Mr Colin Green
Head of Offshore Electricity Transmission
Office of Gas and Electricity Markets
9, Millbank
London
SW1P 3GE

Your Ref: (189/07) and (URN 07/1096)

5th September 2007

Dear Colin,

Offshore Electricity Transmission – A Joint Ofgem/ BERR Policy Statement, Reference (189/07) and (URN 07/1096)

Please find attached Warwick Energy Limited's (WEL) written comments in response to the above policy statement on Offshore Transmission Networks.

As you are no doubt aware we are in the process of developing the consented 300MW Thanet project off the north Kent coast and the similarly sized Dudgeon scheme in the Wash.

The Thanet project is to be connected at 132kV into the EDF Energy Networks (SPN) Distribution System and has appointed preferred contractors for the full scope of supply including turbines, foundations and electrical installation for Onshore and Offshore Substations and associated export and interarray cable systems. The detailed design of the project is underway with the intention of commencing construction in 2008 for completion in 2009.

WEL's response recognises that the issue of Offshore Electricity Transmission is complex and the Ofgem/ BERR document reflects this in its nature. At this stage WEL wishes to ensure that the proposals do not adversely affect either the development of the imminent Thanet project, the later Dudgeon scheme or the ongoing Offshore generation industry in its wider sense. With this in mind the attached document comprises two main sections:

- Some specific items in relation to issues immediately relevant to the Thanet project;
- A number of general points and issues arising out of the overall proposal documents.

The attached response is intended to pick up all our major concerns in general terms although it does not directly conform to the specific questions/structure posed in the document.

In summary WEL continues to have reservations regarding the potential for adverse effects on our projects arising from the Offshore Transmission proposals.

The proposed "go-active" and "go-live" dates and the tender requirements for appointing an OFTO mean that there is a risk that an OFTO License will not be issued by the "go-live" date.

The proposed minimum 75% of actual costs ascribed to the Regulatory Asset Value (RAV) by Ofgem leaves the project with a significant risk of exceptional losses at the transfer date. We see no justifiable reason why RAV cannot be set at 100% of cost since each project is required to be efficient and economic to meet financial close requirements. Alternatively the RAV could be agreed in advance of financial close with Ofgem (with suitable caveats for justifiable changes in outturn) so the risk can be properly quantified.

Aside from the initial capital value ascribed to the electrical infrastructure there is also a potential for significantly increased on-going charges for operations and maintenance arising from the tender process. Another critical concern surrounds compliance issues and adoptability criteria for equipment – given the fact that the required technical criteria are unlikely to be clear at the time of financial close on the Thanet project these issues are particularly problematic. I noted that the National Grid presentation at the recent seminar seemed to reopen the debate again about the outer boundary location for Transmission assets.

The issue of consents will also need to be addressed since the existing consents will need to be modified/ split to allow the proposed transfer to an OFTO – not an easy activity with something as inflexible as a Section 36 consent.

WEL also notes that design of systems to the minimum security standards prescribed in the proposed GB SQSS (single transmission circuit to shore for <1000MW TEC) is unlikely to be a commercially viable reality for most projects. The Thanet project will use 2 off 132kV circuits as the most economic and efficient means of connection to the existing onshore 132kV DNO network. Under such circumstances TOW believes the cost of the connection should be fully recoverable in the RAV, i.e. at least the minimum practical scheme should be recoverable under RAV. The policy proposal implies that this will not be the case.

WEL also wishes to express some more general concerns regarding the overall enduring proposals. At first sight the proposals appear to be complex – particularly in terms of the proposed connection application and tendering processes. WEL has real concerns regarding both of these areas, which appear costly, time consuming and difficult to manage. Delays for future developments such as Dudgeon seem an inevitable consequence. Indeed the proposals may well prove a potential barrier to prevent new projects coming forward by adding cost and preventing effective competition.

It seems certain, under the current proposals that we will have to go through the time consuming and costly exercise of tendering to buy/operate the transmission assets that we have just designed and built for Thanet to ensure that it has an OFTO. It would be simpler to allow for existing asset owners to apply for exemption from these untried arrangements if they so wish. No explanation has been given as to why such a common sense option has been discarded.

