Promoting choice and value for all gas and electricity customers

All interested parties

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Dear Colleagues

Open Letter: Planning for an integrated electricity transmission system – request for views

The joint DECC and Ofgem Offshore Transmission Coordination Project[1] (the OTCP) recently concluded that the future transmission system planning role of the GB National Electricity Transmission System Operator (NETSO) will be critical to realising the potential benefits of a more coordinated approach to the development of offshore transmission links. In parallel, activities like the North Seas Countries Offshore Grid Initiative (NSCOGI)[2] and our emerging regulatory regime for interconnection highlight the need for an enlarged perspective, which includes the cross-border dimension, on system planning. In addition, the role of the NETSO is being expanded in different directions; for example, DECC is proposing a role for the NETSO in administration of the feed-in tariff (FIT) and capacity market arising from the Electricity Market Reform. This, and the addition of other responsibilities for the NETSO, raises issues of potential synergies and conflicts of interest as well as questioning whether existing incentives and obligations are appropriate to facilitate these new activities.

Given this, and in line with the Authority's role in ensuring economic and efficient network provision, we intend to build upon the findings of the OTCP and respond to these other identified drivers with a new project entitled "Integrated Transmission Planning and Regulation" (ITPR). This project will consider what is needed with respect to system planning to deliver the future integrated transmission system onshore, offshore and cross-border, and will review how the relevant institutions and the incentives around them should evolve to support this new activity. The project will also consider how the onshore, offshore and interconnector regulatory regimes interact to deliver multiple-purpose transmission projects that could be a feature of the future energy system. As part of this, we will seek to ensure that the regimes continue to provide effective and stable frameworks for the significant investment in transmission infrastructure that is required in the future.

We are committed to ensuring that this project draws on a range of stakeholder views and evidence. This open letter sets out our view of the drivers and evidence for work in this area and the next steps to address the issues raised. We invite all interested stakeholders to respond to the questions set out in this document, with a particular focus on the scope of

[1] For further information, see: http://www.ofgem.gov.uk/networks/offtrans/pdc/pwg/otcp/pages/otcp.aspx.
[2] For further information, see the NSCOGI Memorandum of Understanding: http://ec.europa.eu/energy/renewables/grid/doc/north_sea_countries_offshore_grid_initiative_mou.pdf.

the project and additional evidence that contributes to the issues outlined below. We request responses by 25 May 2012. We are also hosting a workshop on 16 May 2012 (see below for further details) to share our and industry's views of the issues associated with system planning – we would welcome attendance from all interested parties.

Drivers for the ITPR project

Role of the NETSO offshore

For most offshore generation projects to date, the most efficient means of connecting to the onshore network has been via independent, "point-to-point" transmission links. In future, it may be more efficient for certain offshore transmission connections to be more coordinated, as generation plants become larger and more distant from shore. The OTCP concluded that the NETSO's system planning role is critical to facilitating the identification of efficient coordination opportunities. As such, Ofgem is consulting on whether improvements may be needed to facilitate this role[3]. This relates, in particular, to the NETSO's role through the connection process and in relation to identifying shared assets and anticipatory investment. It also seeks views on improvements to network planning documents and, in particular, to the merging of the Offshore Development Information Statement (ODIS) and the Seven Year Statement (SYS).

Similarly, and as identified through projects such as the NSCOGI, connecting GB with other Member States also gives rise to issues around system planning and coordination. For example, where two or more countries are attempting to interconnect and integrate shared offshore generation, this highlights differences in approaches taken in different Member States and differences in the role of Transmission System Operators (TSO) and regulator. As such, the potential increase in cross-border developments may also suggest the need for a more holistic approach to system planning to facilitate appropriate system development. The ITPR project will build on the work of the offshore consultation noted above, it will take forward the issues created by the NETSO having a strengthened role in network planning for offshore and also consider the inclusion of cross border developments in that planning role.

