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Our Reference NG/CT/LAD

Dear John,

## **Licensing offshore electricity transmission**

National Grid is potentially a willing investor in offshore networks with expertise that we hope will bring value to the establishment of offshore connections. This response provides our views on the issues raised in the consultation from the perspective of a potential network investor offshore. National Grid's views as onshore licensee and as designate GBSO for offshore networks are the subject of a separate response.

Answers to the specific questions raised in the consultation document are given in the attached appendix. In summary, we agree that a competitive approach to allocating transmission owner responsibilities is in principle preferable to any allocation on non-financial criteria. However, to achieve an effective competitive system there are practical issues that will take time to resolve and costs that will fall to various industry parties. To decide the most appropriate approach these time and cost aspects need to be compared to the benefits that can be expected. At present, and as reflected in the consultation, there is little information on which to make such assessments and this must be an area for urgent further work.

As well as economic efficiency, co-ordination of the development of offshore networks is identified in the consultation as a key objective and criteria by which alternative approaches have been selected/rejected. While the precise nature of the desired co-ordination would benefit from further definition, we note that several aspects are likely to arise naturally if a single licensee acts exclusively in a particular area. To achieve the same actions and outcomes in a competitive non-exclusive approach is by no means impossible but will require greater upfront work on suitable equipment and technology standards.

Competition for both exclusive and non-exclusive approaches requires good quality information in bids so that the best can be accurately assessed together with incentives such that successful bidders seek to deliver in-line with their bids. We agree that the non-exclusive approach offers most scope for competition in terms of the number of competitions and by offering the opportunity to recognise

specific factors that may not be easily expressed as generic cost parameters. It also offers the potential for achieving enhanced incentives for delivery by enabling the participation of generators (a potentially important aspect of the “generator tender” approach). Incentives may also be strengthened if the validity of bids can be extended by including generic ‘unit cost’ parameters to address actual conditions. If such parameters can be derived and independently measured then a competition for exclusive licenses may also be achievable. The feasibility of establishing suitable generic ‘unit cost’ parameters must be established so that their potential use in exclusive and non-exclusive licenses (together with benchmarking and other regulatory information gathering) can be decided.

Generally, the regulatory contract for an offshore network licensee must be established in such a way that it follows best practice for contracts between contractors and clients on one-off developments (i.e. well defined deliverables on suitable stages with mutually agreed rewards/penalties and clear change management procedures).

If you have any queries relating to this response, please contact me or Lewis Dale on 01926 655837.

Yours sincerely,

Chris Train

Cc: P Whittaker  
L Dale

## Appendix – Answers and comments on specific consultation questions

### CHAPTER: Two

**Question 1:** *Which option do you favour and what are your reasons for doing so? Do you have any views on any aspect of our intended approach under each option?*

We agree that a competitive system for appointing transmission owners would, in principle, be preferable to the award of exclusive franchises (presumably, on the basis of largely non-financial criteria) for one or more areas. As well as potential benefits to transmission users from selecting the transmission owner offering the best value for money, a proper competition could also provide assurance to prospective transmission owners that selection will be transparent, unbiased and merit based.

To establish meaningful competition in practice, however, will be a significant challenge and not without cost. A key question is whether the competition can distinguish between a realistic bid (that makes accurate assessments of costs and risks) and unrealistically low bids which might secure appointment but which are likely to run into difficulty once the contract is awarded (risking late delivery, poor quality and the potential for unwinding any apparent efficiencies obtained in the competition).

As well as ensuring that (1) the competition yields sufficient information to enable the competition assessor to select the best bid, the regime must also provide (2) ongoing incentives for efficient delivery. Absent these two aspects, the competitive approach will default to a potentially arbitrary appointment and either a failure to deliver (as the successful bidder finds that it is not worthwhile proceeding) or a failure to achieve the expected benefits of the bid (as the best that will then be achieved is cost plus regulation of that incumbent network owner). Whether the costs of a competitive system will be justified by the benefits it brings will therefore depend on the effectiveness of the competition and associated incentives.

Absent an already established asset base, the incentive on a transmission owner (who is independent of generation) to deliver offshore assets is simply that the project has a positive net present value. While late delivery penalties in the regulatory contract may provide some incentive to complete a project, these are likely to be stronger once costs have been substantially sunk rather than at the outset where the option to walk away (e.g. through liquidation) remains. For this reason, we believe the additional incentives that may be brought by generator involvement (see following question) will be important in establishing a workable competitive regime.

