OFFSHORE TRANSMISSION EXPERT GROUP
1 November 2006

Key issues for consideration

Background

At the OTEG meeting on 29 September 2006 it was agreed that a paper should be prepared for the November OTEG meeting to highlight the key issues relating to the development of the offshore transmission regime that should be considered in the short-term.

To facilitate this, a workshop was held on 19 October 2006 that was attended by a good cross-section of industry parties impacted by the offshore transmission regime development. A list of attendees is included in Appendix A.

This paper represents the output from the workshop and presents the areas, along with an initial view of the likely scope, where the workshop attendees recommend that further consideration is appropriate.

The workshop's consideration was informed by a paper that presented the roles, rights and obligations of the various parties involved in the offshore regime. This paper is included in Appendix B.

OTEG is invited to consider the areas presented and agree a way forward as to how they should be progressed.

Key areas for consideration

1) Access, charging and compensation

The GBSQSS sub-group of OTEG has recommended a different security standard to apply offshore as compared with the established security standard onshore. If implemented, this will mean that the design and characteristics of offshore networks could depart significantly from those onshore. With this in mind, the following issues should be considered:

- Are the access rights granted onshore appropriate offshore?
- Who bears the risk if an offshore generator's access is restricted (due to either offshore TO assets or onshore TO or DNO assets)? Should this risk be shared across the market, or carried by individuals?
- The availability of different networks (offshore TO, DNO, onshore TO) will impact on a generator's access to market. How is access both to, and across, these different networks co-ordinated (and what implications will this have for compensation)?

- Who contracts for the provision of TO and DNO capacity (GBSO, offshore generator)?
- What standards apply to the DNO when delivering capacity associated with offshore connections?
- What level of transmission charges is appropriate to reflect the characteristics of the offshore network?
- Does the offshore generator pay a single charge (to the GBSO), or a charge to the GBSO and a charge to DNO?
- Will the creation of any new arrangements be discriminatory to existing transmission or distribution connectees?

The workshop recommends that further work should be done now to consider these issues in more detail.

2) Connection processes

The existing onshore connection application process obliges the GBSO to provide a connection offer to the applicant within three months of the application being made. During this period, the GBSO will seek connection offers from affected TOs and will provide a single offer back to the applicant. The offshore regime gives rise to the following issues:

- How is an offshore TO identified, and how long will this take? This will depend upon whether an exclusive or non-exclusive approach is taken to offshore TOs.
- Can any advanced works or feasibility studies be undertaken prior to the application timescales starting?
- How is any application fee determined?
- How are the different connection options considered (i.e. connection to onshore TO or DNO), and by whom?
- Should the GBSO have a wider role in considering the overall connection design (e.g. a requirement to consider overall network optimisation)?
- Does the connection offer include conferring rights on the applicant to use DNO systems as well as transmission networks (or is a separate application required to connect to and use the DNO)?
- Will the current prescribed timescales be sufficient?

The workshop recommends that further work should be done now to consider these issues in more detail.

3) Integration of DNOs

It is known that some offshore windfarms will connect into DNOs (indeed some are already connected via 132kV assets offshore). This gives rise to a number of new interfaces and hence issues that do not currently arise in the onshore regime. Work has been undertaken previously examining these issues and this resulted in a paper that was presented to the OTEG meeting

on 29 September. The issues raised in that paper are still valid, and are summarised below (where they are not covered elsewhere in this paper):

- How are DNOs integrated into existing processes that handle the interface between the GBSO and TOs? Currently GBSO – DNO interfaces are managed via the Grid Code/CUSC. Is it appropriate to extend this model, should the model defined by the SO-TO Code be used, or is a new code required to manage the interfaces?
- What models can be developed to manage these new interfaces, and what are the pros and cons of each of these models?
- How does a DNO determine the investment required to support an offshore connection?
- How is the interface between the offshore TO and the DNO managed, physically and commercially?
- How are generation power flows controlled?

The workshop recommends that further work should be done now to consider these issues in more detail.

4) Role of Offshore TOs

The exact service that an offshore TO will provide needs to be specified. This will be impacted by whether an exclusive or non-exclusive approach to offshore TOs is taken. A number of issues will need to be considered:

- What performance obligations apply to offshore TOs?
- What obligations exist for any future development in the same geographical area?
- Can revenues be changed if conditions change?
- What obligations exist on offshore TOs to provide connection offers?
- How are existing assets adopted by offshore TOs?
- What happens if TO assets are stranded?

The workshop agreed that these are valid issues that require consideration, but that they will be heavily influenced by the eventual decision on whether an exclusive or non-exclusive approach to TO licence allocation is taken. Therefore, the recommendation here is that detailed consideration should be undertaken as soon as the outcome of the forthcoming Ofgem/DTI consultation is known.

Recommendation

This paper represents the output of a workshop's consideration of the key offshore issues that can be progressed in the short term. The workshop recommends that:

- Work should be progressed now on the following issues:

    - Access, charging and compensation;
    - Connection processes; and
    - Integration of DNOs.
- Work should be progressed at a later date on the definition of the role of an offshore TO.

OTEG is invited to:

- Consider whether the list of issues raised is appropriate;
- Consider whether it wants to add to any of the descriptions of the issues; and
- Agree the best way forward for considering the issues.

