

## **MINUTES OF THE SONI GRID CODE REVIEW PANEL MEETING**

**Lagan Suite, Hilton Hotel, Belfast**

**Wednesday 12th November 2014, 1.30pm -3.00pm**

Present:

<b>Members/Alternates</b>	<b>Representing</b>	<b>Position on the GCRP</b>
Marie-Therese Campbell	SONI	Chairperson and alternate for Brendan Woods
Michael Beggs	SONI	Alternate for Alan Kennedy
Adrian Henning	SONI	Observer
Conleth McAteer	SONI	Observer
Gareth McLoughlin	SONI	Observer
Denis McBride	AES	Member
Cathal Martin	SSER	Member
Angela Blair	PPB	Observer
Joseph Awodola	MIL	Alternate for Stephen Hemphill
Tony McElroy	Energia	Member
Ian Bailie	NIE	Member
William Steel	Power NI	Observer
Billy Walker	NIAUR	Member
David Cashman	EirGrid	Observer
Leigh McCarthy	SONI	Secretary of the SONI GCRP

### **1. Chairperson's Introduction to the Meeting**

The Chairperson welcomed the Panel Members, alternates and observers and gave an overview of the agenda.

### **2. Apologies for absence**

The Chairperson noted that apologies were received from: Stephen Hemphill, Alan Kennedy, Brendan Woods, Denis Kelly, Joe Duddy, Tom McCartan, Jim Cooke, Conor O'Doherty and Alex Baird.

### **3. Minutes of the Grid Code Review Panel Meeting held on 11 June 2014**

The Chairperson noted that no comments were received to the minutes of the previous meeting held on 11<sup>th</sup> June 2014 in Dublin. There being no other comments, the minutes of the previous meeting were approved by the Panel.

#### **4. Network Codes**

- 4.1 David Cashman gave an update on the Network Codes. Slides relating to his update can be found [here](#).
- 4.2 Denis McBride noted that he was aware that AES and PPB are the only NI representatives on the Joint Network Codes working group but would welcome further involvement and a more representative group across NI.
- 4.3 The Regulators were approached by PPB to set up a meeting to examine Network Codes impacts in NI specifically. This meeting has not taken place but may still occur before the next round of assessments of Network Codes.
- 4.4 David Cashman noted that there hasn't been any specific drafting relating to an overarching document on the Network Codes combining both Grid Codes. We are still on the working assumption that Option 4 was agreed and progressing on that basis. Further discussion will take place when the progression of assessments starts in earnest in January 2015. Assessment templates will be made available prior.
- 4.5 Denis McBride queried whether we still need to have the discussion specific to NI impacts.

***Action: SONI to check with NI Generators whether there is still a need to set up a meeting.***

- 4.6 The Chairperson asked for PPB view on the meeting as the request originated with PPB.
- 4.7 Angela Blair noted that PPB still thinks Option 1 is the easier approach. The last meeting, where all 3 sub working groups came together, highlighted some wavering by a few individuals on Option 4 after completing the assessments. Questioned whether the Options need revisited before we go any further.
- 4.8 David Cashman confirmed this is still the assumption. We require a full view of the Network Codes before we can ask detailed design questions. The working assumption is still Option 4. There may have been some confusion with sub-group members at the last Joint Working Group. It is important that full members communicate to sub-group members to ensure there are momentum and less ambiguity on plan and progression of assessments.
- 4.9 The Chairperson asked David Cashman to clarify Option 4.
- 4.10 Billy Walker asked if there are other European countries considering the same options.
- 4.11 David Cashman noted that there are two Grid Codes on the Island of Ireland so this was best approach from that angle. With Option 4 the Grid Codes will remain and we will build in the structure of the Network Codes. There will be aspects such as RFG and CACM sections that will be built up as the Codes come into force. The Codes are not the same because of jurisdictional differences. The "All-Island" approach should be recognised in the Codes.
- 4.12 Denis McBride noted that it would be easier to take bits out of the existing Grid Codes that are no longer applicable.
- 4.13 David Cashman stated that the review is very high level and once they get into the detail the option may change. Don't know how they overlap or how two codes affect one clause in the

Grid Code and need to understand before we can confirm the detailed design. Disagrees that Option 1 is an easier route than Option 4, they are equally as difficult.

