

John O'Connell  
Commission for Energy Regulation  
The Exchange  
Belgard Square North  
Tallaght  
Dublin 24.

*Date : 9 March 2010*

**RE: RESPONSE ON PROPOSED DIRECTION ON CONTESTABILITY FOR  
DISTRIBUTION AND TRANSMISSION CONNECTIONS TO THE DISTRIBUTION  
SYSTEM**

Dear John,

DSO welcomes the opportunity to provide further clarity to our position on contestability, in particular in relation to the response received to CER's proposed direction. For ease of reference we will comment on each of the items in turn.

***Underwriting by the Final Customer***

As set out in our response to the proposed direction DSO agrees with CER's position that, as an initial principle it is best that any funding from the UoS customer would only occur on both termination of the contract of the defaulting party, and energisation of remaining parties. However DSO also considers that this matter could be reviewed, in the light of experience, to determine whether the process lends itself in practice to a more flexible approach that still affords protection to the interests of the user.

Furthermore, and in light of the comments received and discussions with the industry on this matter, DSO is happy to provide a written assurance to any sub-group – once a defaulting parties contract has been terminated – setting out the amount of the funding which will be provided from the End-User, once a project is energised. Such a written assurance may be useful if a sub-group has difficulty obtaining funding on the basis of the drop out.

***Ownership of the Shallow Connection***

One respondent queried whether – in the event that ownership of contestably built assets was transferred to the DAO or TAO respectively – the generator would be liable for TUoS/DUoS charges and O+M charges on these assets. Another respondent suggested that the party who built any asset contestably should be compensated 'at full market value' in the event of a transfer. In relation to any distribution connection to a generator – whether contestably built or non-contestably built – the following situation pertains:

1. The generator (or group of generators) is 100% liable for the cost of their connection<sup>1</sup>. On the distribution system the capital cost of the connection includes both shallow works and deep reinforcement works
2. Generators are not liable for DUoS on their MEC<sup>2</sup>
3. Generators are liable for Operation and Maintenance Costs on their connection. These charges are designed to cover the annual ongoing cost of operating and maintaining the assets required for the connection of the generator.

From 1. above, as a generators is 100% liable for the cost of their connection, any transfer of assets will occur at a nominal value only

A third respondent requested clarification that – where a generator owns an asset, that this ownership does not give him additional rights with regard to determining who is given access to that asset in the future.

While this issue is for CER to finally confirm, in the event that access to a contestably built asset, which remains in private ownership, was controlled in some way by that owner, this would greatly undermine the ability of both System Operators to develop the system in an efficient and effective manner and consequently would impact negatively on the End-User.

DSO further re-iterate our position that our preference is to take over ownership of all contestably built assets. At a minimum, ownership should be transferred in the case of shared assets, assets required for system development and assets required to connect other users.

### **Construction of Transmission Assets by Distribution connected parties**

DSO and TSO continue to engage on this issue, and the optimum legal mechanism for handling the contestable build. Both SO's are confident that the engagement will be complete such that this issue will not cause a delay in issuing offers to parties.

### **Non-contestable activities**

One respondent further queried the need for protection, communications and metering to be non-contestable. This issue, and the justification for this work being non-contestable, has been comprehensively covered in our previous response. However to re-iterate the key points:

#### ***Protection***

- The installation of protection on a connection is required to ensure protection of the plant installed, and also to ensure safe operation of the system it is installed to protect. In addition to the safety implications, protection that fails to operate correctly impacts on the security of supply of other customers.
- Protection is closely coordinated with the characteristics of the relays selected, matching those of others in use on the system, which means that introducing non-standard relays is not feasible..

