DRAFT SUMMARY MINUTES OF THE JOINT GRID CODE REVIEW PANEL (JGCRP) MEETING RADISSON BLU HOTEL, BELFAST

20 FEBRUARY 2013

MEMBERS:

<u>Name</u>	<u>Initials</u>	Present	Constituency	Company	
Brendan Woods	BW	Υ	Chair (TSO)	SONI	
Jon O'Sullivan	JOS	Υ	Chair (TSO)	EirGrid	
Mark Glancy	MG	Υ	TSO Representative	EirGrid	
Salim Temtem	ST	Υ	TSO Representative	EirGrid	
Cormac McCarthy	CMcC	Υ	TSO Representative	EirGrid	
Peter Gillespie	PG	Y	IPP (excl. Renewable and CCGT)	Bord na Mona	
Barry Sherry	BS	Y	Grid Connected Independent Generators excluding Renewable Generators	SSEG	
Kieran Adams alternate for Gary Thompson	AD	Y	IPP Generators (CCGT only)	Energia Generation	
Jane McArdle	JMcA	Υ	Renewable Generators	SSER	
Karol O'Kane	KOK 1	Υ	ESB PG	ESB PG	
Sean Doolin as alternate for Joe O'Connor	SD	Y	ESBPES	Electric Ireland	
Kevin Hannafin	KH	Υ	Independent Electricity Supplier	Energia Generation	
Rónán Ó hÓgartaigh	ROH	Y	Transmission Asset Owner	ESB	
Robert O'Rourke	ROR	Υ	Regulator	CER	
John Egan	JE	Υ	HVDC Interconnector	EirGrid Interconnector Ltd	
Nigel Thomson (alternate for Brian McAuley)	NT	Y	Market Operator	SEMO	
Martin Ahern	MA	Υ	Demand Customer	Shannon LNG	
Stephen Walsh (alternate for Paul Hickey)	SW	Y	Distribution System Operator	ESB Networks	
Patrick Liddy	PL	Y	Demand Side Units	Activation Energy	
Ciaran Donnelly	CD	Υ	Renewable Generators	Wind Prospect	
Denis McBride	DMcB	Υ	Generator	AES	
Gerry Hodgkinson	GH	Υ	ТО	NIE	
Ian Bailie	IB	Υ	DSO	NIE	
Brian Mulhern	BM	Υ	Regulator	NIAUR	
Cathal Martin	CM	Υ	Renewable	SSER	
Jim Cooke	JM	Υ	Generator	Coolkeeragh ESB	

OTHER ATTENDEES:

<u>Name</u>	<u>Initials</u>	Present	Role	Company
Arlene Chawke	AC	Υ	GCRP Secretary	EirGrid
Anne Trotter	AT	Υ	TSO Observer	EirGrid
Alan Rogers	AR	Υ	TSO Observer	EirGrid
Karen Creighton	KC	Υ	TSO Observer	SONI
David Cashman	DC	Υ	TSO Observer	EirGrid
Karl O'Keeffe	KOK 2	Υ	TSO Observer	EirGrid
Séamus Power	SP	Υ	TSO Observer	EirGrid
Willem Uijlings	WU	Υ	Presenter	DNV Kema
René Peeren	RP	Υ	Observer	Endeco Technologies
Alan Foley	AF	Υ	Observer	DAE
Michael Peters	MP	Υ	Observer	Fingleton White
Jag Basi	JB	Υ	Observer	ESB PG
Brian Mongan	BM	Υ	Observer	AES
Conor O'Doherty	CO'D	Υ	TSO Observer	SONI
Karen Creighton	KC	Υ	TSO Observer	SONI
David Mccartney	DM	Y	Observer	Power NI Energy Ltd (PBB)
Tom McCartan	TMcC	Y	TSO Observer	SONI
Angela Blair	AB	Y	Observer	Power NI Energy Ltd (PBB)
Lee Donovan	LD	Y	SONI Secretary	CMS

INTRODUCTION TO GCRP MEETING & APPROVAL OF MINUTES

- BW (SONI Chair) welcomed all panel members, alternates and observers. A round table of attendee introductions took place.
- The JGCRP members approved the Minutes from the JGCRP Meeting held on 4 Dec 2012 (Dublin) subject to the comments received.
- KOK 1 (ESB PG) sought a clarification relating to the discussion on RoCoF as reported in the
 Minutes (page 3, last sentence of paragraph 1). KOK 1 (ESB PG) enquired if the 'further studies'
 referred to the KEMA studies or other studies. BW (SONI Chair) clarified that the 'further studies'
 referred to studies that are to be carried out by the OEMs. KOK 1 (ESB PG) also queried if the
 'further studies' will take place before the new RoCoF obligations are implemented.
- ROR (CER) confirmed that the CER have received the modification proposal and the Generator submissions. The CER expect to make a decision in quarter two 2013 but it has yet to be decided if immediate implementation will take place. KOK 1 (ESB PG) asked if the additional studies will be considered as part of the CER decision and ROR (CER) noted that it will depend on the timing.