- 4.14 Angela Blair noted that Option 1 would allow reference to other documentation outside Grid Code without having to change the whole existing structures.
- 4.15 David Cashman noted that the Working Group is only looking at the Grid Codes, not the distribution codes or licences etc.
- 4.16 The Chairperson noted for clarity that three Network Codes have been assessed to date and we have the impact assessments. Proceeding with Option 4 for the remaining Network Codes is the best way forward and until we have the assessment for all the Network Codes completed. There will be additional work required to focus effort into looking at what the document will look like and the option may change in the long run depending on the outcome of assessments.
- 4.17 Angela Blair confirmed that she wants to proceed but if there is no consensus on what is the right option now is the time to give consideration to this.
- 4.18 David Cashman stressed that once the Codes come out of comitology, things will progress quickly and there will need to be a review of the Codes before there is detailed discussion. There would be concern if we have to revisit this at this stage. We can't progress until the codes are finalised.
- 4.19 Denis McBride noted a concern for AES is the governance arrangements for a new code. If there was a proposed modification to the new Grid Code. If there was legislation which would apply then there would be no option.
- 4.20 David Cashman noted that in the future there will be two types on modifications, one at EU level and the second where boundaries will be set but can move these within European framework.
- 4.21 The Chairperson asked whether, from a SONI perspective, the European modifications always require consultation. David Cashman said he would imagine so. Denis McBride noted there may be options in relation to how you implement. David Cashman noted that there are elements on costs, for example that the Panel will have to discuss.
- 4.22 The Chairperson asked what the next steps are. David Cashman stated that CACM is nearly finalised so aiming to get out the next round of templates in the next few weeks and in January the sub-group meetings will be arranged.
- 4.23 Billy Walker asked about the difference between Network Codes and Guidelines. David Cashman explained that a Network Code is a full regulation whereas a Guideline is more of a direction but is also legally enforceable.
- 4.24 David Cashman said he would be happy to take further questions after the meeting.
- 4.25 Billy Walker queried the need for the meeting. Denis McBride said there was a concern about whether it would be better to have an "All-Island" code or two separate codes. Safety co-ordination is an NI specific matter so keep in original Grid Code. Purpose of meeting was to understand if this is the right way to go. Denis McBride said he thinks this is a reasonable approach but people should voice their opinions. The Chairperson noted that if there are issues members do not think have been addressed then a meeting would be useful.

***Action: The Chairperson to send out the slide prepared by David Cashman in relation to Network Codes.***

- 4.26 Ian Bailie queried how the Panel would ensure there are no conflicts with the changes. Denis McBride noted that the Network Codes would contain regulations and remove what applied to NI and ROI. Specific jurisdictional points would be separate.
- 4.27 Joseph Awodola asked the Panel to clarify the different SONI/EirGrid jurisdictional issues.
- 4.28 Denis McBride noted that this is European law and there are two member states involved so will apply to both anyway so worthwhile keeping together what is mutual to both member states. Changing the primary legislation could be an issue.
- 4.29 Angela Blair asked if it would be better for Northern Ireland to have a separate view giving the example of Load Frequency Areas and Blocks in the LFCR Code and asking is this suggested split in the best interests of NI? The Chairperson pointed out operating on an “All-Island” basis and there are upcoming projects such as North-South which will reinforce this. Angela Blair said there are only two NI representatives but there are ten from EirGrid, so maybe this needs further discussion. The Chairperson said further assessment of the codes will highlight those issues. Denis McBride said he agrees with Angela Blair’s point, we are being asked to assess ROCOF for two different areas. When CACM comes in there will be a requirement to do a bidding zone review.
- 4.30 The Chairperson understood that GB discussion bidding zones is not finalised. It is expected that NI and IE will be one synchronous area. This needs to be discussed and assessed further with regard to I-SEM impacts.
- 4.31 Billy Walker asked why there are only two NI parties. Denis McBride said that NIE were invited and some other parties but are not taking up the invitation, there must be resourcing issues but it is important to have as many views as possible. The Chairperson noted that NIE did come late to the assessment of the Network Codes but there will be continuing involvement which is very welcome.
- 4.32 Joseph Awodola asked what would happen if EirGrid no longer owns SONI. Denis McBride said the Code will still apply to both jurisdictions. The Chairperson confirmed that she would not foresee any issue with this.

## **5. DSU Modifications**

- 5.1 Gareth McLoughlin gave a presentation on DSU modifications which can be accessed [here](#).
- 5.2 Denis McBride asked why the first proposal was not approved. Gareth McLoughlin confirmed that there was on-going NIAUR work which affected this.
- 5.3 The Chairperson asked how the TSO/DSO involvement will develop. Gareth McLoughlin commented that he is not sure how this will be done but that the TSOs/DSOs are aware that this is taking place and there are on-going discussions on an “All-Island” approach for this.
- 5.4 Ian Bailie said that DSUs have to be treated like other generators on a “first come, first served” basis. When an applicant makes an application this has to be assessed in a certain way so NIE can police this connection to the network. Gareth McLoughlin pointed out that there is an issue with payment as well.
- 5.5 Gareth McLoughlin noted that there has been a concern raised by a number of DSU operators about the need to go to NIE separately if they are only operating within the connection agreement. However, there are concerns that if a number of DSUs within the same part of the network are dispatched by SONI there would be a certain amount of demand NIE will expect to be on the network.