---

<sup>1</sup> Consequently the value of this assets does not go on the Regulated Asset Base (RAB), and is not subject to a return form the End-User

<sup>2</sup> Generators are liable for the relevant DGA tariff on their MIC, which is payable through their supplier

- The introduction of new relays is a very major exercise and involves a lot of specialised work and training in the new relay and is likely to give rise to delays

There is additional merit in re-iterating what work can and should be done by each party where protection is being done non-contestably

- DSO specifies the relay manufacturer, type, model, firmware version and software version that must be used
- DSO provides elementary design drawing according to which the outside world must be connected up
- IPP acquires the relay from said manufacturer or chosen intermediary (not ESNB) and installs it as per the elementary
- DSO provides the relay configuration and setting file when requested by the ESNB appointed Project Manager

### **Communications**

- As with protection DSO considers that communications is vital to the safe and secure operation of the distribution system for all users, and therefore it is imperative that this aspect of the works remains as a non-contestable activity.
- Without robust and secure communications and protection schemes the integrity of the distribution and transmission networks would be compromised
- The communications network, up to and including the RTU must be fully managed and supported on a 24 x 7 x 365 basis. In addition maintenance contracts must be in place with all equipment suppliers and a stock holding of spares must be available. In the event that communications works were undertaken contestably, it is likely that the equipment used would not interface easily with existing communications infrastructure. The DSO has a wide range of experience in dealing with IPP's (in both green field sites, and as retrofits) and is committed to delivering the required infrastructure locally at the IPP site and remotely in associated stations and control centres.

However, on further review, DSO considers that equipment procurement can be undertaken by the IPP – on the same basis as for protection. The non-contestable model for communications, therefore will be as follows:

- DSO specifies the equipment manufacturer, type, and model that must be used. DSO will also specify cables (copper or optical fibre) to be used for interconnection of the communications equipment. Procurement and installation of equipment by IPP will apply to the IPP site only and not any remote location.
- DSO provides designs to IPP. These designs will specify wiring between the RTU and an interface, interconnections between communications equipment and connections to 48V DC power system.
- IPP acquires the equipment from said manufacturer or chosen intermediary (not ESNB) and installs it as per the design provided. DSO Telecoms clerk of works to check progress with equipment installation at key milestones. Any deficiencies to be remedied and approved by DSO Telecoms clerk of works before progressing to the next milestone.
- IPP to be responsible for pre commissioning and commissioning of 48V DC power system. DSO will verify the IPP installed equipment, before becoming responsible for

pre-commissioning and commissioning of all works. IPP to provide equipment specific technically competent person to assist with pre commissioning and commissioning.

- IPP to keep DSO informed on project progress.

Should an IPP so request, DSO will provide the IPP an opportunity to visit an existing site with similar communications equipment.

### ***Metering***

ESBN Ltd. bears the license obligation of providing meter data to the customer., the supplier, EirGrid and the SEM. We consider that the installation and commissioning of the metering is an essential part of maintaining clear accountability for data quality and the resolution of any subsequent issues. This concern is underlined by the increased complexity of metering for windfarms.

As with protection and metering, however, DSO considers it appropriate to take this opportunity to set out – at a high level – what work should be carried out by the IPP in relation to metering.

Please note, more concise metering related documentation will be handed over with the rest of the work package documentation and will be determined by the voltage.

The IPP will be responsible for the following works;

### **Specific to 38kV IPP Connection**

- IPP Feeder Cubicle – Plinth and HV Metering Equipment
- Revenue Metering CT/VT units
  1. Inclusion of space on the associated IPP feeder cubicle plinth in the ESBN substation.
  2. Supply and installation of appropriate mounting steelwork.
  3. Supply and Installation of the specific, dedicated Revenue Metering CT/VT Units as advised by ESBN.
  4. Making off the Primary connections for the Revenue Metering CT/VT units.
- Revenue Metering Marshalling Box
  1. Supply and Installation of steel work for mounting of the Revenue Metering Marshalling Box adjacent to the CT/VT units.
  2. Mounting of the Revenue Metering Marshalling Box provided by ESBN.
  3. Supply and installation of a suitably protected 230V single phase supply cable from the IPP 400/230VAC Distribution Board to the Revenue Metering Marshalling Box.
  4. Supply and installation of galvanised cable tray (outdoor use) for cables running from the Revenue CT/VT units Secondary Terminal Boxes to the Marshalling Box.
- Labelling of all associated Revenue Metering Equipment at the HV Cubicle location.
- Main Earthing / bonding of all associated HV cubicle Revenue Metering Equipment to the substation Earth Grid.
- Supply and installation of dedicated ducting for Revenue Metering Cables only, to go from the Marshalling Box location to the Meter Cabinets location.