I trust the comments are clear however please do not hesitate to get in touch if you require any clarification on any of the points made.

Yours sincerely,

Mark Petterson
Director
Warwick Energy Limited

Warwick Energy Limited

Comments on Ofgem/ BERR Policy Statement on Offshore Transmission Networks (July 2007)

Scope

This document summarises Warwick Energy Limited's (WEL's) initial comments to the Ofgem Policy Statement for Offshore Electricity Transmission Reference (189/07) and (URN 07/1096) dated 27th July 2007. The response is divided into two main sections. The first deals with areas of particular concern affecting the Thanet project directly. This is followed by a section covering some general issues and points of clarification raised by the document. The response from the BWEA will deal with responses specific to the questions formally raised in these documents.

Key Issues of Immediate Concern to the Thanet Project

Scope of Offshore Transmission Systems

In response to previous DTI/ Ofgem GBSQSS consultation (Ref: 211/06 (Ofgem) & 06/2186 (DTI)) we noted that the scope of the Offshore Transmission System (OTS) was not fully or clearly defined. Particular issues of concern raised by TOW included the extent of network for adoption at the Offshore Substation, and whether voltage control and power factor correction equipment will be included in the OTS. WEL notes that there appears to be no reference in the latest policy document (Ref: 189/07) to a process which will examine these issues. We would be interested to learn of any developments in this area since the scope of the OTS is of critical importance to adoption issues.

Chapter 3 – Design of Regulatory Regime

Section 3.6

This requires OFTOs to hold seabed leases or licenses in addition to those held by the generator. For transitional projects these Licenses will have been obtained by the developers and will form an integral part of the Consents for the overall project. It may not be straightforward to split licenses to comply with the requirements of the final arrangements. For the enduring arrangements the split in application for consents between generator and OFTO will make the process more complex and less easily managed.

Another consideration is that in order for developers to reach financial close consents would normally be required. The splitting of the generator and transmission circuit consents is likely to increase risks and timescales and therefore tend to delay or prevent new projects coming forward.

Section 3.9

In the event that the OFTO License is revoked a new tender process is proposed. This presumably leaves a project without an OFTO for the intervening period – possibly a year or more using Ofgem's figures. This is unsatisfactory and unless a practical solution is found would prevent revocation of a license being a practical possibility.

Section 3.12-3.15

WEL notes that the proposed period for the OFTO License is 20 years, presumably to give the OFTO security of tenure and the developer longer term price security. WEL has previously expressed concerns that the long period without regulatory review in a new industry is likely to inflate costs. While noting DBERR comments in the Impact Assessment regarding possible savings from a PFI approach WEL does not believe that the quoted 10-20% savings will materialise. WEL therefore believes that the length of period without a price review will add unnecessarily to overall costs.

A further consideration is that the Crown Estates leases are for longer periods than 20 years and the expected asset life of the main components of the OTS are likely to be 40 years or more. The proposed duration of the Licenses, and consequential write down of capital costs, will therefore tend to push up initial costs. The fact that there are limited offshore sites means that those developed under Round 1 or Round 2 will most likely be re-equipped with new turbines in the future. As such re-use of OFTO systems is likely to be the most economic way forward. The proposed approach does little to encourage such long term thinking from the OFTO.

We therefore suggest that as a balance a 40 year tenure is offered to each OFTO but that the price charged to the developer is reviewed every 5 years.

Section 3.16-3.21

The concerns expressed by Ofgem regarding treatment of cost risk and unexpected events are magnified by the proposed duration without regulatory review. As noted above WEL does not support the lack of regulatory review and believes that 5 yearly cost reviews could address many of the issues raised. What happens at the end of the (20 year) license period is also affected by the lack of regulatory review.