- 5.6 Ian Bailie commented that this is problematic in itself. NIE allowing access of generation onto network on the basis of minimum load. Care will need to be taken in respect of the dropping of load required for generation.
- 5.7 Gareth McLoughlin said NIAUR has been contacted about this. The Chairperson asked if this would constitute a change in AGU classification. Gareth McLoughlin said this would not be affected in principle; this matter is out for consultation.
- 5.8 The Chairperson pointed out the lack of DSU representation at the SONI Grid Code and it would be good to have this going forward. There have been recent discussions with potential DSU members and this will hopefully be progressed once licence conditions are sorted out.
- 5.9 Michael Beggs asked what the process for this would be. The Chairperson said that from a Constitution perspective we can recommend that they request representation and NIAUR would agree that diversification would be helpful. They could also attend as observers in the meantime.
- 5.10 Denis McBride commented that it would be worth looking at this point in the Grid Code Constitution as well.

***Action: The Chairperson to review the Grid Code Constitution***

- 5.11 Billy Walker confirmed that NIAUR are looking at this and there are legal issues to be resolved and this should be looked at by the end of the year.

*Post Meeting Note: The Regulatory Authority has issued a timetable on the progression of the DSU licence issue.*

**6. WFPS Settings Schedule Modification on Active Power Output**

- 6.1 The Chairperson advised that the modification was drafted in line with industry requests to modify the WFSS on fast acting Active Power Output under Frequency Control response. It was agreed that as the industry had proposed the change (not the specific wording) and that it was agreed with the Regulators that it did not have to be consulted upon. There had been some communication between NIRIG and SONI on this matter.
- 6.2 Gareth McLoughlin confirmed that the POR 5-15 seconds requirement would remain so as to align with the EirGrid Grid Code.
- 6.3 Denis McBride asked if the wording change should specify a number. Cathal Martin asked how this would be implemented as worded and that it introduced vagaries. Gareth McLoughlin confirmed comparisons would be done with existing technologies. The Chairperson noted that the idea was to align this with the EirGrid Grid Code.
- 6.4 Gareth McLoughlin noted that the letter from NIRIG stated that there is a range depending on manufacturer, and there is a requirement for this to be done as quickly as possible. The Chairperson noted that a fast response requirement should incentivise generators to provide best possible. Cathal Martin commented that this will incentivise generators to purchase better technology.
- 6.5 Gareth McLoughlin commented that if it is the same turbine there should be the same response so will be able to tell if there is a delay. Cathal Martin noted that it would be difficult to tell as there are some many variations even between turbines with same manufacturers.
- 6.6 Ian Bailie asked what the tolerance is for this matter. Denis McBride noted similarities with conventional plant, there is a reluctance to provide a minimum standard but hopefully system

services will address this. Why not let system services deals with this, it will incentivise people to provide more. The Chairperson noted that there was an objection to 0.2 seconds this wording was intended to address this as industry effectively proposed the change. System Services is not taken into consideration, intention to align with EirGrid Grid Code.

- 6.7 Cathal Martin said this is narrowing the market and there is no cost benefit analysis to determine why. The Chairperson noted that the TSO will always look for the best possible responses from turbines. It is implicit in the wording; therefore no number was specified, but rather ‘no inherent delays’ in providing the response.
- 6.8 Michael Beggs asked what NIAUR’s view on the derogation from existing 200 millisecond requirements is. Billy Walker said that derogations do not need to be sought anymore as long as this modification is agreed.
- 6.9 Cathal Martin noted that there should not be a delay to this process. The Chairperson commented that there is derogation in place but if this is approved then no derogations will be required. Cathal Martin said there is a problem with the ambiguity of the wording. Gareth McLoughlin said SONI could review this further and bring this back to the next meeting. Ian Bailie asked if this could be included as a range. Gareth McLoughlin said SONI could consider this. Cathal Martin said it would useful to revert to NIRIG on this matter.
- 6.10 Billy Walker asked if NIRIG responded to the last SONI letter in relation to this. The Chairperson said as far as she was aware there was no written response to this. The Chairperson said this wording was published on website.