All other equipment associated with Revenue Metering will be supplied and installed by ESB Networks as part of the standard costs.

### **Specific to MV IPP Connection.**

The Revenue CT/VT chamber used to meter MV customers / IPPs is purpose built for ESB Networks and as such will be supplied by ESNB as part of the standard costs.

The IPP will be responsible for the following works;

- Mounting of Revenue Metering CT/VT chamber in ESB side of MV sub-station
- Making off the Primary connections for the Revenue Metering CT/VT units.
- Main Earthing / bonding of all associated HV cubicle Revenue Metering Equipment to the substation Earth Grid.

### **Financial Arrangements**

Two respondents queried the financial arrangements and in particular the proposals around the Performance Bond.

For clarity, the purpose of the Performance Bond has changed somewhat from the initial proposal.

At this point the primary purpose of the Performance bond is as a mechanism to help the parties sharing an asset put an agreement in place, in the understanding that they will not be liable for additional costs. On this basis it is proposed :

1. As part of the agreement to opt for a contestable connection, all parties will be required to indicate whether their agreement is conditional on the lead developer putting a Performance Bond in place.
2. In the context of unanimous agreement, if one party indicates that agreement is conditional on a Bond, then a Bond must be put in place
3. In the event that a Bond is in place, and the group as a whole<sup>3</sup> opt to modify from a contestable to a non-contestable option, the cost of progressing this option will be based on standard costs, and will be covered by the Performance Bond
4. The standard costs which will apply will depend on DSO's assessment of the outstanding works. In the event that the full amount of the bond is not required to cover these costs, then the excess will be refunded.

In the event that all parties agree to contest the connection – even in the absence of a Performance Bond – and ultimately they opt for a non-contestable agreement (under the same conditions outlined above), DSO will quote for the connection (based on standard costs). Under these circumstances no works will progress until payments are made by the generators to DSO in acceptance of this agreement.

On the basis of all of the above the proposal for a bond is not now to cover off the exposure to the End-User, but rather to aid in reaching agreement with the parties agreeing to contest the connection.

---

<sup>3</sup> As a general principle, unanimous agreement will be required to modify from a contestable to a non-contestable build except in the case where Connection Agreement with the lead developer is terminated, or is otherwise unable to complete the build . In such an instance, the remaining sub-group members must unanimously agree to nominate a new lead developer (with new agreements to be put in place to reflect this change), or enter into a non-contestable Connection Agreement with the DSO

## **Standards**

One respondent raised the issue of standards and in particular relating to cable laying in rural areas.

This issue was covered in detail in our response on the consultation. The standards which apply for cables are also appropriate in a rural area and are proven in ensuring long-term reliability of the cables. In addition our proposal with regard to laying cables in roads has benefits with regard to safety, long-term reliability, and future access.

In relation to transformer sizes – which were also raised as an issue – DSO reiterates that as part of our process of preparation for Term Contracts, DSO undertakes a review of the plant equipment and sizes being used. This may result in an enquiry being sent out for new equipment sizes, following which a technical and financial evaluation is undertaken to ensure any change represents good value for money. Any such review will take into account submissions by generators, along with other factors.

Please note, however, that there is a significant cost incurred by the DSO in any change in standard sizes, and this cost is also considered when evaluating any proposal for change.

On an ongoing basis DSO keep abreast of current developments in the field with a view to minimising the cost of developing, operating and maintaining our system as a whole.

## **Resources**

One respondent raised the issue of resource planning, in particular in relation to commissioners. From DSO's perspective resource planning will be best managed in co-operation with all parties, and by having clear processes, roles and responsibilities.