Section 3.22-3.24

There are obvious difficulties in defining performance parameters for OTS of the type proposed in the documentation. These include weather risk and lack of available data on historic failure rates due to the novel nature of the business. In relation to such issues it is not clear how failure to comply will be rationally translated into lack of availability payments as suggested elsewhere (see Section 8.3). Therefore the transfer of risk from the developer (a perceived key benefit of the change) to the OFTO may not occur. If this is really the case then there is presumably no incentive for the OFTO to perform to requirements other than the ultimate sanction of Ofgem revoking their License.

Section 3.29-3.33

WEL does not believe that building networks to the minimum standard required by the GBSQSS will necessarily result in the most economic or efficient schemes. Actual designs will be driven by practical issues of construction and network integration (see later) as well as the potential cost of constraints on lost generator output. Regarding the latter point a simple example relates to circuit capacity for a wind farm connected via 2 off 132kV circuits. It may be more economic overall to install each circuit with a rating greater than 50% of site TEC. This will reduce lost output in the event of an outage on a single circuit – particularly for prolonged outages in winter. The proposed regulatory regime appears to make no formal recognition of such synergy savings which can only be realised by interactive design between the OFTO and generator systems.

The lack of a driver for integrated design appears to be an important defect in the regulatory regime.

Section 3.39

This refers to a "substantial fee" being payable by the developer during the bidding phase. Such sums are likely to be a significant barrier to new entrants and smaller developer's entering the market. This will reduce the number and competitiveness of new generation schemes which is contrary to Ofgem and Government's stated aims.

Under the existing arrangements developers have direct control of exposure to costs and risks and are therefore better placed to manage projects. Indeed it is currently possible for a realistic assessment of electrical connection costs to be made for a sum affordable by small companies. The proposed OFTO arrangement does not appear to maintain this status quo and therefore will tend to prevent new projects coming forward.

This section also delays the tender process until a development is sufficiently certain. When will this be? Consent application? Consents stage itself? This could be up to two years later than current normal practice and these delays will be added to the delays inherent in the tendering process iteself. Uncertainty about grid connection timing in the interim will itself cause any development team and the supply chain supporting them considerable extra difficulties not currently faced. A project delay of 3 years could be the unintended result of these new arrangements compared to existing, developer driven, connection initiatives.

Section 3.42

This refers to upfront payments made by the generator to the GBSO to cover the possibility of future insolvency of the generator. There are several issues which need to be considered properly in this:

- The payment will act as a barrier to small entrants to the market;
- The treatment of transitional projects should be different since the design and potentially construction will already be complete;
- The reality is that if the generator becomes insolvent the wind turbines themselves will remain in-situ (unless subject to failure which is uneconomic to rectify) and probably be bought up by a new owner. Every effort should be made to ensure that this is the case to ensure that renewable targets are met; and
- In view of the above the chance of stranding on the OFTO network itself is presumably relatively low in comparison to conventional plant onshore. The regulatory regime should reflect this.

Section 3.47

WEL welcomes the proposal that generator's will be remunerated for unsatisfactory performance of the OFTO. The means of setting such targets and the mechanism by which performance can be monitored against these is however not clear.

Section 3.49-3.50

As noted elsewhere WEL believes the typical life for the main assets in the OFTO network will be 40 years or more. The regulatory regime should take proper account of this and provide suitable incentives for the OFTO to achieve such lifetimes where efficient and economic. This area needs more consideration and the proposals appear unclear.

Chapter 5 – Transitional Arrangements

By way of background WEL notes that the economics of Offshore Generation are such that it is already necessary to ensure efficient investment on all aspects of a project, including the electrical connection. Indeed it is for the very reason of marginal economics that the Government has recognised that security standards Offshore can be lower than those used Onshore (DTI Document Reference: URN 07/756, April 2007). In order to reach financial close transitional projects must satisfy backers that investment is efficient and economic. WEL believes that due recognition of these realities should be fairly reflected in any arrangements for transitional projects.

Section 5.2

WEL agrees that all projects having either been constructed or having reached financial close should be eligible for transitional treatment. WEL notes however that signature of contracts may be delayed by factors outside the control of the developer; e.g. availability of turbines due to changes in market conditions or generic turbine faults. Under these circumstances a transfer to the enduring arrangements and the need to re-tender the rest of the project may well delay projects significantly. WEL therefore would propose that such projects should still be eligible for transitional treatment if a significant economic or timing benefit in completing the project can be demonstrated.

