
DISTRIBUTION CODE REVIEW PANEL

Tuesday 13 September 2016

NIE Networks, Fortwilliam House, Belfast

MINUTES OF MEETING

a. Attendees

<u>Members</u>	<u>Non members</u>
Rodney Ballentine (RB), NIE Networks (Chair)	Carl Hashim (CH), NIE Networks (Secretary)
David McDonald (D McD), NIE Networks	Stephen Hammond (SH), NIE Networks
David Hill (DH), NIE Networks	Stephen Thompson (ST), NIE Networks
Jonathan Pollock (JP), NIE Networks (alternate for Ian Bailie)	Norman Watson (NW) (SONI)
Joe Duddy (JD), RES	Raymond Skillen (RS) (SONI)
Philip Carson, Power NI (alternate for William Steele)	
Jody O'Boyle (JOB), Utility Regulator	
Sam Alexander (SA), Powerhouse Generation)	

b. Apologies

Apologies received from:

- Denis Kelly, NIE Networks.
- Ian Bailie, NIE Networks. Jonathan Pollock attending as alternate.
- William Steele, Power NI. Philip Carson attending as alternate.
- Fiona Hannon, SSE Airtricity.
- Billy Graham, Simple Power.
- Andy McCrea, NIRIG.

No responses received from:

- Kevin Hannifin, Energia.
- Gavin Thompson, Michelin.

1. Welcome and apologies

The Chair welcomed everyone to the meeting. Apologies for non attendance were noted.

The Chair noted that attendance constituted a quorum.

2. Update on Panel membership

The Secretary noted the following changes to the make-up of the Panel since the last meeting –

- Following an internal reorganisation, NIE Networks has nominated new members into various roles as follows:
 - Rodney Ballentine replacing Denis Kelly as Chair.
 - David Hill replacing David McDonald as Network Operations rep.
 - David McDonald replacing Chris Huntley as Generation Connections rep.
 - Denis Kelly replacing Gerard Magee as Metering rep.
- Billy Graham advised the Secretary prior to the meeting, that he was stepping down from the Panel. Andy McCrea from NIRIG has been notified of the need to nominate a new member for small scale generators.
- Gavin Thompson is understood to be no longer working at Michelin. The Secretary will ask the CBI to advise if it needs to nominate a new member to represent large demand customers.
- Jody O’Boyle is replacing Ronan McKeown as the member from the Utility Regulator.

Action:

- i. **NIRIG to nominate new SSG member. (NIRIG)**
- ii. **CBI to advise / nominate new large demand customer member. (Secretary to follow up with CBI)**

3. Review of minutes of 5 August 2015, including actions

Minutes from the previous meeting were reviewed. The Chair noted than many of the actions would be covered in later agenda items during the meeting.

The Panel agreed the minutes.

JD requested that draft minutes from meetings be circulated as promptly as possible.

4. Update on RoCoF workstream

JP gave a presentation on the subject. (Slides circulated to Panel with draft minutes.)

JD enquired as to SONI’s position on ‘under frequency’. After the meeting, RS explained that agreement on such settings and RoCoF requirements are dealt with through the DS3 work programme.

JD asked if NIE Networks had shared its vector shift work with the appropriate GB working group. JP confirmed he had not, but said he would do so.

JD asked if NIE Networks had commenced writing out to LSG. JP confirmed this had not commenced yet, but was due to commence soon.

RS asked if NIE Networks would seek to confirm changes to settings had been made by generators, in due course. JD commented further that experience in GB indicated engagement and compliance from LSGs was mixed (and that perhaps the same may be

experienced in Northern Ireland). NIE Networks confirmed that LSGs would be subject to testing, so compliance could be measured. More tricky for SSGs, but at a minimum NIE Networks will ask for test results to be submitted for verification.

5. Update on voltage control

JP gave a presentation on the subject. (Slides circulated to Panel with draft minutes.)

A Panel member asked whether a nodal controller solution was a better alternative approach to reactive power control. NIE Networks confirmed it was, but no funding was available during RP5 for a nodal controller solution. “Smart Power Factor” control is considered the best compromise in the absence of a nodal controller at cluster substations.

JD asked how reactive power control performs under disturbed scenarios. JP confirmed that wind farms will revert to voltage control, until the system is stable again.

6. Update on system services

DH gave a presentation on the subject. (Slides circulated to Panel with draft minutes.)

NW and JD asked whether embedded generation connected to the distribution network could offer system services to the TSO. DH confirmed it could participate in some of the system services but could not avail of the “steady state reactive power” system service unless the TSO had dispatch control.

7. Innovation proposals in RP6, including storage

JP gave a presentation on the subject. (Slides circulated to Panel with draft minutes.)

8. EU Code Changes

DH gave a presentation on the subject. (Slides circulated to Panel with draft minutes.)

JD asked if the new G98 and G99 documents would be consulted on. DH said he would check and confirm.