APPENDIX A

Offshore Process meeting, 19 October 2006, Ofgem

Attendees:

John Greasley	National Grid
Bec Thornton	National Grid
Lewis Dale	National Grid
Anthony Mungall	Ofgem
Karron Baker	Ofgem
Katherine Watson	DTI
David Densley	Scottish & Southern (TO)
Guy Phillips	E.On
Graeme Vincent	CE Electric (DNO)
Dragana Popovic	ENA
Robert Longden	Airtricity
Mike Kay	United Utilities (DNO)
Colin Taylor	Scottish Power (TO)
Will Clements	Scottish & Southern (DNO)
Rachel Lockley	British Energy
Tim Moore	EDF Energy (DNO)
Dave Wilkerson	Centrica

APPENDIX B

Offshore Transmission: Rights and Obligations of different Parties

The OTEG GBSQSS sub-group has recommended a different security standard to apply offshore as compared to the established security standard onshore. If implemented this will mean that the design and characteristics of offshore networks could depart significantly from those onshore and therefore there is a need to review the arrangements for offshore charging and compensation in particular, and the nature of roles, rights and obligations in general.

The table below details the roles of the different parties affected by the proposed offshore transmission arrangements. It considers the obligations that each party has, and the rights that go with these obligations. It also highlights a number of issues that are summarised at the end of the paper:

Role	Role	Obligations	Rights	Comments/questions
GBSO	Operation of GB transmission assets (including offshore TOs) Management of contractual interface with transmission connected party Potential management of contractual interface with DNO Management of transmission flows Charge for services via	To comply with onshore codes (CUSC, BSC, STC, Grid Code) To offer terms for connection within specified timescales To provide connection and access products (e.g. TEC) To co-ordinate outages between networks and generators To restrict operational access To provide compensation as defined in CUSC/BSC	To request Transmission Owner Connection Offer (TOCO) from TOs To seek financial security from users To charge TNUoS and connection charges to users	Onshore arrangements (via CUSC/BSC) provide for the GBSO to compensate users for lack of access in certain circumstances (CAP048 for disconnection, pay-as-bid for operational constraints) these costs are then socialised via BSUoS (essentially, the market collectively self-insures). Is it appropriate for GBSO to provide compensation for lack of access to offshore users? Standards will be different offshore, so should CUSC/BSC

Role	Role	Obligations	Rights	Comments/questions
	TNUoS and BSUoS	To pay TOs via charging methodology statement To manage codes/develop rules	To charge BSUoS in accordance with the transmission charging methodology	arrangements for compensation also be different? Are current connection offer timescales (3 months) achievable for offshore? What is the scope of the GBSO role offshore?
Offshore TO	Provision of transmission infrastructure between offshore generator and onshore infrastructure Exclusive or non-exclusive approach will determine the process by which an offshore TO is identified	To comply with appropriate codes (e.g. STC) To provide service as tendered/specified To provide GBSO with TOCO? To deliver service by a specified date To provide and maintain assets To co-operate with GBSO To put in place transmission charging methodology To comply with offshore SQSS	To receive revenues as bid /as specified in price control arrangements To charge GBSO in accordance with transmission charging methodology	What is the exact service that the TO is providing? What are the performance obligations on offshore TOs – can these obligations be incentivised? Should the TO pay compensation to the user if the cables are not available? If so then additional risk may be reflected through to the user via the TOs charges. No opportunity to socialise these costs. What obligations exist for any future development?

Role	Role	Obligations	Rights	Comments/questions
		To decommission at end of life		Can revenues be changed if conditions change? Does the TO have to provide a TOCO when requested by GBSO? Depends upon exclusive/non-exclusive approach How are existing assets adopted? What happens if TO assets are stranded?
Onshore TO	Ownership of onshore transmission assets	To comply with STC To provide TOCO as requested by GBSO To maintain assets To co-operate with GBSO To put in place transmission charging methodology To comply with SQSS	To receive regulated revenue via charging GBSO in accordance with transmission charging methodology	Are current arrangements for onshore TOs appropriate for enduring regime?

Role	Role	Obligations	Rights	Comments/questions
DNO	Ownership and operation of onshore DNO assets Management of flows from offshore transmission networks Management of flows across GSP interfaces	To comply with onshore codes (G/D Code, DCUSA, CUSC, BSC) To offer terms for new connections	To receive regulated revenues via charging for use of distribution system	How is the interface with the offshore TO managed? How is the interface with the GBSO managed? Is it appropriate for the DNO to provide compensation to an offshore user if capacity is not available? What standards does the DNO apply in providing access? Who contracts with the DNO for additional capacity? How is the DNO incorporated into existing onshore processes?
Offshore Generator	Provision of offshore generation assets	To comply with codes (CUSC, Grid Code, BSC as amended for offshore) To pay Connection Application fee? To pay TNUoS and connection	To apply for connection and use of the transmission system and to be connected To receive an offer with a date	Should the offshore user receive compensation if access is not available? Should the offshore user insure himself against unavailability of access, or is it appropriate for the market to insure them

Role	Role	Obligations	Rights	Comments/questions
		charges to GBSO Provision of financial security (e.g. final sums) To have the relevant consents in place	for when access will be provided, along with the associated charges To receive an appropriate level of compensation if offshore capacity is not available	via BSUoS? How are existing assets adopted?