Section 5.8

The one year period between the "go active" and "go-live" dates is noted. However the Ofgem expected time to appoint an OFTO may be 1 year assuming a suitable number of responses is received to the initial request for tenders. Hence in the event that no bids are received there is a risk that the project will not have an OFTO in place by the "go-live" data. WEL believes that this issue should be addressed by the proposals.

Section 5.9

The inclusion of the phrase "unconditional financial close" seems unreasonable since unconditional contracts are frequently not possible. WEL would seek assurance that a pragmatic interpretation of this philosophy will be adopted.

Section 5.13

As noted in responses to previous Ofgem documents (Ref 58/07) wel does not believe that the 75% estimate for RAV is appropriate. This figure adds risk to a project since there is no certainty that the costs will be recoverable. Hence financiers will factor in extra costs to mitigate this risk.

As noted earlier there are already strong pressures on developers to prepare economic, efficient and fit for purpose designs. The proposal that the value of the OTS for transitional projects could be ascribed a minimum value by Ofgem of as low as 75% of the capital cost presents a significant risk to investors. As such it would need to be factored into any financial/ risk modelling and will add unnecessary costs to projects. WEL therefore believes that this 75% proposed minimum level of return is unrealistically low and is in fact likely to add to project costs rather than reduce them. This is contrary to the stated Ofgem aims. WEL also notes that Ofgem has not provided a reasonable argument in support of the chosen figure.

It is WEL's view that 100% of actual costs would be a more appropriate asset value. Such an approach would be justified by the existing pressure on developers to produce economic

and efficient projects. Furthermore existing projects reaching financial close will have necessarily been through a tender/ contract process to obtain the most efficient and economic electrical system. The use of actual costs would remove the added risks and consequential additional costs associated with the Ofgem proposals.

A further alternative is that the RAV could be agreed with Ofgem in advance based on design intent and documentation already required to reach financial close. The expected cost of such an exercise is likely to be low and would help de-risk projects thereby reducing overall costs.

Section 5.14

WEL agrees that possible non-compliance with GB SQSS or Grid Code requirements is an important issue to be addressed by any transitional arrangements. The problem arises largely because these standards are not yet defined. It should therefore be recognised that it is not currently possible to ensure compliance by normal design processes. However early projects should not be penalised since these projects are critical in reaching Government targets for renewable generation by 2010 and beyond.

Pending definition of requirements the area of compliance is an unknown risk which will add to financial and technical project risks. This will therefore add costs to a scheme at financial close. Such effects will exist regardless of whether compliance can be achieved without modification of the proposed design.

The proposed process represents a risk to existing developers and raises a number of potential obstacles:

- Potential additional cost to achieve compliance over and above those construction costs that could reasonably be foreseen at financial close;
- In general Ofgem may be reluctant to grant derogations – particularly derogations in perpetuity - for sites not achieving full compliance. Furthermore the decision of whether additional costs are “prohibitive” and therefore justify a derogation presumably rests with Ofgem. It is therefore difficult for developers to place a sensible cap on potential extra costs arising from possible non-compliance issues. This is likely to further add to development costs;
- Only Licensed parties are able to apply for derogations to Ofgem. As such any transitional project which is non-compliant will not be able to obtain a derogation prior to adoption by a Licensed Owner. This will potentially affect the number of Licensed Owners tendering to adopt the project, and thereby reduce competition and inflate prices. The tender price may in addition be further inflated to account for the potential requirement to modify the system to address any non-compliant aspects. In both these instances the unknown risk of compliance will potentially increase costs for early projects and therefore discriminate against them in comparison to later projects.

WEL believes that one possible solution to the above would be for the technical proposals for transitional projects to be examined at an early stage and if necessary agreed formally prior to introduction of the OTS regime. Any costs associated with such a process are likely to be low, and in any case represent bring forward costs only since the suitability of the scheme will ultimately need to be assessed by Ofgem anyway.