MPID 240 Demand Side Units

KOK 2 (EirGrid) stepped through the SDCs section (the section applicable to both the EirGrid Grid
Code and the SONI Grid Code of the modification proposal. A link to the proposal, as presented
at the GCRP, is available here.

- KOK 2 (EirGrid) proposed presenting the remainder of the proposal at the EirGrid GCRP meeting. Amendments were made to the original proposal following a prior meeting with DSU representatives.
- BW (SONI Chair) noted that SONI anticipate having a SONI Grid Code Demand Side Unit Proposal prepared within the next two weeks and it will go through the normal Grid Code Modification procedure.
- No comments were raised by the panel members.

ENTSO-E Network Codes Development Plan

- AR (EirGrid) presented slides on a development plan for the ENTSO-E Network Codes. The
 presentation is available here.
- BW (SONI Chair) noted that the TSOs are making substantial commitment to the ENTSO-E
 Network Codes in terms of participation and reviewing documents. He encouraged panel
 members to take the opportunity to review the codes and participate in discussions.
- DMcB (AES) queried how much of the Grid Code will change? What is the expectation?
- AR (EirGrid) noted that there are exhaustive and non-exhaustive clauses. Exhaustive clauses
 must be implemented into the Grid Codes and non-exhaustive will be up to the individual country.
 It will all have to line up and it will take a considerable amount of work.
- DM (PPB) remarked on how Generators would like to have an opportunity to give input/feedback and suggested the organisation of workshops.
- AR (EirGrid) anticipates that the TSO will have a process in place by the end of the year. The
 Network Codes will go through a commitology process which could take up to a year; and
 following commitology there will be a three year implementation phase. ENTSO-E is seeking a
 process to be in place relatively soon, they will use the RFGs as a trial to ensure that the process
 works. Once that is successfully achieved the process will be repeated for the other 11 Network
 Codes.
- BS (SSEG) raised the question if the TSO will be responsible for the management of the Code and will Europe monitor each country or will it be up to the individual TSO?
- ROR (CER) noted that primarily it will be the National Regulators but the overall compliance of member states will be overseen by ACER. Derogations from sections of the code for a member state will be reviewed by ACER.
- BS (SSEG) queried if EirGrid and SONI will use this exercise to harmonise the codes.
- JOS (EirGrid Chair) noted that we will move towards similar standards.

DS3 Update:

- JOS (EirGrid Chair) gave a high level DS3 update to the members:
 - System Services bi-laterals have concluded. Aggregated data published as requested by participants. The TSOs are aiming to get a full report of recommendations to the Regulators by end of March to include a full summary of the

consultation and the TSOs response to the consultation. A detailed modelling report is also due to go to the Regulators. The Regulators aim to propose a decision in June through the SEM committee with a final decision in September.

EirGrid commissioned KEMA to carry out RoCoF studies. The RoCoF modification proposal and Generator submissions have been submitted to the Regulators. The 2 Hz/s for the NI Grid Code until the additional N-S tie-line is commissioned, has been removed from the proposal and currently stands at 1 Hz/s until the additional N-S tie-line is commissioned. The TSOs will review the 2 Hz/s proposal subject to the findings of the KEMA study. This will hopefully be closed within the next six months.

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Comment [t1]: Move wording within the sentence

- DS3 is now moving into Operational Policy Frequency and Voltage control. A major part of work will be on the Voltage Control with the DSO. Currently a lot of detailed analysis is being carried out on Frequency Control – it is anticipated that within 12 months an inertia policy will be in place in the control centres.
- o TSOs are currently scoping out an enhanced Performance Monitoring System.
- An Industry Forum is due to take place on the 27th March but this date is subject to change because it clashes with an IWEA conference. The new date will be advised.
- o An Advisory Council meeting is due to take place 19th March.
- DM (PPB) observed the need for a greater working relationship between gas and electricity (at department level, governance and industry). A meeting took place last week in Northern Ireland to discuss a gas modification regarding a 4 hour effective time for re-nomination of gas and this has implications/barrier for DS3 type products.
- JOS (EirGrid Chair) accepts the interaction. DS3 products/incentives should drive the management of the imbalances.
- BW (SONI Chair) suggested that this is an appropriate item for discussion at the upcoming Generator Forum (Belfast). He invited Generators to volunteer to present on this at the forum, the agenda for the forum has yet to be finalised.