JOB asked if G98 will include Stage 1 and Stage 2, as per the existing G83 process. DH confirmed that it would.

Action:

- iii. **To confirm if G98 and G99 documents will be consulted on. (DH)**

9. Potential over install connections

DMcD gave a presentation on the subject. (Slides circulated to Panel with draft minutes.)

JD asked why 20% was considered an appropriate limit to over install. RS answered that 20% was arrived at after carrying out extensive studies, and 20% was considered a tolerable level for over installation.

JD challenged further, asking why it mattered what level of generation was installed; JD’s view was that so long as the amount of generation exported on to the network did not exceed the MEC limit, it should be the generator’s issue how much generation capacity it installs at its site.

JS said there were fault level considerations and concerns. JD noted and agreed that fault levels were a legitimate reason to limit installation capacity. But JD maintained that the other reasons cited by the TSO for limiting install capacity could be overcome through market design solutions rather than technical solutions such as limiting installed capacity.

A consultation on over install connections is to follow in due course. JD will note his view in the response to the consultation.

JD went on to state that PV connections may be a special case, as the over install potential for PV may be greater (e.g. 40-50%) than for other technologies. JD said he would make this point in the response to the consultation.

JOB asked if the consultation would differentiate between over install connections using one generation technology and those that use different types of technology e.g. wind and solar. RS said the consultation would not do so, and it would be technology neutral.

The Panel then discussed the necessary changes that may stem from an over install policy, to the Grid Code and the Distribution Code. It was noted that the Grid Code review panel has access to a legal resource, and that this has proved beneficial when making drafting amendments to the Grid Code. By contrast the DCRP has not had access to or made use of a legal resource. The Panel will consider if a legal resource would be beneficial.

Action:

- iv. **SONI to circulate a link to its consultation in due course. (SONI)**
- v. **Panel to consider if access to a legal resource would be beneficial. (All)**

10. Embedded generator reactive power and connection voltage

JD noted that NIE Networks may seek to avail of reactive power from a connecting generator, and that this can increase the cost of the connection. Until recently, it was not possible to quantify the benefit to NIE Networks of having access to the reactive power so a cost-benefit of the additional connection costs could not be carried out.

However now that DS3 has introduced a market value to reactive power, it is possible to carry out an economic test on NIE Networks' connection policy. JD suggested this should be carried out.

NIE Networks stated that its standard design policy for LSG is in line with the minimum requirements set out in D Code 2015 to enable generators to export their required reactive capabilities.

JOB noted that the Utility Regulator is carrying out a review of connection policy in Northern Ireland, in the near future.

The Panel noted that this discussion was for noting, and was outwith the scope of the Panel's activities.

11. Embedded generator reactive power at low active power

JD explained that a turbine manufacturer had asked him to raise a query. That being that the turbine manufacturer cannot control its turbines' power factor down to a zero-level,

as is required by the Distribution Code. They can only maintain the power factor down to the Designed Minimum Operating Level (DMOL) of the final turbine.

JD asked how NIE Networks applies the zero-level requirement.

DH stated that he was aware of the issue, and that NIE Networks adopts a pragmatic approach to this requirement i.e. it is acceptable for the power factor to be controlled down the DMOL of the final turbine or 15% of the MEC, as opposed to zero.

JD asked that this be noted in the minutes.

If the issue remains a concern for parties to the Distribution Code, the Panel will consider proposing an amendment to the Distribution Code.

12. AOB

DH mentioned that, following feedback from a consultation on amendments to the Setting Schedule for < 5MW generators, NIE Networks will need to consult again. DH will circulate the consultation to the Panel, for comment.

RS asked if a Setting Schedule is needed specifically for PV generators. Up to now PV generators have been following the existing Setting Schedules. So it may be sufficient to simply generalise the names of these Schedules to cover all technologies. NIE Networks will consider this point.

Action:

- vi. **Consultation on Setting Schedule for < 5 MW generators to be circulated. (DH)**
- vii. **To consider generalising names of existing Setting Schedules. (NIE Networks)**

13. Date of next meeting

Tuesday 13 December was proposed for the next meeting.

Action:

- viii. **Secretary to send invite for next meeting. (Secretary)**

Summary of actions

- i. **NIRIG to nominate new SSG member. (NIRIG)**
- ii. **CBI to advise / nominate new large demand customer member. (Secretary to follow up with CBI)**
- iii. **To confirm if G98 and G99 documents will be consulted on. (DH)**
- iv. **SONI to circulate a link to its consultation in due course. (SONI)**
- v. **Panel to consider if access to a legal resource would be beneficial. (All)**
- vi. **Consultation on Setting Schedule for < 5 MW generators to be circulated. (DH)**
- vii. **To consider generalising names of existing Setting Schedules. (NIE Networks)**
- viii. **Secretary to send invite for next meeting. (Secretary)**