MINUTES OF THE
ELECTRICITY NETWORKS STRATEGY GROUP (ENSG) MEETING

BIS CONFERENCE CENTRE

10AM FRIDAY 5TH OCTOBER 2012

Present:

Co-Chairs

DECC	Sandy Sheard (for Jonathan Brearley)
Ofgem	Andy Burgess (for Ian Marlee)

Members

National Grid	Mike Calviou
SHETL	Mike Barlow (for Ian Funnell)
UK Power Networks	Barry Hatton
Renewable Energy Systems	Joe Duddy (for Patrick Smart)
Northern Power Grid	Mark Drye (for Phil Jones)
Centrica	Merel Van der Neut Kolfschoten
Transmission Capital Partners	Chris Veal
Renewable-UK	Guy Nicholson
The Crown Estate	Chuan Zhang
Scottish Government	Liam Kelly (for Colin Imrie)
Welsh Government	Ron Loveland
DECC	Tom Luff

Also in attendance

National Grid	Andrew Hiorns
Ofgem	Simon Cran-McGreehin
Ofgem	Jon Parker
DECC	Paul Hawker

Apologies

Scottish Power	Jim Sutherland
Central Networks	John Crackett
Vattenfall	Jason Ormiston
Energy Networks Association	David Smith
EDF	Mark Cox
RWE Npower	Alan McAdam

1. Welcome and Introduction and actions from last meeting

1.1 The Co-Chairs welcomed the participants. All actions from the previous meeting had either been completed or would be covered later in the agenda. The minutes of the last meeting had been published on the ENSG part of the DECC website.

2. Updates and discussion on related workstreams

Offshore Transmission

2.1 Ofgem gave a presentation on this topic. Ofgem had published an Open Letter on offshore transmission in July. This was consulting on the connection offer process, coordination, and anticipatory investment proposals (particularly pre-construction work being undertaken by third parties). Ofgem would be publishing a 'minded to' position on adjustments to the connection offer process to support efficient network coordination by the end of the year. Other upcoming consultations and publications were highlighted:

- Ofgem publication of policy proposals and further consultation on framework for investment needed to support coordination (late 2012)

- Consultation on new Tender Regulations for granting offshore transmission licences consultation to close on 5 November.

- Ofgem consulting on proposed changes to the Offshore Transmission Owner (OFTO) licences by the end of the year

2.2 Ofgem also noted that National Grid had requested funding for pre-construction work off the East Coast. This request had been covered in National Grid's RIIO-T1 price control.

Integrated Transmission Planning and Regulation (ITPR)

2.3 Ofgem introduced this item. It had published an Open Letter in March seeking views on how the current regulatory regimes for transmission investment could work together effectively to deliver efficient investment for an integrated transmission system. A further Open Letter was planned for publication by the end of October. In Spring 2013 Ofgem planned to consult on possible solutions. ENSG members were invited to contact Ofgem if they wished to discuss any aspects of the project.

Discussion

2.4 DECC drew attention to a two page overview of the implementation of the offshore transmission coordination project. Copies were made available at the meeting and could also be found at http://www.decc.gov.uk/assets/decc/11/meeting-energy-demand/wind/6344-offshore-transmission-coordination-project-implem.pdf

2.5 A question was asked on the latest Government position on EU renewables trading. DECC replied that this remained under consideration and there was, as yet, no date for the next steps. Ofgem was asked about the valuation of assets for transfer between offshore generators and OFTOs. Ofgem replied that it expected to publish guidance on this by the end of the year.

2.6 It was suggested that the ITPR and offshore coordination projects should be brought together. Ofgem agreed that they should take account of each other, but the offshore coordination project needed to press ahead at a faster pace.

Smart Grid Forum

2.7 DECC gave an update on the work of the Smart Grid Forum. It was focusing on the RIIO-ED1 electricity distribution price control to develop shared understanding of scenarios and network requirements. A number of workstreams had been established .

2.8 Workstream 1 had been developing shared assumptions and scenarios on deployment of smart technologies and distributed generation based on DECC's Carbon Budget work. Workstream 2 had been looking at the costs and benefits of the various smarter technologies and this work was now complete. Workstream 3 was refining the model and assessing the potential network impacts of the assumptions and scenarios from Workstream 1.