Section 5.15

WEL notes that Ofgem proposes that assets which exceed the minimum technical rules should be paid for in full by the generator. However there are circumstances where the connection design may exceed the minimum design for reasons beyond the control of the developer. WEL understands that the proposed GB SQSS will allow single circuit transmission systems for at least 1000MW and potentially 1320MW of offshore generation; however in many cases a double circuit offshore connection will be needed to meet generator, DNO or TNO requirements. Another possibility is where the generator rating exceeds that of available plant or equipment at the most economic transmission voltage; e.g. 132kV cable ratings are limited to around 180MVA or less hence 132kV connected sites with a TEC significantly in excess of this figure are likely to require at least 2 circuits. WEL believes that in such instances there is no justification for the developer being expected to fund the 2 circuit design – since it is in effect a minimum scheme.

Section 5.17

WEL notes that the tender process will cover only the on-going maintenance and operation. Given that the industry is relatively new and the proposed regime is for 20 years the level of risk in such a tender will presumably be high. As such there may either be no bids or high priced bids to mitigate against the perceived high level of risk. In view of this WEL would question the suitability of the proposed arrangements.

Section 5.23

It is unclear how a second round of tenders initiated on the "go-live" date will help projects which may reach full financial close to (but after) the "go active" date. Such projects may already be constructed before the tenders initiated at the "go-live" date could be completed. Hence there is a risk that projects could be delayed simply because an OFTO License is not available.

Section 5.24

This proposal appears to introduce an unnecessary delay on projects where financial close is expected after the "go-active" date. It would also lead to potential duplication of design work. A further effect is that it will discourage contractors from bidding existing projects since there is a real risk that they will need to re-bid the project if financial close is not reached.

Section 5.26

For a transitional project the developer will have already reached full financial close which may also include construction of the OTS. It is not clear why the developer should then pay for a tender process as part of the OFTO arrangements. The receipt of an OFTO Licence is presumably a profit making venture for the successful bidder and costs should be recoverable from that party not the developer.

Section 5.29 and 5.36

For projects already constructed there appears no reason why the RAV cannot be determined in advance of the tender process.

Section 5.38

The issue of technical specifications and requirements of the OFTO does not appear to be addressed. There is both a short term warranty issue and a longer term operations and maintenance implication. The proposals appear inadequate in these areas.

Section 5.40

WEL notes that an OFTO of last resort may be used if the tender process fails – i.e. the developer receives the License. It is not clear why the simple expedient of allowing the project exemption from the OFTO process is not permitted. This would avoid the need for a complex and time consuming tender process for a project which has already been tendered and built.

WEL continues to believe that a commonsense approach of allowing early developers to opt for an exemption from this process is needed. The paper includes no discussion or explanation as to why this was route has been discounted.

In relation to the enduring arrangements there is no OFTO of last resort. In such a case a project may fail simply because a suitable bidder does not come forward. This would occur only after a costly and time consuming tender exercise is carried out. It is not at all clear why the developer cannot act as the OFTO of last resort in this case either – and this defect may prevent projects from progressing.

Chapter 7 – Connection via Distribution Networks

The Thanet project is to be connected to a Distribution Network Operator (DNO) system. Under the existing arrangements the project can apply directly to the host DNO for a connection (e.g. Section 16 Connection Offer), as well as separately to National Grid for a Bilateral Embedded Generator Agreement to allow use of the Onshore Transmission System. The processes outlined in Chapter 7 are therefore particularly relevant to Thanet.

Section 7.8

WEL agrees that the existing connection type to a DNO network most comparable to an OTS is a large embedded power station.

Section 7.11

The mechanism for recovery of DGUoS charges is not clear.

Section 7.14

The connection process does not appear to take adequate account of the relative merits of a DNO or TNO system connection. The process is to be co-ordinated by the GBSO. There is no License obligation to provide an economic and efficient overall system (i.e. one including DNO and TNO systems) on the GBSO. There is therefore no driver for the GBSO to explore DNO connections for OFTOs in a proper manner. WEL believes this to be a major defect in the proposals especially for smaller projects where DNO networks may offer the most economic and efficient means of connection.

