

National Grid Electricity Transmission (NGET) Response to the June 2008 Joint Ofgem and BERR Regulatory Update on Offshore Electricity Transmission

25 July 2008

Introduction

- 1 We welcome the opportunity to respond to the joint Ofgem and BERR Regulatory Policy Update on Offshore Electricity Transmission of June 2008. We recognise that a significant amount of work has gone into developing the policy proposals described within the document and are keen to see that these are implemented as soon as is practicable subject to any essential adjustments triggered by specific responses to policy questions.
- 2 We are pleased to see that the document provides a clear outline of the steps required to implement the new arrangements in preparation for 'Go-Active' in April 2009. We believe that implementation in these timescales is essential to provide certainty in the development of Round 1 and Round 2 offshore generation projects.
- 3 We look forward to working with Ofgem and BERR over the coming months in order to finalise transmission code changes for offshore electricity transmission and ensure that the arrangements are implemented consistently across all the areas affected by Ofgem and BERR's policy proposals.
- 4 Given that policy proposals (and the technical recommendations of the relevant technical working groups) are based upon Round 1 and Round 2 experience of radial networks with a single connection to the onshore network, the arrangements will need to be reviewed against the type of development envisaged under Round 3. We believe that this work is essential for Round 3. However, it should not be allowed to interrupt or delay implementation of the current suite of proposals.
- 5 We have already submitted high level comments in response to the request for material comments by 4th July 2008. These topics are discussed again in the following submission. We have commented extensively on policy proposals in previous consultation responses and have not repeated these comments in this document. Our response to the current consultation should therefore be considered alongside our responses to previous offshore electricity transmission policy updates.

Key Issues

Scope of Proposals for Designation in April 2009

- 6 The proposals outlined within the Regulatory Policy Update have been developed after of a considerable amount of time, effort and thought on the part of Ofgem, BERR and interested industry parties.

- 7 National Grid has made a significant contribution alongside Ofgem and BERR both in leading working group activity and developing the necessary changes to transmission frameworks. These changes have been developed to a stage that allows interested parties to visualise how the proposals for Offshore Electricity Transmission are likely to work in practice.
- 8 In line with the work programme outlined within the document, we expect to make a further contribution in terms of:
 - a. Review of current proposed drafting in response to industry comments;
 - b. Consistency checking between all affected codes, standards and agreements;
 - c. Minor changes required as policy proposals are finalised;
 - d. Development of processes and procedures including STC Procedures (STCPs); and
 - e. NGET's contribution to the Tender Process.
- 9 This work is achievable within the published timetable providing that no major revisions are made to the assumptions behind current policy proposals.
- 10 The recommendations of the various technical working groups which have examined Offshore Electricity Transmission issues over the last 2 to 3 years have all been based on the assumption that transmission connections to offshore generation would be delivered through radial networks with a single connection point to the onshore transmission system. Specifically, discussions were limited to developments with a transmission route of length of 100km or less between the onshore connection point and the offshore platform and with a generation capacity of 1,500MW or less.
- 11 This assumption is valid for Round 1 and Round 2 developments, and hence for the current set of policy proposals. It will not be valid for many Round 3 developments which are expected to be larger and further offshore, and hence may drive different network solutions.
- 12 A change to this assumption could drive different recommendations in the following areas:
 - a. Generation connection criteria;
 - b. Voltage control criteria for shared offshore networks;
 - c. Fault ride through criteria for share offshore networks;
 - d. Offshore quality of supply issues;
 - e. Frequency control on HVDC connected offshore networks;
 - f. Access and Compensation for offshore users;
 - g. Charging arrangements for offshore users; and
 - h. Operational implications of offshore networks connected in parallel with the onshore networks.
- 13 We do not believe therefore that it can be assumed that the current proposals can be applied to Round 3 developments in the absence of a significant amount of assessment and evaluation.
- 14 Currently it is anticipated that the first Round 3 projects will start to generate in 2018 (ie nine years after current proposals go-active). We do not believe that it is possible to review GBSQSS Offshore Generation Criteria to cater for generation

projects of the size and location expected of Round 3 projects effectively within the published timetable and that trying to do so may impact on the delivery of the know requirements for Rounds 1 and 2.

- 15 We recommend therefore that the assessment and review of the proposed Offshore Electricity Transmission arrangements in the context of the anticipated Round 3 generation developments, which we are keen to be involved in, is taken forward in a co-ordinated programme outside the scope of the current project.

Embedded Transmission

- 16 We note that the arrangements for connecting offshore transmission networks via onshore distribution networks have been developed significantly for this policy update document. We anticipate working with Ofgem and BERR to ensure that distribution and transmission frameworks interface effectively.
- 17 There are four specific areas which we believe need to be reviewed and developed prior to the next consultation:
 - a. The means by which onshore distribution works can be integrated into the proposed transmission connection process;
 - b. The implications of the interface between NGET (acting as the 'Offshore Transmission System Operator' or 'OTSO') and the DNO under the Distribution Code where the Distribution Code treats the 'OTSO' as a network operator;
 - c. The implications of the interface between NGET (acting as 'OTSO') and the DNO under the DCUSA where the DCUSA treats the 'OTSO' as an embedded generator; and
 - d. The management of variation between DNO charging methodologies which means it may not be possible to treat offshore transmission users consistently.
- 18 We look forward to discussing these issues in further detail and would be pleased to take the first three of these issues forward through a reconvening of the Offshore Transmission Embedded Transmission Working Group (OTETWG). Issues around the management of variation between DNO charging methodologies may be mitigated by developments in distribution charging.