2.9 In August, the Smart Grid Forum published a report drawing all this together. In particular, the report described the Workstream 3 model which assists in the evaluation of investment options for electricity distribution networks to address the challenging issues that lie ahead. The model showed which smart technologies might be cost effective. The Smart Grid Forum will also establish a web portal to assist data sharing and bring together innovation.

2.10 Workstream 6 was investigating the commercial and regulatory challenges of implementing smart grid solutions. It had published a report in August and is now considering solutions to the identified barriers. These barriers included:

- The application of over burdensome and inappropriate standards to technologies such as storage and demand side response
- The rules on informing DNOs of new connection requests
- The commercial engagement between DNOs and third parties

Discussion

2.11 DECC was asked if the ENTSO-E Demand Connection Code was being considered in the Smart Grid Forum. DECC confirmed that they would be discussed at the next Smart Grid Forum to be held on 23 October (see also Action 2).

2.12 It was agreed that the commercial and regulatory barriers report should be circulated to ENSG members.

2.13 It was agreed that network/market integration related affairs should be included in the update to the next ENSG meeting (see Action 2).

2.14 DECC was asked where storage was now covered in the Department? DECC responded that its Science and Innovation team was looking at this issue, in particular the development of new technologies.

ACTION 1: DECC to circulated the Smart Grid Forum Commercial and Regulatory Barriers report to ENSG members.

ACTION 2: A presentation on EU Network Codes, ITPR and EU network development plans would be made at the next ENSG meeting.

3. Transmission Owner (TO) Major Projects Template and Update

Template

3.1 DECC introduced this item and explained the format of the template. DECC thanked the TOs for their contributions to the template which had now been published on the ENSG part of the DECC website. ENSG members were encouraged to distribute the update to colleagues and stakeholders. The content of the template would be updated on a quarterly basis. It would be circulated to ENSG members and posted on the DECC website. Comments on the format of the template were welcome from ENSG members and other stakeholders. They should be submitted to ensg@decc.gsi.gov.uk.

Update

3.2 SHETL provided an update on its projects. In particular:

- The Knocknagael project (Reference 3H on TO Major Projects Update) had been completed.
- On Beauly-Denny (1HP) wiring of the first section had begun that week
- On the Eastern HVDC (3NHP) a solution had been developed
- Caithness-Moray project (21H) had been rescoped as a point-to-point connection. So, the Shetland Islands would connect straight to Caithness which would also be used to connect the Orkney Islands in due course.
- Beauly-Mossford (12H) had now received planning consent for an overhead line
- On the Western Isles link (14H) the estimated costs had increased primarily to the costs of cables. SHETL was assessing an updated needs case with Ofgem. SHETL had intended to put out an indicative prices and timetable document in October, but this was likely to slip. It hoped to get all parties signed up in Q2 2013 and then begin awarding contracts.
- On the Orkney Islands (17H) there had been so much Microgeneration connecting that new generation was now having to await transmission upgrades. This increase was primarily due to Feed in Tariffs, but how many generation projects would actually complete was uncertain. In the meantime

SHETL was looking at short term solutions such as utilising contracted capacity which was not being fully used.

3.3 Scottish Power was not present, due to illness, to cover its projects. However, DECC had been informed by Scottish Power that all of its projects were making good progress, and that National Grid would provide an update on the Western HVDC Link.

3.4 National Grid highlighted the following projects in its update:

- Western HVDC (14H) – a revised planning application would be considered by Flintshire Council in wb 8 October. Should that also be refused then a date of 12 December had been set for an appeal on the original application.
- Eastern HVDC (3NHP) – highlighted that the TOs were planning to use Voltage-source converters (VSC) for this project.
- London (15N) – the timetable for the network reinforcements had slipped, but the offshore wind generation which would drive the need for the reinforcements had also been delayed, so system requirements would be met.

Discussion

3.5 ENSG members welcomed the format of the update and found it very useful. Some minor errors and inconsistencies were pointed out, which would be rectified for the next update in December 2012.

