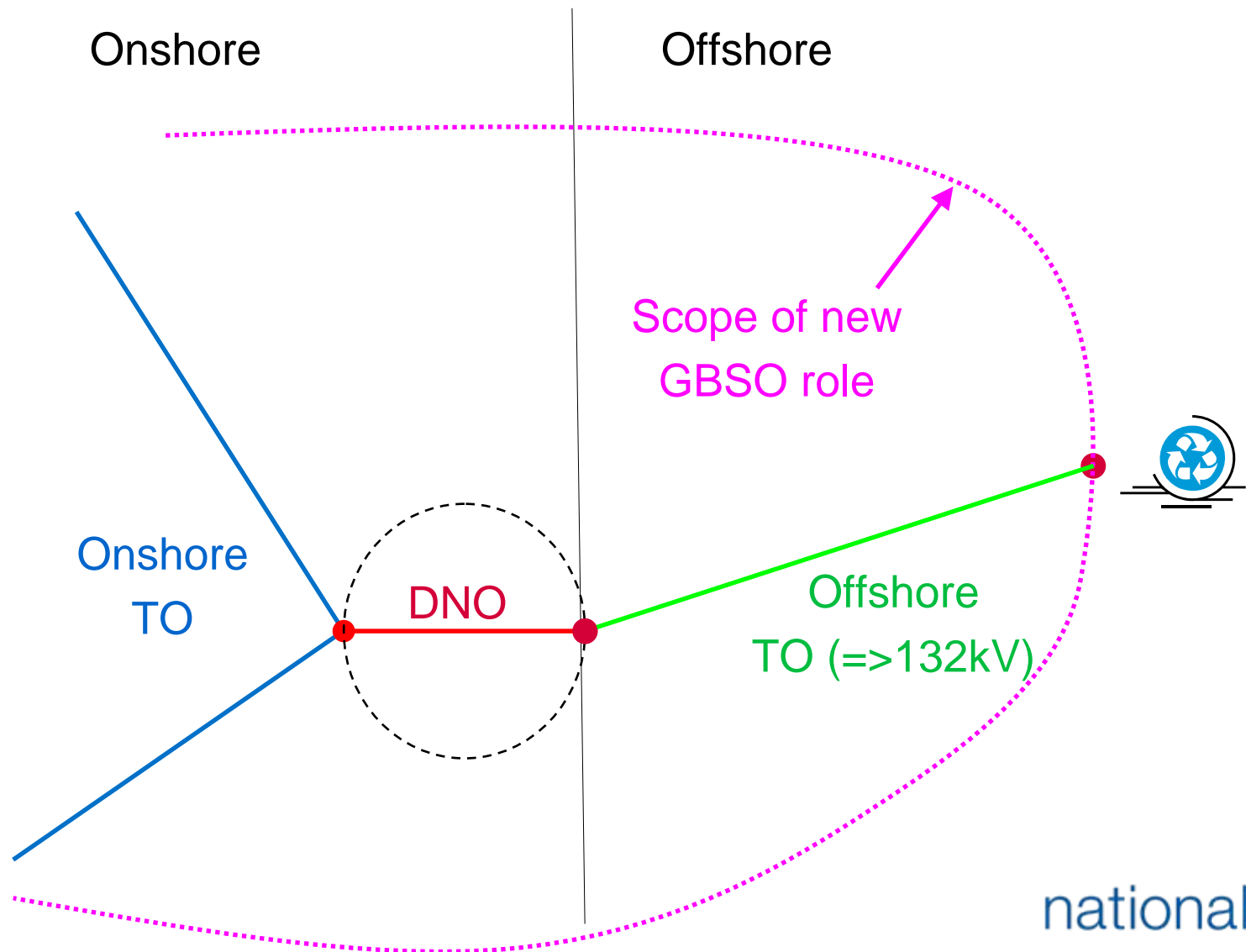


Offshore transmission connecting to DNOs

Views of an informal 'sub-group'

John Greasley, 29 September 2006

What is the issue?



Current onshore arrangements

- ◆ Transmission connected
 - ◆ User applies to GBSO
 - ◆ Affected TOs identified
 - ◆ TO offers made to GBSO
 - ◆ GBSO makes single offer to User
 - ◆ User contracts with GBSO
 - ◆ GBSO charges User for connection and use of system
 - ◆ TOs charge GBSO via charging methodology
- ◆ Distribution connected
 - ◆ User applies to DNO
 - ◆ DNO makes offer to User
 - ◆ User contracts with DNO
 - ◆ DNO charges User
 - ◆ GBSO informed of Large Embedded Generators

Assumptions

- ◆ Energy Act 2004 legislation will not change
- ◆ GBSO operates Offshore TOs
- ◆ Offshore User applies to GBSO for transmission connection
- ◆ Connection and use of system agreement is between GBSO and User
- ◆ DNOs own and operate their own assets
- ◆ Onshore investment planning is done between GBSO and DNO

Proposed offshore arrangements

- ◆ Users are transmission connected offshore ($\geq 132\text{kV}$)
- ◆ User applies to the GBSO
- ◆ GBSO will identify affected TOs (including offshore TO)
- ◆ If connection onshore is via DNO, then DNO will also need to be involved in transmission offer process
- ◆ User contracts with the GBSO
- ◆ DNO needs to be integrated into the process

Why is this an 'offshore issue'?

- ◆ Large Power Stations already connect to DNOs
- ◆ Arrangements are in place to inform GBSO of these connections so that contracts with the generator can be put in place
- ◆ Interface between GBSO and DNO managed via the Grid Code/CUSC

- ◆ Key differences
 - ◆ Potentially, no contractual relationship between User and DNO
 - ◆ Contract between User and GBSO
 - ◆ Offshore TO exists between the User and DNO

What principles need to be achieved?

- ◆ Contractual relationships between
 - ◆ User and GBSO CUSC?
 - ◆ TO and GBSO STC?
 - ◆ TO and DNO ?
 - ◆ DNO and GBSO ?
 - ◆ User and DNO ?
- ◆ Mechanism to provide transmission/distribution capacity
- ◆ Mechanism to share information between GBSO, TOs, DNOs for planning, development and operational purposes

Issues/questions

- ◆ Who determines onshore connection design?
- ◆ How are DNOs integrated into existing processes?
- ◆ How does DNO make investment decisions?
- ◆ How does DNO treat offshore TO connection?
- ◆ Who contracts for DNO capacity?
- ◆ What compensation is paid if capacity is unavailable (and by whom)?
- ◆ How is interface between DNO and offshore TO managed?
- ◆ How are generation powerflows managed?

Solutions

- ◆ Different models could be developed to address these issues
 - ◆ Differing levels complexity
 - ◆ Varying amounts of departure from current arrangements
- ◆ Some initial thinking has been done
- ◆ Further work required to
 - ◆ Develop and refine models
 - ◆ Determine the most appropriate overall solution

Summary

- ◆ OTEG is invited to:
 - ◆ Agree that there is an issue that needs to be resolved
 - ◆ Consider principles presented and requirement for any additions
 - ◆ Comment on the assumptions made
 - ◆ Consider the issues/questions that need to be resolved
 - ◆ Agree how and where work should be taken forward