

Workshop on Energy Law Development of a European Transmission Grid integrating renewable energies

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Sue Harrison

Head of European Energy Markets

UK Department of Energy and Climate Change

Development of a North Seas Grid

- North Seas Countries' Offshore Grid Initiative (NSCOGI) work programme to date (2010-2012)
- Key features of NSCOGI process – advantages, risks
- Initial findings
- Next steps

NSCOGI – work programme

- Focus on possible barriers to coordinated offshore grid development in three areas:
 - ✓ Grid configuration
 - ✓ Regulatory and market arrangements
 - ✓ Planning and consenting regimes

Key features of NSCOGI process

- Led by Ministries, but with full support from NRAs, TSOs and Commission
- Includes all countries bordering on North and Irish Seas (B,NL,F,D,DK,S,NO,IR,LUX,UK) - with high offshore renewables potential
- Commitment demonstrated by signature of Memorandum of Understanding, but a voluntary initiative

Advantages of NSCOGI process

- Full involvement of all key players (although more contact with developers needed)
- Able to influence policy developments at national and EU level
- Facilitates coordination of approaches to offshore grid development at early stage

Risks of NSCOGI process

- Very crowded policy space – risk of duplication, so coordination with other work streams essential
- Insufficient resources and engagement from participants

NSCOGI – Initial findings (1)

General

- Useful forum for discussion and information exchange by all participants, which should continue
- Coordination of national approaches to offshore grid development and renewables trading is recommended.
- Virtual and actual case studies would help test the validity of the initial findings and, where appropriate, develop them further

NSCOGI – Initial findings (2)

Grid configuration

- Grid study investigated 2 grid design options for connecting offshore renewables: point-to-point and meshed
- Because of relatively small volumes of offshore RES expected in 2020-2030, investment costs were similar (€30bn) and net annual costs were slightly lower for meshed design than for radial (some €77m less p.a.)
- Economic benefits of meshing are highly dependent on the level and location of offshore RES
- Meshed design might present technical challenges
- May be additional, less quantifiable benefits, eg operational flexibility and fewer landing points

NSCOGI – Initial findings (3)

Regulatory and market arrangements

- There are differences in the regulatory and market arrangements of the 10 countries but no insurmountable barriers to coordinated development of offshore networks.
- High-level principles drawn up to be used as guidelines for future cross-border developments – eg on planning, grid design, financing, operation and ownership of assets, system charges.
- No existing arrangements for trading across assets combining interconnection and offshore generation – so options developed but further work needed.

NSCOGI – Initial findings (4)

Planning and consenting regimes

- Predictable decision making and efficient processing of planning and consenting regimes essential for legal certainty for investors
- There are differences in the planning and permitting regimes of the 10 countries, but no insuperable barriers to integrated cross-border developments.
- Cooperation, coordination and communication across borders needed to accelerate decision-making
- Particular attention to landfall points needed – because of impact on local population

NSCOGI – Next steps

- Initial findings presented to Ministers at end 2012 and they agreed that NSCOGI should continue work in 2013
- Areas for further study in 2013 include: trading arrangements for hybrid infrastructures; cost allocation; anticipatory investment; impact of renewables support schemes; use of more ambitious scenarios to test whether design topology changes as offshore RES increases; use of cases studies to explore issues identified in all three work streams
- More contact needed with stakeholders to test practicality of emerging ideas
- More coordination between different work streams needed