WEL believes that a 3 month period for the DNO to consider applications to be appropriate based on experience with both Barrow and Thanet projects. While recognising that this may introduce a problem for the GBSO in making offers within the 3 month period a shorter period may prevent the most economic means of connection being identified.

It is WEL's experience that discussions can be held with DNOs within the 3 month period to help determine whether a connection can be made at reasonable cost and the form of the connection. Clearly this is an informal process and a more formal framework may be required. The issue of how connections to DNO systems are managed needs further consideration to resolve these issues.

Chapter 9 – Technical Rules

Of particular relevance to the Thanet project are the appropriate standards that should apply to OTS networks which connect into Onshore Distribution Network Operator (DNO) systems rather than transmission systems. At present there appears to be no such security standard in existence – the work of the GB SQSS group specifically excluded such networks from their deliberations. This is despite the fact that the only project already constructed where the electrical system could be subject to transfer to an OTS (Barrow) connects to a DNO system.

WEL's view is that connection standards for OTS networks connecting to DNO networks should be no more onerous than those connecting to Onshore Transmission systems. Indeed depending on cost/ benefit analysis and the capability of the Onshore DNO network there may be justification for less onerous security or connection standards.

The scope of the Grid Code work is of critical importance. WEL does not believe that an OTS GB SQSS can be developed independent of the Grid Code. The existing proposals appear to be based on the assumption that the GB SQSS is independent of the Grid Code. This is implicit in the lack of definition of Offshore connection conditions in the proposals. WEL believes that an iterative approach by using the proposed GB SQSS to help develop a Grid Code and then using the Grid Code to refine the GB SQSS proposals may be useful in addressing these issues.

General Issues

Chapter 4 – Enduring Competitive Framework

Section 4.1

WEL has concerns that the proposed application process and related tender process are overly complex, time consuming and will act as a barrier to development of the offshore generation industry. While the process has been simplified in comparison to previous proposals WEL's basic concern remains. WEL believes that Ofgem should take further steps to address the underlying complexity of the whole process. This should include a re-review of the basic structure and aims of the proposed competitive framework.

One important feature of current Offshore projects is the need for a seamless approach to consent, design and construction issues. The proposals appear to cut across objective and there is a risk of projects becoming artificially fragmented to fit in with regulatory policy. This would have a potentially significant adverse effect on the overall offshore generation industry.

Section 4.2

In response to previous proposals WEL noted that an annual tender window is likely to prevent bids being received for some projects. This is because potential bidders will not have sufficient resources to bid all projects resulting in possible cherry picking. As such WEL is opposed to the proposed principle of an annual bidding window.

The tender process appears complex and costly; however not withstanding this, the proposed standardisation of project documentation (i.e. a "one size fits all" approach) is unlikely to foster innovation or development of the most economic solutions for transmission systems.

Warwick Energy has carried out tender preparation and assessment processes for both Barrow (constructed) and Thanet (currently at preferred contractor stage). In the light of this experience WEL believes that comparison of tenders will be difficult unless the invitations to tender contain a reasonably detailed level of project specific information. This is likely to add to the difficulty in preparing tenders. However without this information it will be difficult to compare tenders on a like for like basis. This in turn could bring the whole process into disrepute and reduce the number and quality of bids for OFTO Licenses.

As noted elsewhere there is no certainty that a particular project will receive any viable bids for an OFTO. The complete reliance upon market drivers to deliver solutions has been shown in places such as California to be unreliable. WEL therefore believes that there should be an OFTO option of last resort in all cases.

Section 4.8, 4.33, 4.34 and 4.38

The associated Impact Assessment prepared by BERR implies (Sections 4.61 and 4.62) that Ofgem will be best placed to run the tender process. WEL notes that this type of work is a significant extension to Ofgem's existing role. The achievement of this extension in practical terms is likely to be a significant challenge. Indeed it may in itself inadvertently create a barrier to developments particularly for early projects.