***Action: Cathal Martin to discuss this matter with NIRIG. SONI to seek a response from NIRIG to the letter from Brendan Woods.***

- 6.11 Cathal Martin asked if NIAUR would grant a temporary derogation for wind farms in the interim. Billy Walker said they weren’t considering this but if this needs to be done it will be.
- 6.12 The Chairperson asked if this could be done quickly if the wording is agreed with NIRIG. Gareth McLoughlin asked if anyone else would be concerned if SONI contact NIRIG to agree wording for temporary derogations. No one objected to this.
- 6.13 The Chairperson asked for approval of the panel of the wording and if no further objections it would be recommended for approval to the Regulators with a caveat for NIRIG to review wording and ensure they are satisfied with outcome.

***Post Meeting Note: The Chairperson understands that NIRIG are in agreement of the wording but will communicate their concerns therein with SONI on the implementation of the wording.***

## **7. Update of Grid Code Modifications**

- 7.1 The Chairperson noted the fail to sync modification and asked Billy Walker to give an update.
- 7.2 Billy Walked asked for resubmission of letter and report to the Regulators of the Fail to Sync modification
- 7.3 The Chairperson urged to the Regulators to approve the modification as stands as all work has been done to analyse cost benefit and a report was submitted last June 2014. The Chairperson will resend the report and modification to provide clarity on the issue and in order to progress a decision.

- 7.4 The Chairperson requested alignment notification of the RoCoF alternatives DS3 work stream as a matter of priority as consultant appointed in CER to commence studies work.
- 7.5 Billy Walker commented that there is clarity needed around the 18 month time frame.

***Action: Billy Walker to confirm alignment of 18 month timeframe in relation to RoCoF***

*Post Meeting Note: The letter of alignment has now been issued.*

- 7.6 The Chairperson noted that the Harmonics modification will go to the next meeting in February. It is the Chairpersons understanding that there is no reason at this time to prevent it going to SONI Grid Code in Feb 2015. There are several guidelines currently being consulted upon.

## **8. Any Other Business**

- 8.1 Denis McBride said that a lot of testing documents have been published. Gareth McLoughlin noted that there is a requirement under DS3 for EirGrid to review test producers. Denis McBride commented that a lot of the tests look like commissioning testing and asked if there is an intention to randomly test. Gareth McLoughlin said this was not his understanding. Denis McBride said there was a lack of clarity.

***Action: SONI to provide clarity on publication of testing requirements and templates***

- 8.2 The Chairperson said that a note is due to be sent in relation to Event Analysis shortly. This is related to discussion raised in AOB at the Joint Grid Code in the morning. It will be proposed the TSO examine chargeable events where the frequency nadir prior to 5 seconds, if there is inertial response from the machine if any. This does not have any impact on timeframes of POR provision by generators. A working group will be set up to examine issues. The Chairperson clarified that it will examine issues from 1<sup>st</sup> October 2014 onwards.

*Post Meeting Note:*

***Synchronous Generators: Influence of ROCOF on POR Performance Assessment***

*Following investigations of generating units' response to recent frequency transients, the SOs have concluded that the effect of a unit's inertia response should be taken into account as part of the assessment of Primary Operating Reserve (POR) in the event of frequency transient events where the frequency nadir occurs before the start of the Primary Operating Reserve (POR) period (5 seconds) and there is a subsequent rapid rise in system frequency within the POR timeframe. The POR response assessment, as contained in the Harmonised Ancillary Services (HAS) contracts, is carried out at the frequency nadir during the POR time period 5 to 15 seconds, if the frequency nadir is before 5 seconds the response assessment is carried out at 5 seconds. With a frequency nadir that occurs before 5 seconds the frequency will be rising again at 5 seconds and the unit will be partly absorbing energy from the system, the volume depending on the generators inertia characteristics and the positive Rate of Change of Frequency (ROCOF). The inertia effect with absorption of energy will reduce the indicated POR performance at 5 seconds. The SOs will work with the industry to develop an assessment methodology to take into account the inertia effect; in the meantime in the event that a POR charge is indicated under these conditions the SO will assess the unit's response in conjunction with the unit's operator before a charge is applied. This change will apply from 1/10/14. Due to the confidential nature of the HAS contracts the effect on individual plants will need to be discussed at an individual level. Please direct enquiries in relation to this issue to: - [performancemonitor@eirgrid.com](mailto:performancemonitor@eirgrid.com)*

8.3 This has been discussed at the last few generator meetings but this will be more official when the note is published. This is an interim measure until SONI work out what needs to be done on a long term basis. Denis McBride asked if this relates to a less than 5 seconds threshold, he asked if changing is to be done quicker. The Chairperson confirmed this in relation to our assessment of the response time. Hopefully the note will clarify this. The proposal is to change the tolerance level to twenty per cent.

**9. Arrangements for next meeting**

11<sup>th</sup> February 2015 (Dublin)