In general we agree that competition should be somewhat easier to achieve for individual work packages (as envisioned in the non-exclusive approach) because specific conditions may be assessed rather than a wider range of potential costs. The non-exclusive option also permits a series of competitions rather than a more limited number. However, if it is possible to establish unit costs relevant to the range of conditions that may be experienced in a particular area (desirable for making robust project specific contracts as well as contracts for wider geographical areas), then it may also be possible to allocate franchises for wider areas on a competitive basis (by assessing the bids for more extensive work packages).

**Question 2:** *Do you think that the approaches which have been ruled out should be considered further and are there any other options or approaches that should be considered?*

In chapter 3, the consultation document addresses the fact that generation developers have already developed offshore connections at transmission voltage and others may choose to do so prior to the introduction of the new regulatory regime. The need to address this issue shows that many aspects of the “generator tender” approach already exist in practice. It is therefore somewhat surprising that this option is so quickly dismissed.

Given the issues associated with establishing a workable competitive regime (see answer to previous question), we think some of the incentive properties that might emerge in the non-exclusive “generator tender” approach are useful and important. Generators have a strong incentive to see delivery achieved so that they can obtain competitive advantages from the energy and renewables markets. Offshore generation developers are also likely to have relevant information concerning both local conditions and the nature of the most appropriate trade-offs between investment costs and service levels. They are in a position to provide ongoing competitive pressures on any appointed TO by virtue of their ability to select a replacement or, in many cases, to continue the build themselves.

The consultation document argues that the “generator tender” approach should be ruled out on the grounds that it might undermine initiatives (as yet unspecified) that seek the appropriate co-ordination of offshore networks. The extent that such co-ordination issues are important is discussed further below but we suggest that the first priority should be to ensure the regime delivers offshore connections and co-ordination of such delivery would then be a follow on (otherwise, there is a risk that there will be no connections to co-ordinate). It also argues that the “generator tender” option should be ruled out on the grounds that transmission charges may be insufficiently cost-reflective – but this would appear at odds with the existing relevant objectives for developing cost-reflective transmission charging methodologies.

Discussion on this subject at the consultation seminar suggested that the advantages of generation developer participation in the transmission owner selection competitions might be realised in the retained non-exclusive option. If this is the case, then it would be important to better distinguish between the features that characterise the retained approach and the “generator tender” approach.

**Question 3:** *Should anything further have been taken into account in assessing the options?*

- 1) Given the importance of having sufficient information to enable the preparation of high quality bids and accurately select between them, a preliminary assessment (in terms of the timing and quality of information delivered) of the potential alternative processes for selecting the transmission owners should be undertaken (both exclusive and non-exclusive appointments).
- 2) It would be useful to identify the nature of the incentives that could be created for transmission owners. If, as seems inevitable to some degree, there will need to be a trade-off between holding transmission owners to the terms of their original bid and recognising the need for revised terms as new information emerges, then the extent that incentives will in practice be able to support a competitive appointment process may differ. This assessment should also identify the benefits of generator involvement.
- 3) The previous two areas (information and incentives) will be key in determining the likely costs and benefits (to transmission customers in general and offshore users in particular) resulting from the offshore regulatory regime.

## **CHAPTER: Three**

**Question 1:** *Could providing anything further, beyond the comfort already provided by Ofgem, be justified for projects that will be constructed or have secured financial close prior to the award of offshore TO licences?*

**Question 2:** *Would a departure from Ofgem's current approach to the adoption of assets be justified or would different treatment be unduly discriminatory?*

If, as would appear to be the policy intent, companies should make commercial decisions concerning whether and when to bring forward particular renewable projects then it is important that any uncertainty introduced by regulation is minimised. We agree that the statements already made by Ofgem concerning the adoption of assets are helpful. Although not explicitly stated, we understand that any new price controls introduced on such assets would also be subject to the normal rights of appeal. It is for consideration whether additional comfort could be provided in the form of a statement concerning when a licence exemption could be expected and the implications of such an exemption.

While we agree with Ofgem's and DTI's desire to establish an enduring offshore regulatory regime that promotes the required co-ordination of offshore network developments, it may be beneficial to identify the circumstances under which exemption may be appropriate. (It is assumed that exemption would mean that the connection to the GB transmission network would be at an onshore location such that the exempted offshore assets owned by the developer would not be subject to a price controlled revenue stream from the GBSO.) For example, such an exemption might be considered if the connections are not currently shared and might remain in force until such time that a future customer wishes to share such assets or it would be beneficial to incorporate such assets in a more extensive offshore network.

