to consumers. Stakeholders are continuously engaged throughout the process and customer satisfaction is directly measured to inform incentive payments.

## Network Competition

12. Ofgem has a key role in promoting competition in the energy market and regulating the monopoly transmission and distribution network activities. They have stated that they believe it is in the interest of consumers for competitive processes to be used in deciding which companies should build and own transmission facilities.
13. Due to our combined role of system operator and transmission owner, National Grid has been able to deliver benefits to consumers from an oversight and responsibility for the end to end process of identifying the need for new transmission network, designing, procuring and building it and operating it over its entire lifetime. This ensures efficient, economic, and coordinated development and management of the equipment; provides clarity over responsibility for all aspects of the network's design and performance; and allows the optimization of investment and operational costs in order to minimise lifetime costs to the end consumer.
14. We identify that these coordination benefits are particularly important in the strongly meshed parts of the GB transmission network. Competition has been introduced into the delivery and ownership of unmeshed parts of the network (for example, the Offshore Transmission (OFTO) regime and concerning interconnectors to other markets). National Grid will work with Ofgem to ensure coordination benefits can be achieved across all the assets we operate and we will participate in competitions where we can bring benefits from our skills to consumers.
15. There is currently significant discussion about the development of competition in Electricity Transmission in GB through Ofgem's Integrated Transmission Planning and Regulation (ITPR) and Strategic Wider Works (SWW) workstreams. National Grid supports the introduction of further flexibility into the regulatory regimes to enable the right delivery route for particular types of asset. It is for Ofgem to determine the role of competition, the characteristics of projects suitable for competition, and be clear on the benefit to consumers.

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<sup>1</sup> As an illustration on the effectiveness of this regime in driving efficiencies, Ofgem reported in 2008 that "Since 1990 the real cost of electricity distribution charges have been halved and transmission charges cut by 41%." See Alistair Buchanan's Speech at SBGI on "Ofgem's RPI-X at 20 Project" – 6<sup>th</sup> March 2008: <https://www.ofgem.gov.uk/ofgem-publications/64130/sbgi-6-march.pdf>