3.6 A question was asked about Ofgem's consideration of introducing competition into onshore transmission by allowing third parties to play a role in delivery. Ofgem responded that it felt it was viable to do so and that this was now covered under the ITPR project. Further information would be included in Ofgem's Spring 2013 ITPR consultation.

3.7 National Grid was asked if the TO updates provided to the ENSG would be aligned with National Grid's Electricity Ten Year Statement. National Grid confirmed that the analysis would consider a range of future potential outcomes, including the Gone Green scenario. The network solutions identified in the forthcoming Ten Year Statement would be based on those identified in ENSG report, but updated in line with updated in line with updated scenarios.

3.8 There was interest in further discussion of the Eastern HVDC project. It was suggested that due consideration should be given to encourage the next bootstrap(s) such as the Eastern HVDC project to use the technologies compatible with those to be used in offshore wind connection (including voltage-source converters and polymeric cables) so that the bootstrap may act as a pilot scheme for 2GW HVDC offshore wind connections. Project. The TOs offered to present on the Eastern HVDC project at the next ENSG meeting.

ACTION 3: TOs to present on the Eastern HVDC project at the next ENSG meeting.

4. ENSG Future Work Programme

ENSG Future Work Programme Discussion

4.1 DECC introduced a discussion paper (ENSG04-2012) which had been prepared in conjunction with an ENSG Working Group on the possible future ENSG work programme. The ENSG Working Group had discussed and prioritised a number of potential elements of an ENSG Work Programme based on the impact ENSG work might have, the timescales, and resources. The elements had been divided into three categories:

- **Network delivery progress** – The TO Major Project Status Updates allowing the ENSG to:
    - maintain an overview of project status
    - publish this information for stakeholders
    - identify barriers/risks to project delivery

- **Proactive analysis / horizon scanning role** - Project-based value added ENSG work with specific deliverables

- **Critical friend** – The ENSG can benefit from updates on related projects. It can also offer a valuable review and challenge function, where appropriate, to help inform and support policy, regulation and project development and implementation that is being undertaken through these other projects.

4.2 The network delivery progress and critical friend roles were already being undertaken. It was proposed that ENSG continued these roles. For the critical friend role, the following areas were initially proposed to be covered, but others could be added if there was an identified need by the ENSG.

- Ofgem's ITPR project
- EU Networks Codes
- Smart Grid Forum
- Offshore policy developments

4.3 On the proactive/horizon scanning role two areas were proposed to be covered:

Cross-Electricity Networks project

4.4 There were likely to be increased interactions between the transmission, distribution and offshore networks. There could be a need for increased coordination between the networks, and potentially for new roles and responsibilities to be developed. Key factors included the deployment of new technologies and a potentially changing role of DNOs as the nature and profile of demand changes.

4.5 The purpose of this project would be to consider the challenges facing the interactions between electricity networks over the coming decades, and identify

what, if any, gaps exist with regard to meeting those challenges, including the roles of the various players and development of solutions. If gaps were identified, it would make recommendations on the timescales for investigating those areas further and for developing options where appropriate, and also who might be best-placed to undertake such work, e.g. existing organisations or groups. The scope of this cross electricity networks project would not include developing solutions to address any gaps identified.

4.6 It was proposed that an ENSG Working Group be established to take this project forward. The project would initially set the scope for approval by the ENSG (via email) and then deliver a final report to the next ENSG meeting

Technology Issues project

4.7 Technology, including network technologies and other technologies which networks will need to support in the future, is a fast moving and broad area. The ENSG Working Group felt that it was important to get an understanding of what network technologies were being developed, what they aimed to achieve, likely timescales for deployment, and any challenging areas for which technological solutions were not being developed (or not fast enough).

4.8 It was proposed that this area be considered further by an ENSG Working Group either as part of the Cross-Electricity Networks Project or as a standalone project. It would start with a scoping exercise looking at network technologies and also the impact of other technologies on the network, e.g. how can it accommodate/facilitate greater Demand Side Management or storage. This would be low resource initially as technology is mapped 'in house' by pooling ENSG members' knowledge.