As outlined in previous responses there are 2 key ways in which developers can aid in the optimum use of commissioning resources

1. The carrying out of pre-commissioning works in a thorough manner and as per the schedule provided
2. Updating their schedule of works to DSO such that any change in the timeline for commissioning works is advised soonest

## **Timeline for a decision on whether to contest**

One party commented specifically that the decision to contest a connection could not be made at the 3 month pre-offer time, but rather should be made on the basis of receiving both a non-contestable and contestable offer. In addition and from discussions with the industry, DSO understand that the proposed hybrid option is primarily intended to overcome problems with obtaining agreement from all parties to contest shared assets.

We will cover the hybrid option in particular below. In relation to the proposal that two offers be issued in the first instance, DSO comment as follows:

In order to facilitate the decision to contest pre-offer issue, DSO propose to provide - at a pre-offer stage - information to the customers as to what cost would be incurred depending on which assets they opt to contest. This communication would also advise which assets can be contested and which parties need to agree to the contesting of said assets. Where an option is taken to contest shared assets, parties will be required to advise as to which developer will undertake the

role of lead developer. TSO and DSO are currently engaging to assess what impact – if any – this additional work will have on the Gate 3 offer programme. However a final impact assessment cannot be complete until such time as a final direction is available. Under this option, a decision to contest could be accommodated without the need for a modification and the costs and delays resulting.

Should the outcome of a final decision be that two offers should be issued, then this additional work load would certainly impact of the Gate 3 offer schedule, and additional costs would be incurred by developers to cover the cost of the additional work required. Furthermore, it would not be possible to issue contestable offers for shared assets without the parties having nominated a lead developer.

### **Hybrid Solution**

A number of respondents commented on the need for a hybrid solution whereby DSO would undertake the design and planning permission works, with the wayleaving and construction being ultimately carried out by the developer(s) on a contestable basis.

One respondent also stated that the issue of impact on relationship with contractors raised by ESB Networks was a non—issue on the basis that

‘contractors accept an amount of unproductive tendering as part of the normal contracting process. It is our experience that there is no impact on working relationships, quality of delivery or any other factor, as a result of failure to proceed with every enquiry.’

Another respondent commented that NIE offer the hybrid option and consequently DSO should also be able to facilitate it.

Having considered these comments DSO remain strongly of the view that all parties (including the End-User) would be best served if a decision to contest a connection was made pre-offer issue, and that once an offer on a non-contestable basis was accepted, parties were not allowed to modify such an offer.

DSO accepts that other jurisdictions may offer a variety of options, however it is likely that this is on the basis of a small number of connections and/or over a small geographic area.

Between Gate 2 and Gate 3, there are likely to be of order of 300 connections to be built – some on a contestable basis and some on a non-contestable basis – over the entire country. Taking account of this, and the fact that contestability at a distribution level is also new, it is vital to ensure timely and efficient delivery of the required infrastructure, that the processes adopted are clear and simple and the roles and responsibilities of all parties are also clear.

In response in particular to the comment setting out that

‘contractors accept an amount of unproductive tendering as part of the normal contracting process’

ESB Networks would like to clarify that our experience to date has been that, by putting framework contracts in place with contractors and thereby which providing some guarantees as to the level of work to be expected, the prices tendered for said work is improved. As these prices impact on other business as well as generator connections, any increase in same has an impact on the cost to the End-User.

Having said all of the above, and in consideration of the proposals put forward by one respondent, DSO are prepared to propose an option whereby – provided all parties agree, and in the absence of a final agreement to contest – works can be commenced on a non-contestable basis, but on the understanding by all parties that a modification may be requested at a later stage to a contestable option. This proposal is set out in detail in the document also attached. DSO reserve the right to review the ongoing feasibility of this option in due course once there is some experience with contestability. On this basis DSO would propose that the position be reviewed one year after the first hybrid offer is accepted. DSO would point out that – should this option prove unworkable – this would not necessarily be a reflection on the success of distribution contestability itself.

I trust this is to your satisfaction. If you have any queries on the above please contact me at 7027078

Yours Sincerely,

Fiona O'Donnell  
DSO Regulation  
Asset Management  
ESB Networks Ltd.