Addressing multiple-purpose projects

Through engagement with stakeholders and project developers, both bilaterally and through interactions with the All Islands Approach[4], we have been made aware of developments that could involve multiple-purpose transmission links in connecting them to the GB network. These potential transmission lines could serve the combined purpose of connecting offshore generation, providing reinforcement of the onshore network and/or linking our market with that of other Member States. They may, therefore, cross the boundaries of our existing regimes for network investment. See Annex 1 for some schematic examples.

Analysis undertaken for the OTCP highlights the technical challenges faced by the development of some projects. Assuming that these can be resolved, the projects may be developed on a case-by-case basis through our existing and separate approaches to transmission investment. In certain cases there may be a need for clarifications or longer-term modifications to the regulatory regimes to ensure that the regulatory approach remains effective.

[3]For further information, see: http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=12&refer=Networks/offtrans/pdc/cdr/2012.

[4] The All Islands Approach, a joint initiative involving governments from the British Isles, the Channel Islands and the Isle of Man, is seeking to develop an approach to energy resources across the British Islands and Ireland to facilitate the cost-effective exploitation of the renewable energy resources available, increase integration of our markets and improve security of supply.

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Development of interconnection

In developing a regulatory regime for interconnection[5] we are acknowledging that interconnection can bring wider benefits to the GB system and to consumers (for example, security of supply, integration of renewable generation etc). However, this perspective also highlights the need for a clear view of GB transmission network development that includes the cross border dimension, and allows proper evaluation of the benefits and costs to GB consumers of increasing interconnection.

Furthermore, the Third Package has clarified that interconnectors are TSOs and, as such, it is no longer appropriate to treat them under the same framework as generation and demand. As TSOs, interconnector licensees have a responsibility to cooperate with the NETSO and other TSO entities; however, the route for achieving this cooperation may not be clear. For example, in exempting interconnectors from the transmission network use of system charges (TNUoS)[6], there is no longer a signal or incentive for interconnector developers to choose network locations which minimise GB reinforcement costs and costs to GB consumers. Equally there is no comprehensive view of the system which might be used by the NETSO and transmission owners (TOs) in assessing grid connection requests from potential interconnector owners, evaluating costs and benefits and arriving at an overall optimal solution for the GB system.

Together, therefore, these developments highlight the potential benefit of having a coordinated picture of the role of interconnection as part of an overall GB system perspective to allow for the assessment of new proposals.

Evolving institutional arrangements

In recent years, the NETSO has witnessed a number of changes to its role and responsibilities within the current arrangements, including extension of its system operator (SO) role offshore. Through the SO 2013 work[7], and in line with the principles developed under the RIIO price control framework, the NETSO is likely to face longer-term and more output-focused incentives from 2013 onwards. It is also expected to be tasked with delivering the electricity market reform instruments, the FIT and the Capacity Market[8], alongside its role in overall system operation. This sits alongside the other roles of National Grid plc.

Through the OTCP process, questions have been raised around whether the NETSO is sufficiently incentivised to undertake effective system planning across onshore, offshore and cross-border developments. Following on from the OTCP, we are consulting on whether short term changes are needed to support the NETSO's system planning role offshore; the next steps from this consultation will now be captured in the ITRP project. The ITRP project will also consider whether improvements are needed, in the longer-term, to the NETSO's role and incentives as system planner across the whole of the national electricity transmission system.

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[5] The cap and floor regime for regulation of project NEMO (a proposed interconnector between GB and Belgium) and future subsea interconnectors, see: http://www.creg.info/pdf/Opinions/2011/NEMO/Nemo-EN.pdf.
[6] For further details, see: http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=97&refer=Europe.
[7] Ofgem is consulting on proposed objectives, policy and principles for the regulation of GB gas and electricity system operators, which will cover an eight year period from April 2013. The focus of that consultation is on incentives for real time and day-to-day system operator functions such as balancing and constraint management, including schemes relating to SO outputs and cost incentives. See "System Operator incentive schemes from 2013: principles and policy": http://www.ofgem.gov.uk/Markets/WhlMkts/EffSystemOps/SystOpIncent/Documents1/SO%202013%20Principles.pdf.
[8] As part of this, we are considering how the (potential) role of the NETSO in identifying appropriate low-carbon generation interacts with its role in developing the necessary transmission network (in, for example, its role under the TYNDP). See "Electricity Market Reform: Potential synergies and conflicts of interest consultation": http://www.ofgem.gov.uk/Markets/WhlMkts/EffSystemOps/Pages/effSystemOps.aspx.