Compensation

- 19 We note the proposal that an offshore generator should be entitled to compensation if an OFTO fails to meet its annual performance target. This arrangement is not included in the current proposed code or licence drafting therefore we look forward to discussing the changes to transmission frameworks required to implement this proposal.
- 20 We also note the proposal that NGET should carry out further analysis on the funding of the rebate of onshore and offshore elements of transmission charges in the event that an offshore generator is entitled to compensation for a loss of transmission access. We believe that onshore precedents can be applied in this area and would expect the means by which offshore compensation is ultimately funded to be discussed as apart of the offshore transmission licence special conditions development.

Completion Notice

- 21 The concept of a 'Completion Notice' as provided by NGET for transitional offshore developments is raised within the published licence drafting as well as in the text of the Energy Bill. It is not discussed within the body of the regulatory policy update and further discussion is required on the criteria under which a 'Completion Notice' would be granted to ensure robust and consistent application over the range of transitional developments.

Transmission Losses

- 22 We are disappointed that Ofgem have come to the view that OFTOs should not be subject to an operational losses incentive. There are three elements that will determine operational losses:
- a. The design impedance of the offshore network
 - b. The operational impedance of the offshore network (as dictated by the plant available and in service); and
 - c. The power flows through the offshore network.
- 23 As the first two of these are a function of the offshore network design and availability and so are wholly or partially under the OFTO's control, then it would seem appropriate to place some incentive on OFTOs to minimise losses on and ongoing basis, throughout the life of the offshore network.
- 24 In the absence of an ongoing incentive, lifetime transmission losses need to be taken into account in the tender, design and construction stages of offshore network development to ensure that lower cost equipment is not selected inappropriately at the expense of ongoing losses.

Grid Code

- 25 We note that the current onshore thresholds for frequency control obligations (CC6.3.7) are proposed to be extended offshore. We continue to believe that this is not appropriate in the offshore environment and ask that this is kept under review to ensure safe, secure, economic and efficient operation of the transmission system as the overall number, size, composition and connection technology (AC or DC) of offshore developments becomes clearer.

Relationship Between NGET and OFTO Subsidiaries

- 26 We note the proposal for the introduction of a prohibition on NGET forming OFTO subsidiary companies and seek assurances that all parties entitled to information on another party's development (as part of their duties to respond to a construction application for example) are treated consistently with this principle.

Tender Process

- 27 We note that the draft tender regulations for offshore electricity transmission have been published for consultation. We believe it is important for all stakeholders to have the opportunity to run through the proposed tender process, ideally alongside the proposed connection process and including the option of connection via distribution networks. This would enable stakeholders to gain a practical insight into the proposed processes and potentially to identify

any issues that have not been foreseen whilst drafting the relevant codes and regulations.

Workplan

- 28 We have been and continue to be in dialogue with Ofgem and BERR representatives over the work that NGET needs to complete in order to implement Ofgem and BERR's proposals for offshore electricity transmission. This has worked well over the course of the project and we expect to continue in this fashion up until project completion.
- 29 The following sections summarise the work we expect to complete over the next few months. If there are other activities that National Grid is expected to undertake then we would be grateful if we could be informed of these as soon as possible to ensure there is no unexpected delay to the programme.

Consistency Checking and Response to Comments

- 30 We anticipate our involvement in the review of all the proposed offshore transmission related changes to transmission standards, frameworks, and agreements in terms of consistency with other documents, finalisation of policy proposals and response to comments.

GBSQSS

- 31 We are keen to complete the work on the offshore chapters of the GBSQSS and are progressing the analysis in respect of the security requirements at the offshore grid entry point.
- 32 As mentioned above, we agree that the GBSQSS Offshore Generation Connection criteria need further development to establish requirements for the connection of offshore generation of greater than 1,500MW or more than 100km from the onshore connection points. However, we do not believe that this should be included in the proposed changes to be designated for go-active in 2009.

STC

- 33 We expect further policy development to impact on the proposed changes to the STC such as the approach to the OFTO Construction Securities and the management of compensation cash flows. The code procedures (STCPs) will also need to be reviewed in line with offshore electricity transmission policy proposals. Some of these are key to the effective implementation of the proposals and could usefully be reviewed prior to the next consultation.
- 34 Further work may be required to replicate in the STC some of the current developments in the Grid Code arena for testing and compliance.

Transmission Charging

- 35 We have been asked by Ofgem to conduct further work around the split between location and residual charging for offshore transmission. We anticipate releasing a further Transmission Network use of System Charging Methodology

consultation in late August 2008 covering this issue as well as putting forward proposals for handling distribution charges.

Licence Working Group

- 36 We note the licence drafting within the consultation and plan to raise our comments in Standard Licence Working Group discussions. We expect to participate in any subsequent discussions on licence special conditions.

NGET Incremental Enduring Resource

- 37 We plan to discuss the impact of NGET's new offshore transmission related obligations on ongoing system operator resource levels with Ofgem for inclusion in subsequent licence special conditions discussion and consultation. Additional resources are likely to be required in network connection design, interfacing with the tender process, dynamic compliance, code management, contract and customer management, operational planning and real-time control.

Transition

- 38 We are in discussion with a number of generation developers who are likely to fall under the definition of a transitional scheme for the purposes of offshore electricity transmission. These discussions are ongoing and we expect to tackle issues arising from these in parallel with Ofgem's discussions subsequent to developers' submission, as requested by the end of July 2008.