Notes from the Offshore Transmission Embedded Transmission Working Group (OTETWG)

14th January 2008
Ofgem, 9 Milbank

Present

Bridget Morgan	Ofgem (Chair)
Samantha McEwen	Ofgem
Anthony Mungall	Ofgem
Cherie Davis	Ofgem
Richard Clay	Ofgem (part)
Paul Ward (PWd)	UU
Dragana Popovic	Energy Networks Association
Cornel Brozio	Scottish Power Energy Networks
Tony Berndes	Western Power Distribution
Paul Jones	E.ON
Matthew Hays-Stimson	EDF Energy Networks
Peter Waymont (PW)	EDF Energy Networks
Charlotte Ramsay	SEDG
Graeme Cooper	BWEA
John Lucas	Elexon
Robert Longdon	Airtricity
Laura Jeffs	Centrica
Brian Taylor	National Grid
Mark Duffield	National Grid
Neil Sutton	National Grid (Technical Secretary)

Apologies

Craig Neill	SSE
Will Clements	SSE

1. Background

BM provided an update of the progress of Ofgem/BERR's Offshore Transmission project since the publication of the July 2007 consultation document.

BM noted that:

- Ofgem has held meetings with DCUSA Panel and Distribution Code Review Panel representatives to discuss arrangements for progressing changes needed for offshore transmission to the DCUSA and Distribution Code.
- NGET has shared draft change proposals for the Grid Code with Offshore Grid Code sub group members for review.
- Energy Bill was introduced to Parliament in Jan 2008.
- BERR published a Government Response setting out decisions in respect of the July 2007 consultation and an updated Impact Assessment in Jan 2008.
- NGET has shared draft change proposals for the GBSQSS to Offshore GB SQSS sub group members.
- Ofgem will shortly publish an update document as part of the Offshore Transmission project.

BM also noted that BERR and Ofgem recognise the need for assistance from industry participants to assist with the development of policy proposals for Embedded Transmission and that this assistance will be sought via OTETWG.

BM noted interactions between the OTETWG review and the:

- Connection Application Process.
- Tender process.
- Industry codes.

The deadline for the OTETWG report is 5th February 2008. This deadline was identified to allow time for drafting to be prepared for any code change proposals needed for offshore transmission ahead of Ofgem/BERR's consultation on draft code change proposals.

2. Terms of reference

Further changes to the terms of reference for OTETWG were discussed. Two additional changes were identified by OTETWG (change to para 10 to include consideration of current arrangements in transmission charging methodologies and a change to Appendix 1 to reflect the revised nomination from SSE).

The terms of reference for OTETWG were agreed and will be posted on Ofgem's website.

ACTION: SMcE to arrange for the agreed terms of reference for OTETWG to be published on Ofgem's website

3. Current arrangements for connection to and use of a distribution system for large power stations

3.1 Contractual

DNO Contractual Obligations

PW explained that embedded generators are required to enter into contractual arrangements in respect of the use of distribution system that is required. PW noted that the arrangements can be:

- Via a supplier (for generation below 100MW that is SVA registered under the BSC).
- Directly with the distribution licensee (for generation that is CVA registered under the BSC).

PW noted that there would also be a specific connection agreement between the distribution licensee and generator in respect of each embedded generator connection.

PW also noted that DCUSA is being developed to define arrangements in respect of distribution networks that connect to and use another distribution network. A DCUSA change proposal (referred to as Schedule 2B) is currently being consulted on.

ACTION: MHS to circulate a copy of the standard connection agreement that forms part of the Schedule 2B DCUSA amendment proposal.

Transmission Contractual Agreements

MD noted that a generator is required to enter into an agreement with NGET in respect of any large embedded power station. MD explained the two types of CUSC contract that NGET may offer to large embedded power stations:

- Bilateral Embedded Generation Agreement (BEGA) which would include rights to use the transmission system.
- Bilateral Embedded Licence Exemptable Large Power Station Agreement (BELLA) which would not include rights to use the transmission system,

3.2 **Technical requirements**

BT explained that technical requirements for large power stations are specified in the Grid Code. MD noted that the Grid Code also defines technical obligations for medium power stations which if the generator is embedded and does not have a contractual agreement with NGET, are contractually enforced via the distribution licensee.

OTETWG distribution licensee representatives confirmed that design requirements of generator connections to distribution networks are generally driven by generator requirements. OTETWG observed that to date, getting a lower cost of connection had been a more significant driver for generators that security requirements.

OTETWG distribution licensee representatives noted that the Distribution Code DDRC[1] defines the distribution licensee data requirements in respect of generator connections. DP noted that the DDRC is currently being reviewed by the DCRP[2]. MD noted that large embedded power stations applying to NGET for a BEGA or BELLA are required to provide Standard Planning Data (as defined in the Grid Code Planning Code).

3.3 **Charges**

MHS explained the distribution connection charging arrangements noting that:

- Sole use assets are fully charged to the requesting party.
- Charges for the requesting party in respect of shared assets are calculated in accordance with defined apportionment rules.
- Any additional infrastructure (compared to distribution licensee view of minimum requirement) required by the requesting party are fully charged to that requesting party.

MHS advised that the connection charge is an upfront capital contribution from the requesting party and also noted that agreement is often reached between distribution licensee and customer for staged payment arrangements. PW advised that distribution use of system charges are levied on a monthly basis.

MD explained that transmission charges for large embedded power stations are calculated in accordance with NGET's charging methodology. PJ noted that licence exempt generators can choose to opt into transmission charging arrangements which can be attractive if the power station is embedded in a negative charging zone.