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In light of this and given the changes to the NETSO's role, it is necessary to consider whether the NETSO's current governance and relationship with other parts of National Grid can best deliver system planning. There may, for example, be a need for reinforcement of the separation between the functionally different business activities within National Grid plc.

European approach for coordinated system planning and development

Our approach to planning and developing system infrastructure is different to other Member States. In general, elsewhere in Europe one national TSO (or a limited number of regional TSOs) will plan (and in most cases implement) necessary network investment, including investment in offshore networks and interconnection with other Member States. This same national TSO is also required to become a member of European network for TSOs for electricity (ENTSO-E), and contribute to the activities and functions required of ENTSO-E at a European level. In contrast, and in light of the different network investment regimes in GB, all our TSOs are expected to contribute to system planning and to the development of the Ten Year Network Development Plan (TYNDP). The NETSO has a coordinating role in assembling this picture onshore and offshore. With regard to ENTSO-E membership, only some transmission and interconnector licensees are full members (National Grid and the Scottish TOs).

As our regimes develop and as we integrate further with other European markets, the differences in approach to system planning may be an issue. In addressing this potential issue, therefore, we will consider how other Member States produce their TYNDP (both currently and going-forward) and whether our approach to producing this remains appropriate for the future. As part of this, we will also consider whether the NETSO should have a stronger role in developing the TYNDP, with potential obligations to consider overall future network development more holistically.

Furthermore, there are some practical considerations regarding the expectations on those designated as TSOs to participate in the new structures, for example whether it is desirable or appropriate for all electricity transmission and interconnector licensees to become members of ENTSO-E.

Scope of the project

Ensuring a stable investment regime to deliver the necessary investment is the key to meeting energy policy goals. It is also necessary to ensure that the way in which this investment is identified and delivered facilitates our longer-term environmental targets and is robust to future challenges that may see the emergence of integrated projects going beyond our borders.

As such, the purpose of the ITPR project is to review the current arrangements for system planning and delivery, within the context of the specific challenges of particular projects and drivers we have identified, to determine whether they are appropriate to achieving a long-term efficient integrated network. This assessment will be done within the context of the NETSO's role (both currently and in light of anticipated changes to its role going forward). In particular, the ITPR project will consider two related aspects of system planning and development.

The ITPR project will consider what may be needed in terms of system planning and, from there, will evaluate whether the current arrangements are appropriate, in order to deliver an integrated transmission network. We will consider whether the overall institutional framework under which the NETSO and transmission infrastructure investors operate is appropriate. We will also consider whether NETSO's obligations and incentives with respect to system planning are aligned with the overall framework and whether the current responsibilities and tools to deliver system planning (such as the SYS, ODIS and TYNDP) are appropriate. Furthermore, the project will evaluate whether the obligations and

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incentives on transmission and interconnector licensees to contribute to and coordinate system planning are appropriate.

In parallel to this activity, the ITPR project will also consider the interfaces between the onshore, offshore and interconnection investment regimes. In particular, we will explore how these regimes can interact to deliver the integrated cross border infrastructure that could be a feature of the future energy network. This work will need to take account of the developments with other Member States, along with the policy and legislative direction in Europe, while ensuring that our existing regulatory regimes continue to provide an effective and stable framework for the significant investment that is required in the future.

The proposed high level timetable for the ITPR project is set out below.

16 May 2012	Workshop
25 May 2012	Deadline for response to Open Letter
Late Summer 2012	Consultation on range of options
Early 2013	Publish recommendations (where necessary)

Engaging in the ITPR project

We intend to engage with stakeholders throughout this project, in order to inform our understanding of the issues and to develop possible ways to address these.