**Question 3:** *What are your views on the potential costs to TOs of bidding to build, own and operate offshore assets? Do you have views on how such costs might be*

*minimised?*

In order for a transmission owner to produce a good quality bid (i.e. one that the transmission owner will be prepared to be held to) a significant amount of information will need to be collected and assessed. We agree that it would be efficient if certain basic information concerning the nature of the connection could be undertaken once and provided to all interested parties. This may include seabed conditions, preliminary environmental assessments of alternative beach landing options, and preliminary environmental assessments of options for any onshore assets. It would be very useful if the specification for such studies and the arrangements for their funding could be identified quickly.

**Question 4:** *Do you believe there is a risk of a lack of co-ordination that is specific to the non-exclusive approach? If so, how serious a problem do you believe this is? To what extent could the suggested measures or any other measures mitigate such a risk?*

The key risks arising from a lack of co-ordination are:

- 1) failure to obtain all required planning consents for proposed offshore developments because uncoordinated network development fails to minimise environmental impacts;
- 2) unduly expensive network connections because uncoordinated network development fails to harness available economies of scale.

These risks may be important both immediately, where individual offshore developments interact, and over time, as future developments interact with established projects.

The exclusive approach may place an obligation on a transmission owner to undertake their developments in such a manner that minimises these risks. However, the assessment of the extent that any actions are efficient and should receive funding would be an ongoing, detailed and demanding regulatory task (for example, in terms of information asymmetry).

A non-exclusive approach, depending on the information available concerning potential future developments and the design of the competition, may address these risks for the developments known at the time of the competition but there remains a risk that the approach chosen by the successful bidder may not address these risks for other future developments.

The most serious problems (in terms of consents risk and cost) are likely to be those that will arise if developments exploit a limited opportunity to make environmentally acceptable connections such that future expansion becomes untenable. On this basis, co-ordination of developments near the beach will be particularly important.

Given the cost of cable systems, we suspect that there will be few circumstances where speculative investment in cable capacity to facilitate uncertain future requirements will be viable. Rather, (and in accordance with the findings of the offshore security standards group) these risks may be best addressed by ensuring that there are sufficiently flexible solutions to permit reconfiguration and extension of offshore networks on a modular basis. In this respect, whereas an exclusive transmission owner may be expected to adopt a suitable technology strategy as part of its 'economic and efficient' duty, there is the potential that non-exclusive developments might be optimised for particular cases and so diverge from a more flexible general purpose technology approach. We therefore suggest that a set of standards are agreed across the industry so that a suitable compromise can be reached between exploiting technologies appropriate to particular circumstances and those that facilitate interoperability. (Specifically, agreement on technology standards concerning voltage levels, switchgear ratings, substation layouts, etc.)

**Question 5:** *Is it appropriate to allow generators to bid to provide their own transmission services, in particular in the light of any potential moves towards unbundling at an EU level?*

As discussed above (and subject to transmission charges being sufficiently cost-reflective), there are information and incentive benefits from the participation of generators in the development and management of offshore connections. A risk from such participation is that the generator may act in a manner which erects barriers to their competitors in the energy/renewables markets. (We understand that this is the primary reason why unbundling is being considered in the EU). However, in the case of offshore networks, the scope for restricting the access of competitors is likely to be much smaller (each individual network represents only a

very small proportion of a controlling generator's potential competitors). Moreover, the transparency and regulatory controls codified in licenses (or exemption conditions, if appropriate) should minimise any remaining scope for anti-competitive behaviour.

**Question 6:** *How can confidence be built that the tender process can be run transparently and fairly and to what extent can the proposals outlined in this chapter ensure this?*

We are keen that appropriate arrangements are established so that we, as the company undertaking the duties of the GBSO, are not prohibited or unduly disadvantaged in any competition for opportunities associated with establishing offshore networks. While it is for other parties to comment on what arrangements they would find satisfactory with respect to avoiding potential undue advantages from any interactions between our SO and TO functions, we think such views would be much better informed once the actual responsibilities and roles of the GBSO are clarified. In advance of such clarification we agree that licence conditions requiring transparency and independence are likely to be a proportionate measure (whereas, at this stage, wider separation is likely to be disproportionate). In anticipation of the requirements of such conditions, we have already established an information ring-fence between our functions undertaking development of the GBSO role and those assessing offshore network investment opportunities.

We welcome the suggestion of the creation of an independent selection panel. As well as reinforcing GBSO independence, it offers the opportunity for bringing relevant expertise in order to make the best possible judgement on the overall quality of the bid (rather than just a simple comparison of the prices). We suggest that the development of the details of the functioning of this panel, together with the associated roles and responsibilities of the various parties involved, will provide a suitable basis against which the regulatory options for controlling interactions between our SO/TO functions can be assessed and decided.