3.4 **Embedded benefits**

PJ explained that Embedded Benefits are costs that a generator can choose to avoid in respect of certain types of embedded power station. PJ also noted that if a generator has opted for Embedded Benefits, it will not benefit from compensation arrangements within the regulatory framework if access to the transmission system is not available.

OTETWG recognised that benefits form part of the access product purchased and acknowledged the need to maintain a balance between payment and benefits. PJ suggested that embedded transmission connected offshore generating stations could be treated as an embedded generator in respect of transmission charging and access product options.

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[1] Distribution Data Registration Code
[2] Distribution Code Review Panel

CD noted that Distribution Price Control Review 4 included an incentive mechanism in respect of distribution system access for EHV connected generators.

3.5 Operational interfaces

BT explained that NGET's data requirements during the operational phase are defined in the Grid Code. BT highlighted that for large embedded power stations this includes submission of half hourly Physical Notifications.

BT also noted that under BC1.6 of the Grid Code, distribution licensees have the right to restrict despatch of the output of real and reactive power from embedded power stations. BT noted that these restrictions are agreed bilaterally between the distribution licensee and the generator and are reflected in the data that the generator submits for Balancing Mechanism purposes. Some distribution licensees have standing instructions for restricting reactive output. BT observed that it is possible for a distribution licensee to identify a reactive capability restriction when the embedded generator is seeking connection to the distribution system.

PW advised that distribution licensee restrictions are generally identified in site specific agreements. MHS observed that actions taken in control room timescales are dependent on control system processes and that it may be necessary to apply distribution access restrictions in very shore timescales.

4. Other relevant parallels in current distribution arrangements

OTETWG considered that there was merit in also taking account of the arrangements:

- Proposed for the DCUSA to define arrangements for connections between two distribution networks.
- In the detailed STC processes that define arrangements for transmission licensees working jointly to enable NGET to produce an offer of connection and/or use of the transmission system.

5. Requirements of embedded transmission connections

5.1 Distribution licensee requirements

MHS explained that as part of a connection application the distribution licensee needs information about who is seeking the connection, who will use the distribution system, when the connection is required and the location that connection is required.

TB explained that distribution licensee connection offers are normally open for acceptance by a generator for 90 days. CD noted that the distribution licensees define arrangements for managing interactive connection offers in their Condition 4B statements.

Distribution licensees advised that the offer of connection does not normally include a connection agreement but would identify any special requirements and may include a construction agreement. Distribution licensees further noted that it may be necessary to have a separate operational agreement with a customer.

ACTION: Distribution licensees to provide further information about the content of a connection offer for a customer seeking an EHV connection.

ACTION: PWd to provide information about the content of operational agreements (and provide copies if available).

Distribution licensees noted that there is usually limited interface with a connecting party until the connection to the distribution system is ready for commissioning.

5.2 GBSO requirements

MD set out the view that there was a need to resolve any conflicting requirements between GBSO and distribution licensee connection application and offer processes. MD also set out other areas of the broader contractual framework that need to be examined.

BT presented a paper highlighting GBSO requirements for the interface between an offshore transmission system and a distribution system in operational timescales. BT set out NGET's proposals to introduce a requirement for the distribution licensee to routinely notify the GBSO of distribution system access availability for an offshore generator whose offshore transmission connection is connected to an onshore distribution system. There was general agreement that there would be a need to advise the GBSO of distribution system access restrictions.

Distribution licensees raised concerns about the proposal which is significantly different (in terms of the frequency of notifications) from the current requirements to notify embedded generators of restrictions.

JL explained that under current BSC requirements, metering would be required at each end of the offshore transmission system (unless the BSC Panel granted a specific dispensation). OTETWG discussed responsibilities for installation of metering in respect of an embedded transmission connection.

5.3 Offshore generator requirements

PJ noted the value to generators of having a single commercial point of contact in respect of a power station connection. RL noted that the network licensee may consider a number of connection options for each connection application made by a generator. RL stressed that generators need to have information about costs and terms of each connection option being considered before a decision can be taken on the option that should form the basis of the formal offer. In respect of information provision, generators would generally prefer to receive information on a staged basis rather than waiting for a full response.

OTETWG discussed possible interactions with the tender process for appointing an OFTO. RC advised that Ofgem will run the tender process.

OTETWG noted that there can be value from a pre-application stage but stressed that the connection application process does not start until a formal connection application has been made.

6. Options for extending current arrangements

OTETWG considered that arrangements for embedded transmission may require changes to the Distribution Code, DCUSA, Grid Code and BSC.

7. Way forward

OTETWG agreed that it would be appropriate to consider embedded transmission arrangements needed up to the issue of a connection offer at the next OTETWG meeting. Embedded transmission arrangements following the issue of a connection offer will be considered at the subsequent OTETWG meeting.

8. Any other business

MD noted that the Grid Code Sub-group's review did not consider embedded transmission. MD noted a likely need for OTETWG members to consider the draft Grid Code change proposals that have been produced to reflect the Grid Code sub group's recommendation and assess if further changes are needed for offshore transmission.

MD requested further information in respect of competition in distribution connections.

MHS queried if there was a need to develop P2/6 as the current standard does not define deterministic planning standards for generator connections to a distribution system.

MHS noted that the EU Procurement Directive would apply to the GBSO when seeking distribution services and that the process developed for embedded transmission would need to take account of procurement requirements.

9. Date of next meetings

- 1100 on 21 January 2008 at Ofgem's Millbank office
- 1100 on 28 January 2008 at Ofgem's Millbank office