



National Grid Electricity Transmission Owner Stakeholder Consultation

Connections to our network July/August 2017



Purpose and content of this consultation

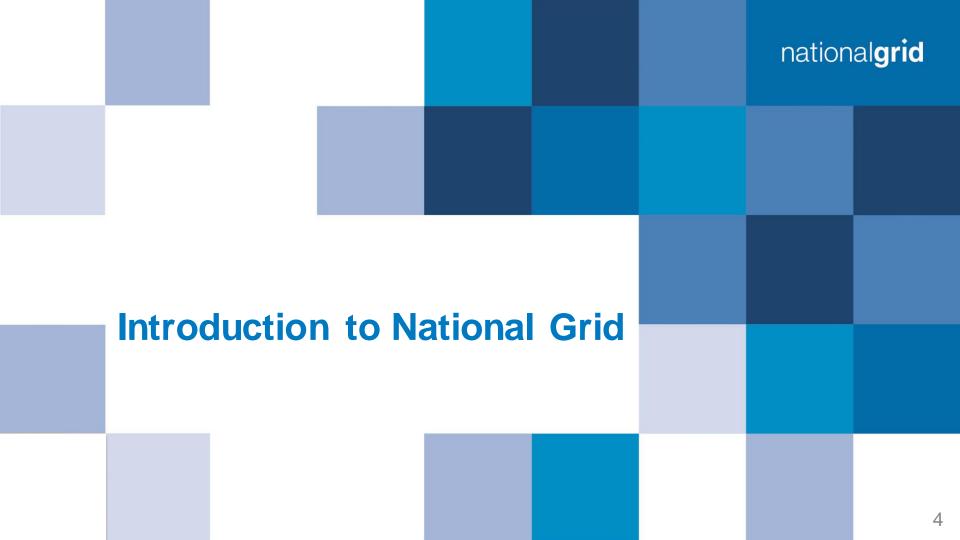


- As the England and Wales Electricity Transmission Owner, we recently held a series
 of workshops to continue discussions with our stakeholders around some of the key
 topics that are important to both them and us
- These workshops were the first of their kind for our Electricity Transmission Owner business, with the intended aim that we listen to our stakeholders, establish their priorities, shape the topics of our future engagement, and start the process of incorporating stakeholder views into our business plans. Topics covered were:
 - Reliability of the Transmission network
 - Future role of Transmission
 - Connections to our network
 - The environment and our work with communities
- We are not consulting on the topic of Safety because we consider this to be nonnegotiable

Purpose and content (continued)



- The following slides focus on the topic of Connections to our network
- Specifically, we would like to hear your views on what we could do differently to facilitate connections
- This consultation pack is structured as follows:
 - Slides 4-6: general background information on National Grid
 - Slides 7-9: some context around the connections process
 - Slide 10: potential questions to consider
 - Slides 11-12: link to consultation survey and next steps



National Grid: what we do



- We are the England & Wales Electricity Transmission Owner (TO)
 - We own, build and maintain the network
- We are also the GB Electricity System Operator (SO)
 - We balance the system and ensure that voltage and frequency are kept within acceptable limits
- We are currently working with Ofgem to make our Electricity System Operator independent from the rest of our business (to take effect from 2019)
- For Gas, we are the GB TO & SO
- We also have US interests in New York, Massachusetts,
 Rhode Island, New Hampshire and Vermont
- We hold a minority stake in four UK Gas Distribution networks (now known as Cadent)
- We own other non-regulated businesses
- This consultation is about the Electricity TO...



National Grid Electricity Transmission Owner

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- Our network operates at 400,000, 275,000 and 132.000 volts
- 45 power stations, 12 Distribution networks and 3 interconnectors are connected to our network, along with a few, large directly connected customers
- What we don't do:
 - Generate electricity in the UK
 - Own or operate UK electricity Distribution networks
 - Sell electricity to end consumers in the UK





Getting connected: some context

- National Grid's Transmission Owner business provides the assets and associated services for connections to the Transmission network
- We are driven by our Transmission licence and the overarching regulatory and commercial framework to ensure we deliver services that:
 - Are economic and efficient
 - Promote effective competition
 - Do not discriminate (e.g. we cannot prioritise certain customers or certain types of generation)
- Changes to the industry framework are subject to codified governance arrangements, which can restrict changes to certain aspects of our services

Getting connected: the process

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The process can be split into four phases...

Scoping



Contracting



Constructing



Operating



Customer activities

- Site and technology selection
- Project investment case and financing plan



- Provide network and process information
- Initial discussions to support project development



- Complete and submit grid connection application
- Seek to agree terms (incl. connection date)
- Detailed analysis to identify network impacts, efficient solutions and programme of work



- Final Investment Decision and consents
- £ securities in place for network investment
- Coordinate work
- Project consents
- Bi-annual securities update
- Coordinate work

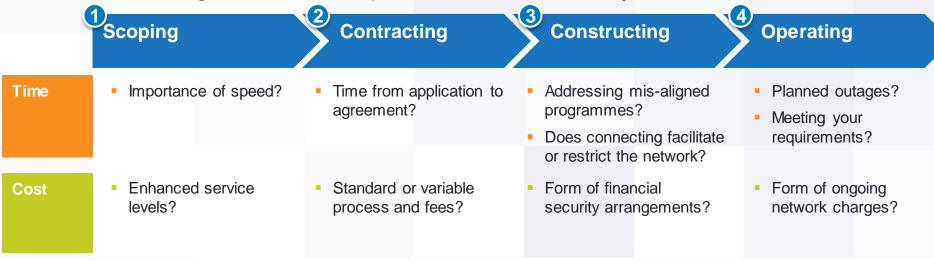


- Commissioning and compliance; sell energy and services
- Revenue & re-finance
- Pay network charges
- Commissioning panel & compliance testing
- Invoicing network charges

Getting connected: questions for consideration

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When looking at ways to improve the process of connecting to our network, there are potential options around the time and costs involved, and the level of quality / detail required by our customers during each of the four phases. We'd like to hear your views...



Standard form of

approaches? contract?

• Amount of detail required?

Options for tailored

Quality

Balance between cost versus availability?Technical standards?Network access?



Consultation survey

- Our consultation on Connections to our network is now open and we invite you to provide your views via the link below:
 - Please click here to provide your feedback
- The consultation will be open until Friday 25th August 2017
- You'll also find consultations on the Reliability of the Transmission network, the Future role of Transmission, and the Environment and Communities using the same link

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Next steps

- Our commitment
 - After the consultation closes, we'll collate what you've told us and combine it with feedback from our stakeholder workshops
 - We'll share this with you and explain how we propose to take it forward (planned for early September)
 - We'll work with you in more detail on your priorities
 - We'll change our plans as a result
 - We'll make this our business-as-usual







Thank you

Any questions? Please email: gary.stokes@nationalgrid.com

