APPROVED

MINUTES OF THE SONI GRID CODE REVIEW PANEL MEETING

Held at the Grand Canal Hotel, Dublin

On 13th October 2011 at 10:30

Present:

Members/Alternates	Representing	
Dick Lewis	SONI	Chairman
Tom McCartan	SONI	As an observer for SONI
Brendan Woods	SONI	As an observer for SONI
Karen Creighton	SONI	As an advisor for SONI
Conor O'Doherty	SONI	As an advisor for SONI
Raymond Skillen	SONI	As an advisor for SONI
David Macartney	NIE Energy PPB	Observer
Denis McBride	AES Ballylumford	Generator
Ian Luney	AES Kilroot	Generator
Brian Mongan	AES Kilroot	Generator
Joe Duddy (as alternate for Cathal Martin)	RES	Generator
Mick McGuckin	Mutual Energy (Moyle Interconnector)	Interconnector
Joe Craig	NIAUR	Regulator
Ewan Powrie	Secretary of the SONI GCRP	

1. Chairman's Introduction to the Meeting

• The Chairman welcomed the Panel Members and gave an overview of the agenda.

2. Apologies for absence

• The Chairman noted that apologies had been received from William Steele (Power NI), Billy Walker (NIAUR), Juliet Corbett (NIAUR), Gerry Hodgkinson (NIE), Jim Cooke (Coolkeragh ESB), Bronagh McKeown (SONI), Adrian Henning (SONI) and Kevin Hannafin (Huntstown Power).

3. Minutes of the Grid Code Review Panel Meeting held on 8th June 2011

- The Chairman informed the group that comments had been received on the previous meeting's draft minutes from Joe Duddy (RES) regarding WFPS Ramp Rate Break Point and the WFPS Testing Document, and confirmed that these comments would be reviewed and the minutes would be amended as necessary.
- The minutes were approved by the Panel.

4. Points arising from Minutes (not otherwise included in Agenda)

• There were no other points arising from the minutes.

5. Grid Code Changes

- 5.1 Dwell Time consultation update on approval
 - The Chairman informed the Panel that amendments to the Grid Code will be made following the formal approval of the regulator for the Dwell Time changes, which is expected within the next few days.
 - ACTION: SONI to update Grid Code.

6. Other Grid Code changes being considered

6.1 Interconnector changes

- The Panel was informed that EirGrid are updating the ROI Grid Code to make changes connected to interconnectors. There will be no impact on the NI Grid Code other than to make a minor amendment in the definition of 'Interconnector'. The Chairman read out the proposed new definition to the Panel and pointed out that whilst the current definition includes the use of the term 'Reserves', the new definition does not, and that the term 'Reserves' is not actually defined in the Grid Code.
- A modification document will be distributed to the Panel for comments, although it was acknowledged that this is a procedural matter which should raise no issues.
- ACTION: SONI to develop a modification document to be distributed to Panel
- The paper relating to Intraday Trading was raised at this point and the Chairman confirmed that certain clauses would have to be reviewed if there are amendments to the definition of 'gate closure'. Denis McBride expressed concern regarding the interaction between the electricity network and the gas network, and the risk of a constraining effect of any Grid Code changes on a gas-fired generator. Joe Duddy also asked whether there could be any restriction of competition issues.
- The Chairman confirmed that the paper on Intraday Trading represents SONI's proposed approach to this issue, and that the drafting of this paper will be developed over the coming months.
- ACTION: SONI to consider the implications of Intraday Trading on the Grid Code

6.2 WFPS – Ramp Rate Break Point

• The Chairman informed the Panel that this matter was raised by Cathal Martin at the previous GCRP, and summarised the issue for the Panel. Currently, if a Controllable

WFPS receives a low Active Power Set-point from SONI, it may not be able to achieve this without the switching out of individual Generating Units. In such cases, if the Controllable WFPS then receives a higher Active Power Set-point, the rate of change of the Controllable WFPS may be restricted by the start-up times of the shut-down Generating Units. As a result, the Controllable WFPS will not be able to reach its required maximum ramp rate as required under the current connection conditions. Therefore changes to start up and ramp rates have been proposed for the Grid Code to address this issue. Tom McCartan provided the Panel with further background information relating to the treatment of this matter in ROI.

• ACTION: SONI to issue consultation document.

6.3 DSU – Update

- The Chairman gave the Panel the background and overview of this matter. He explained that generation sites in NI had traditionally used embedded generators, with an import capability but no export capability (as they were largely diesel generators used for peak lopping). These generators appeared on the market as aggregated DSUs, and in SONI's view the switching on of this generation created a reduction in demand. Under the ownership of Energia, these DSUs became a CDGU with a total capacity of c. 24 to 25MW In ROI, it was explained that some generators were sized larger than the site demand (largely due to the steam requirement for certain processes), but that this arrangement would not be appropriate for NI.
- In response to the issues, SONI have developed a series of new definitions and Grid Code amendments. The definition of DSU and Demand Site will still use the 4 MW threshold, and the Chairman confirmed that metering arrangements would not have to change (a single meter at the connection point with separate import and export registers would be used). Whilst this raised the issue of potential changes to connection agreements, the Chairman confirmed that there would be no need for this in NI.
- The Chairman asked for the Panel's comments on utilising a short consultation period for the DSU modifications; whilst a slight concern was raised regarding due process under the Grid Code, The Chairman invited anyone with issues to engage with SONI directly (and this would be stated explicitly in the consultation document).