**Question 7:** *Is it appropriate to have certain defined re-openers in a fixed-price bidding system?*

Like most contracts (including the contracts between transmission owners and equipment suppliers), the regulatory contract for development of offshore networks must address the situation that will arise when conditions are other than those specified when tenders were invited. The conditions for which tender prices will be valid (and the transmission owner held to) might be kept as broad as possible by requesting a range of parameters which may address eventualities that may be foreseen (for example, different unit costs for cable laying in different seabed ground types). However, beyond these measurable 'known unknowns' there will be other factors which cannot be covered by the tender reply and these will need to be the subject of a re-opener.

Seeking firm contract prices for almost all eventualities will mean that (potentially unfeasibly) high risk premiums will need to be quoted. If the range of conditions for which the prices will be deemed firm is not clear then disputes concerning the need for a re-opener will arise and delays result (see discussion about incentives to deliver above). Any competition must, therefore, be clear concerning the conditions for which prices will be held firm and those for which re-opening may be allowed.

As well as considering fixed review periods, it may be appropriate (in-line with practice on other contracts) to set reviews at key project milestones.

**Question 8:** *How should the geographic extent of exclusive regional licence areas be defined? What is the appropriate balance between obliging exclusive offshore TOs to assume unknown levels of risk and the need for a wider geographic area to ensure a TO is available to connect generators? Is it appropriate to make available three offshore TO licences that cover the three strategic areas and to leave the remainder of the offshore area unlicensed until the need for new licensees arises?*

The geographic extent of responsibilities could be defined using a map with areas corresponding to the strategic offshore areas or subsets of these in which the co-ordination resulting from actions by a specific transmission owner is desirable. We agree that there is little point in specifying responsibilities outside the strategic areas at this stage. The extent of any particular area of responsibility might also be determined according to the willingness of companies to be bound by particular unit cost allowances for a specified incentive period. Such arrangements may be used to determine the appropriate balance between the risk and obligation on a TO.

**Question 9:** *On what basis should the competition for offshore exclusive TO licences be run?*

If it is feasible to agree basic parameters such as unit cost allowances for independently distinguishable conditions within an area, then the willingness to be bound by such unit costs for a set exposure period might form the basis of a competition. In this case it would be possible to hold a competition similar to that envisioned for allocation of individual projects to non-exclusive licence holders but evaluating the cost of a larger bundle of works currently applying in the responsibility areas. Once such a competition is one, the TO might then be held to the component unit costs for further future developments.

**Question 10:** *What is the value and feasibility of benchmarking exclusively licensed offshore TOs and in what way could this be facilitated if desirable?*

Benchmarking TOs may provide a mechanism for determining unit cost allowances (see previous two answers) for new price controls/incentive periods. The feasibility of independently distinguishing and measuring such parameters would need to be established.

**Question 11:** *How can suitable incentives be placed on exclusive offshore TOs to ensure that assets are constructed and operated economically and efficiently? Is there an alternative to simply passing through costs which raise the charges paid by consumers and generators? Would it be suitable to use international benchmarks as a means of assessing economy and efficiency?*

As noted above, many of the issues identified in the consultation concerning the price regulation of transmission owners with either exclusive or non-exclusive licenses are similar to those that would arise between any contractor and client for a one-off development. We suggest the regulatory contract with transmission owners should therefore follow established best practice for such contracts (in particular, defined deliverables for suitable project stages, with mutually agreed rewards and penalties, and defined change control mechanisms.) As discussed under the first question, incentives to deliver connections would be significantly strengthened if the affected generators were participants in the network development consortium.

**Question 12:** *What arrangements would be appropriate for dealing with future build outside of exclusively licensed areas?*

Given the major developments are likely to be within the strategic areas then it is unlikely that this issue is going to be relevant to deciding which approach should be generally adopted. That said, in terms of addressing this circumstance, a number of options exists. If it is possible to identify generic unit cost allowances for the area it might be possible to establish an exclusive license with a new geographic responsibility or a reasonably robust non-exclusive work package. If such parameters cannot be identified or measured, a non-exclusive development specific packagemight be more appropriate. If Ofgem/DTI see merit in retaining a developer lead approach then a licence exemption for such areas may also be viable.

**Question 13:** *How can generators can be provided with timely, firm offers within reasonable timescales under the exclusive option?*

See answer to question 11.

NG/LAD 8 January 2007.