Furthermore the neutrality of Ofgem under circumstances of possible dispute between an OFTO and the local TNO, GBSO or generator could be questioned. This is due to Ofgem's proposed intimate role in assessing and appointing the OFTO in the first place. In WEL's view the issue of segregation within Ofgem is a significant omission form the proposals and needs to be addressed.

Section 4.12 and 4.21

The costs associated with the tender process need to be carefully considered. The requirement for "appropriate financial commitment" or "user commitment" to the tender process is likely to create a significant barrier to new projects being brought forward. The issue of application fees and costs need further consideration with the goal of encouraging generation schemes to come forward.

Section 4.24

WEL's experience of "variant bids" with the aim of encouraging innovation is that bidders will either ignore the option or devise a solution that is not practical or achievable. This is presumably because bidders perceive the standard solution (as far as this exists) to be more likely to be successful. The primary aim of bidders is therefore to meet the basic ITT requirements to ensure a realistic chance of winning the tender. Hence WEL does not believe the proposals will foster innovation or the most economic and efficient network designs.

Section 4.25

If the evaluation criteria are pre-determined and presented in the ITT, potential OFTOs will optimise bids to meet these. This will tend to prevent innovation or design optimisation being undertaken by the potential OFTOs. Such pre-defined selection criteria will place the onus on tender preparation to ensure the most economic and efficient solutions are included in the invitation to tender. As noted elsewhere this will increase the complexity of tender documentation.

Section 4.31 and 4.32

WEL agrees that site location, routes onshore, consents and construction programmes are critical to successful project development. In addition a suitable grid connection location as well as connection substation site together with appropriate consents must be available. It is not clear how these key elements can be dovetailed with the proposed application process and tender proposals. WEL believes that further work is needed to resolve these matters.

Chapter 6 – Connection Application Process

Section 6.7

The outline process for a Stage 1 (Indicative) offer appears reasonable – although it should be optional as to whether the generator wishes an "Expression of Interest" document to be issued. An "Expression of Interest" would in effect remove any possible confidentiality from the wider industry of the connection application and associated connection means. Hence this needs to be treated carefully to respect confidentiality requirements.

The process for proceeding to Stage 2 requires further consideration since interactions with issues such as consents and surveys are not clear. In this respect it may be preferable to keep this part of the process as flexible as possible to allow choice by the generator regarding how such issues are addressed. The issue of recovery of costs for works carried out by the generator relating to the OTS in advance should be further considered.

WEL notes treatment of projects in proximity to each other does not appear to be considered in the application process. However WEL believes that suitable measures are needed to guard against contract race situations. It is also not clear how the proposals apply in a situation where an extension to an existing OFTO system triggers a new application and tender process. Such a situation will also have technical implications; i.e. OFTO/ OFTO connection conditions as well as the more obvious OFTO/ DNO, OFTO/ TNO and OFTO/generator conditions.

There is also a risk that developers with significant parent company backing could apply for connection and then accept resulting firm offers even though actual project development is not due to take place for a significant period of time. Indeed WEL believes there are already precedents for this on the existing (Onshore) transmission system.

The above issue of "reservation" of capacity could result in inefficient development of the GB Onshore and Offshore Transmission Systems. In particular projects may not be able to connect unless unrealistically early offers for later projects are relinquished. Clearly at least some certainty of connection availability is required – but this should not be to the detriment of developing the network in an efficient and economic manner to meet real requirements.

WEL believes one possible solution might involve placing time limits on connection offers – although other measures may also need to be considered. It is not apparent that simultaneous applications, contract race or capacity reservation issues have been considered in the proposals. WEL believes these to be important omissions which should be addressed.

Section 6.8

There is a potential conflict of interest in the GBSO deciding whether a DNO connection should be considered or not. Furthermore the GBSO has no License condition to ensure that

a single integrated system which is economic and efficient is developed. These matters appear to be significant flaws in the proposals.