• ACTION: SONI to issue consultation document

7. DS3

- Conor O'Doherty and Raymond Skillen gave a presentation to the Panel covering the development of the recent WFPS Setting Schedule document, an extensive document which deals with the necessary procedures required for wind farms on the NI system, and incorporates provisions including Fault Ride Through and Voltage Control.
- The background to the WFPS Settings Schedule (formally titled 'Guidance Notes for Wind Farm Power Station Developers) was explained to the Panel: the Schedule has been developed jointly by SONI and NIE in response to the increasing amount of wind farm generation in NI, and that the Schedule is intended to remove duplication between the Grid Code and the Distribution Code, and will form part of the Connection Conditions of the Grid Code (and as such is subject to the governance of the GCRP). This document was requested by generators who need clear requirements on how to connect to the system and the conditions applicable thereafter. As such the

Schedule clarifies the connection conditions and presents clear steps for the generators to achieve compliance.

- Further work is being undertaken on Fault Ride Through and Voltage Control issues in conjunction with generators, turbine manufacturers, and developers, and the results of this work will feed into the DS3 working groups.
- On the issue of Fault Ride Through, Conor O'Doherty confirmed that issues regarding changes of frequency are a separate matter and that other issues such as network configuration, system fault levels, turbine capability and network voltage level also need to be considered. The overriding concern is to do what is best for the NI system. On the topic of Voltage Control, Conor O'Doherty confirmed that currently slope voltage control applies to wind farms, but that the full reactive capability of wind farms is not being utilised and that further sources of reactive compensation may be required to meet the 2020 targets.
- David Macartney asked a question about the potential isolation of this exercise from current ROI work, to which it was confirmed that this is not the case, and the work surrounding this Schedule feeds into all working parties, although there may be policy issues for the government and the regulator.
- The Chairman noted that the NI Grid Code has no specific rate of change of frequency (RoCoF) for transmission-connected generation, and that the ROI GCRP was tabling a modification to amend this in ROI at today's meeting. The Chairman confirmed that SONI are not contemplating such a modification at present but the issue should be kept in mind for the future, and consideration should be given to the implications of changing the RoCoF for generators. David Macartney mentioned to the group that Michael Preston's paper from 2010 was a useful resource for consideration of this issue. Raymond Skillen suggested that the team could engage with generators to help them determine their capability regarding meeting RoCoF requirements, to which the Chairman added that a fuller background document, together with questions, may be prepared to send out to generators.
- ACTION: SONI/NIE to develop background document and questions to issue to generators.
- The Chairman informed the Panel that the outcome of this work would be an extensive consultation document for the Panel to review. In order to progress issues relating to wind farms, it was suggested to the Panel that wind industry working group should be established, which would report to the GCRP.
- ACTION: SONI to develop Terms of Reference for a wind industry working group with Joe Duddy, distribute Terms of Reference to the Panel and request nominations for the group.
- 8. WFPS Testing Document Consultation / Update
- This agenda item was covered in item 7 above.
- 9. Any Other Business
- 9.1 Written questions for SONI

- The Chairman noted that Joe Duddy has provided written questions to SONI regarding the connection conditions, which SONI will review to see whether any amendments are needed, and will respond to Joe Duddy and the Panel as appropriate.
- The Chairman took the opportunity to remind the Panel that modifications may be raised or suggested by any of the Panel Members at any time, for them to be considered by SONI and the Panel.
- ACTION: SONI to review connection conditions and respond to Joe Duddy and the Panel as appropriate

9.2 Update on the Moyle Interconnector

- Mick McGuckin gave the Panel an overview of the status of the Moyle interconnector. He explained that both pole 1 and pole 2 had recently tripped in August 2011 due to the same fault. It is relatively certain that this has been caused by electrical fault in the cable rather than any seismic or third party activity.
- The location of the faults has been identified and a repair contract has been agreed with Nexans. A repair vessel is waiting to set off from Western Norway, and Moyle are placing marine and technical representatives on board. The vessel is due to depart on 25th October and should commence with the repairs on the south cable on 30th October. The cable will be replaced and reburied and it is estimated that reenergisation will take place on 27th November, following commissioning tests. The North cable is due to be repaired from 23rd December onwards, with re-energisation scheduled for 31st December.
- Mick McGuckin pointed out that these dates are only estimates and will depend on various conditions, namely meteorological. It is estimated that 9 days may be lost due to weather (based on historic data). The Chairman confirmed that SONI's winter outlook conforms to the information Mick McGuckin provided. Moyle will be updating the SONI communications team on a daily basis.
- David Macartney asked whether this issue would cause a change to the current levels
 of reserve; the Chairman confirmed that this is not the case but the matter is reviewed
 on a daily basis.

9.3 EU infringement letter regarding Moyle capacity

• The Chairman informed the Panel that a number of parties (including SONI, National Grid, DETI, NIAUR, Moyle and Ofgem) had received an infringement letter from the European Commission regarding the capacity on the Moyle interconnector. In short, the letter asked why the full 500MW capacity of the interconnector was not being utilised. The Chairman confirmed that a new capacity methodology statement had been drafted to explain the East to West and West to East flows and the levels of capacity, which should address the issues raised in the letter. This statement is now approved by all parties.

9.4 SONI 7 year statement published

• The Chairman informed the Panel that SONI's 7 Year Transmission System Capacity Statement is now available. SONI has commenced the preparation of the 7 Year All-Island Generation Capacity Statement (a joint statement with EirGrid); SONI will be contacting Panel members individually for their input into the process.

9.5 Access Rules for Moyle Interconnector

 Joe Duddy informed the Panel that Ofgem has recently published its paper approving the access rules for the Moyle Interconnector, which is available on the Ofgem website.

10. Arrangements for next meeting

 The Chairman noted the proposed dates for the JGCRPs mentioned in the earlier JGCRP meeting, and informed the Panel that a proposed date for the next GCRP would be provided in due course.