4.9 DECC then took the ENSG through areas considered by the ENSG Working Group for proactive analysis/horizon scanning but not recommended for further work at this stage. These were:

- An ENSG "Post-2020 Vision" Report;
- Planning / Public Understanding of Energy and Networks; and
- EU issues

4.10 The rationale behind not recommending these areas for further work was set out in ENSG 04-2012.

<u>Discussion</u>

4.11 It was agreed that the three broad categories for ENSG work (set out in paragraph 4.1) were appropriate.

4.12 It was suggested that the ENSG should consider whether to play a greater role in future offshore network development. Ofgem noted that the offshore wind cost reduction task force had charged Renewable-UK with looking at the issue of a

Design Authority and would be producing a paper by the end of the year. ENSG would also be involved in the ITPR project through its critical friend role.

4.13 The issue of interconnection was raised. Was there a role for ENSG in considering the issues in this area raised in DECC's System Balancing paper? DECC noted that it was currently considering interconnection policy. It was also felt that this should be covered in the proposed Cross-Electricity Networks project. In subsequent discussion the importance of the Pan European Development Plan was raised and it was agreed that the ENSG would receive a presentation on this at the next meeting (under Action 2).

4.14 New infrastructure build and planning consent was highlighted as an important area and it was suggested that a presentation be made to the ENSG. An Infrastructure-UK presentation on the work it was undertaking as part of the Government's Strategic Growth Agenda was suggested as a possible useful activity.

ACTION 4: DECC and Ofgem to consider whether (and when) a presentation on UK infrastructure policy would be useful.

4.15 The proposed Cross-Electricity Networks project received support from ENSG members. It was felt that the ENSG could help map out the overall network picture. The issue of resources was raised and it was agreed that the project would initially stop at mapping existing work and identifying gaps.

4.16 The reference to gas networks in the project proposal was highlighted as an important link to make.

4.17 It was noted that other groups were considering similar topics, and that the ENSG should be aware of the linkages.

4.18 National Grid said it was looking at many of the issues raised in the project in its System Operator role. It therefore offered to lead on this work and chair a Working Group. It was agreed that National Grid would lead the project and look at outputs, timing and milestones. Progress would be reported at the next ENSG meeting, but it might not be in the form of a final report. Nominations were invited to participate in the ENSG Working Group for this project. It was also agreed that the Smart Grid Forum would be informed of this work and members invited to participate.

4.19 It was agreed that the proposed technology issues project should be subsumed into the Cross-Electricity Networks project.

ACTION 5: National Grid to lead the Cross-Electricity Networks project.

ACTION 6: ENSG members to inform Paul Hawker if they would like to participate in an ENSG Working Group for this project.

ACTION 7: DECC to inform the Smart Grid Forum of this project at its next meeting on 23 October and invite members to join the Working Group.

ENSG Terms of Reference and Membership

4.20 There was a brief discussion on the ENSG Terms of Reference. It was felt that they generally remained fit for purpose, but that the critical friend role could be more explicit and consideration should be given to whether a specific reference to gas networks was needed. It was agreed to look at this again (and membership) at the next ENSG meeting, but in the meantime DECC and Ofgem would consider what changes could be made.

ACTION 8: DECC and Ofgem to consider changes to Terms of Reference for discussion/agreement at the next ENSG meeting.

5. AOB and Future Meetings

5.1 It was agreed that the next full ENSG meeting would take place in late March 2013. It was also agreed that subsequent meetings should be pencilled in at 4 monthly intervals, ie July and November 2013. This would secure the slots in ENSG members' diaries as well as providing impetus to the ENSG's work. If it was later decided that there were not sufficient substantive areas for the ENSG to discuss, the meetings dates for 2013 could be revised. It was noted that, after the March 2013 meeting, there could be a disjoint between the ENSG meetings and the quarterly publication of the TO Major Projects Updates. However, it was agreed not to alter the timing of the Updates.

5.2 National Grid's 21 October seminar, hosted by DECC, on maintaining the frequency of the electricity system was highlighted as an informative event. The seminar had explained what frequency control is, why it is important, and how it is currently carried out. It also set out the challenges ahead and how National Grid planned to address them. It was agreed that the slides for the event would be circulated to ENSG members.

ACTION 9: DECC to circulate slides from the frequency control event to ENSG members.