Section 6.9

There appears no reason why a firm and final offer should be treated differently for Offshore and Onshore transmission. As such any final sums liabilities should be subject to similar rules – e.g. Generic User Commitment Methodology.

Chapter 8 – Charging, Access and Compensation

Section 8.3

WEL agrees that the existing TEC product should be adapted to Offshore requirements and further access products may be developed in the usual way.

The treatment of reactive power is not clear since real power (MW) is defined by TEC. There are also no currently defined connection conditions at the boundary between the OFTO and the generator. As noted in WEL's responses to previous consultations the issue of reactive power relates directly to OTS capability including equipment and circuit ratings. In addition the design, location and size of any discrete reactive power compensation equipment is interactive with the generator plant capability. As such overall system design may be optimised by considering the overall system rather than treating the OFTO and generator networks as discrete entities.

A further issue is that without a set of offshore connection conditions the stated aim of allowing multiple users to connect at a single offshore system cannot easily be realised. The charging principles and access principles will also need to apply where an extension to an existing OFTO system is carried out by another OFTO. It is not clear to WEL how this will be achieved by the present proposals.

WEL can find no obvious means of addressing the reactive power, connection condition and overall network optimisation issues in the policy document. This reinforces concerns that the proposals will hinder development of the industry.

Section 8.4

WEL would support the principle of including penalty payments within the offshore regime to ensure there are financial incentives for the OFTO to perform. However the form and level of these performance targets along with the associated penalties needs further consideration. WEL notes that setting such targets for a 20 year period in a new industry is likely to be difficult. This strengthens the case for periodic regulatory price review of the regime over more frequent intervals, e.g. every 5 years.

Section 8.9

WEL agrees that NGET is in a good position to develop appropriate charging methodologies. It is also important to recognise that charging arrangements are subject to wider industry scrutiny and agreement in the usual manner.

Section 8.15

In many cases OFTO systems will be radial networks to single generator connections. It is not clear how the charging regime will distinguish between "value of assets needed for an

individual user to connect" and "the cost of providing the transmission infrastructure". For a radial system these items could presumably cover the same equipment.

Section 8.16

The work carried out to date by NGET as included in Appendix 4 is welcome. WEL supports the notion that charges should be cost reflective.

In respect of TNUoS the example in Appendix 4 Annex 1 is helpful. WEL notes that the example tariffs show variations in different TNUoS for an identical connection arrangement at different nodes in the Onshore transmission system. The locational signal should in principle be identical for Onshore and Offshore generators connecting at a node within a given Onshore TNUoS zone. There appears no justifiable reason for locational signals for the radial offshore networks themselves - other than variation in RAV cost of the installed network. Hence an Offshore generator may be treated as being at the Onshore Connection Point in terms of the Onshore TNUoS, with an additional element added for the OFTO network.

Following cost reflectivity principles the difference between the Onshore TNUoS charge and the Offshore TNUoS charge should presumably represent the cost of the OTS itself. For the example given the offshore systems are understood to be identical and therefore the difference between Onshore and Offshore TNUoS charges should be a constant. In the example given the difference in TNUoS between Onshore and Offshore connections varies between £27.99/kW and £29.17/kW. At first sight this does not appear to be consistent with cost reflectivity charging principles. WEL believes further explanation and/ or a re-examination of the methodology are required.

Summary

The WEL response to the consultation includes a number of detailed comments on particular sections of the proposals. These relate to both the specific questions raised by Ofgem in the consultation and more general issues.

Not withstanding the progress made to date WEL believes that there are a number of issues raised by the policy proposal which require major re-examination. A number of these are set out in the associated covering letter.

Despite some simplifications in the connection application and tender procedures the overall process remains complex. A further major problem is that the proposals appear to split existing synergies between generator and electrical connection consent, design and construction processes. This may lead to less efficient and economic systems being developed. Overall WEL believes the proposals will hinder viable projects coming forward and therefore potentially significantly delay and reduce the number of schemes developed. Clearly such an unintended consequence is not in line with the overall aims and objectives of the policy.

In view of the above WEL believes that a fundamental review of the proposals is required to address these issues.