We would welcome feedback on our understanding of the issues as set out here and, in particular, we welcome views on the following questions:

1. Whether our objectives and scope of work for the ITPR project are appropriate?
2. Whether there are additional drivers for the project that should be considered?
3. Whether there is additional evidence we could consider in understanding the current and future challenges?
4. Whether the current interactions between the NETSO's role and the role of other TSOs in system planning are consistent and efficient?
5. Whether the arrangements for and relationship between the NETSO and other TSOs (for example, interconnector owners) appropriately incentivise system planning?

Please respond to ITPRMailbox@ofgem.gov.uk by 25 May 2012.

We are also hosting a workshop on 16 May 2012 (from around 1pm to 5pm – exact timings to be confirmed) to consider the issues associated with planning for an integrated electricity system. Please also email ITPRMailbox@ofgem.gov.uk to reserve your place at this event (preferably by 6 April 2012) or for further details.

We would also welcome discussions with interested parties on a bilateral basis, if this would be helpful. Please contact Charlotte Ramsay (charlotte.ramsay@ofgem.gov.uk) if you would find this helpful.

Kind regards,

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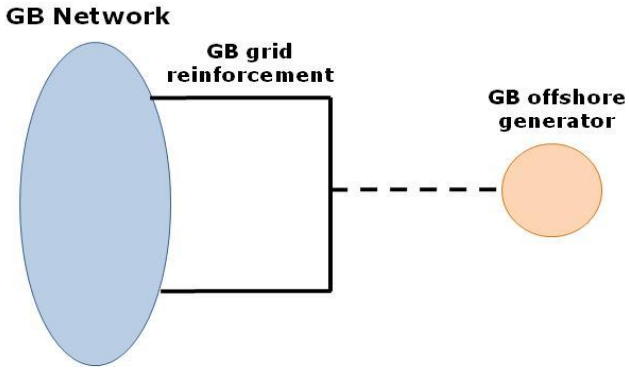
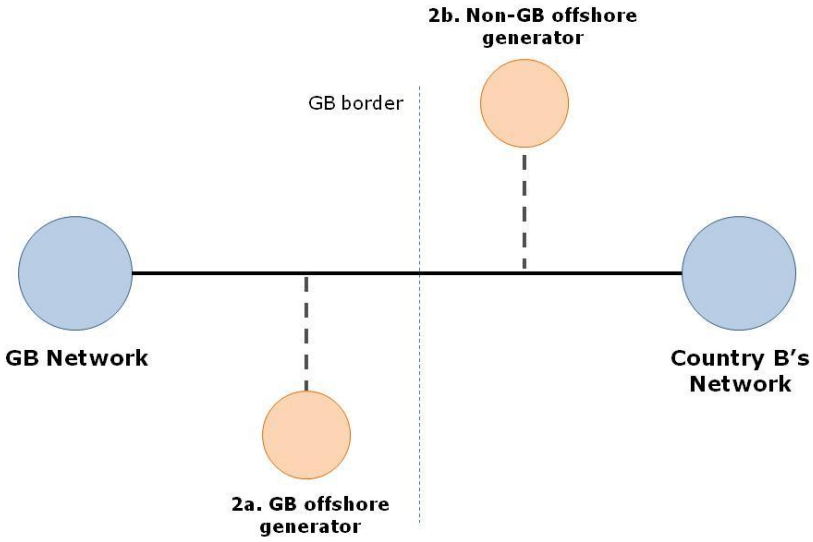
Annex 1: Possible multi-purpose projects

Possible Scenarios
Scenario 1: Offshore wind farm connected to a GB network reinforcement Regime interaction: Asset(s) provide reinforcement of the onshore network and connection of offshore generation to the national electricity transmission system. 
Scenario 2a: GB Offshore wind farm connected to an interconnector **Scenario 2b: Non-GB Offshore wind farm connected to an interconnector** Regime interaction: Asset(s) simultaneously interconnect two markets and provide a connection for offshore generation 
Scenario 3: Renewable generation in a non-GB country connects to GB Regime interaction: Asset(s) provide a connection to GB for generation in a non-GB jurisdiction.