RoCoF - KEMA Study

- WU (KEMA) presented the findings of the KEMA report on RoCoF. The slides are available here. The study was commissioned by EirGrid. The report analysed RoCoF standards on typical Generation, north and south of Ireland, using a theoretical machine. The report demonstrated that at I Hz/s that no theoretical evidence or undue forces caused instability, however stability issues did occur at full leading power factor (0.93). KEMA has recognised that further studies are required on individual Generators and the TSOs will continue to carry out further studies on 2 Hz/s.
- Following the presentation on the report detailed interaction took place between the JGCRP members and WU (KEMA) on many aspects of the studies, to highlight some:
- KOK 1 (ESB PG) remarked that the report justifies the concerns that Generators have had to date on RoCoF and the report recommends further analysis. ESB PG supports this and would like to formally respond to the TSOs position.

Comment [t2]: Defined set of machines

Comment [t3]: 1

Comment [t4]: Delete

Comment [t5]: by

- JOS (EirGrid Chair) noted that the TSOs accept that Generators feel the need to carry out their
 own studies. The TSOs have previously stated that there will be no movement on the RoCoF
 standard until evidence is provided by Generators. He also noted that this report does not
 support the possible catastrophic failure and the long term wear and tear of plant.
- JOS (EirGrid Chair) advised that a standard being implemented in advance of the Generator studies is a matter for the Regulators.
- KOK 1 (ESB PG) pointed out that ESB PG do not understand a new standard being implemented
 in the Grid Code before the studies are complete because it forces Generators to apply for
 derogations for something that they cannot confirm compliance with.
- JMcA (SSER) queried how will the CER make a decision and will the decision include information on the recovery of costs of the studies.
- ROR (CER) advised that the decision will cover the approval/non-approval of the modification, the implementation arrangements surrounding the modification, and cost recovery, if any.
- DM (PPB) queried if NI would have an operational limit of 50% SNSP until the second tie-line is built. BW (SONI Chair) replied that this was not necessarily the case and that further investigations were ongoing.
- GH (NIE) responded that there it is difficult to quantify a time line for the building of the second interconnector planning permission still in session however it is currently scheduled for 2017.
- CD (Wind Prospect) noted that the controllable and non-controllable status of wind farms is
 published on the EirGrid website. Non controllable wind farms are named and shamed. He also
 noted that non compliant conventional Generators are preventing wind farms from connecting to
 the system.
- JOS (EirGrid Chair) advised that 500 MW of wind in Ireland is exempt from the Grid Code and some non compliant capabilities of wind farms are part of the need for a new RoCoF standard.
 All of this is a new paradigm challenge and we all have to play our part.
- SW (DSO) advised that the DSO will commence their programme of work with the larger units on
 the system in order to capture as much of the MW as possible. Alternatives such as Vector Shift
 will have to be looked at for any non compliant Generators and a list of non compliant Generators
 will be compiled. 38 kV wind farms will be looked at first.
- JOS (EirGrid Chair) advised that depending on the CER decision that a considerable amount of interaction may be required between the TSOs and the DSOs.
- SW (DSO) noted that if a Generator has a real problem with anything greater than 0.5 Hz they
 must declare it and they will be put on a list of non compliant generators. In principle the DSO
 will not support a derogation unless the Generator can prove it is physically impossible or it is too
 expensive.
- SW (DSO) noted that the DSO has a protection strategy in place. Currently there are so much small scale generators on the system that in aggregate they need to ride through the faults and be more tolerant.

Comment [t6]: tie-line

Update on European Codes

ST (EirGrid) presented slides on a development plan for the ENTSO-E Network Codes. The
presentation is available here.

<u>AOB</u>

- BW (SONI Chair) provided an updated on the Fail to Sync consultation and a decision was pending the resolution of a dispute between one of the Generators and SONI. NIAUR has now ruled in favour of the Generator and both parties can now move towards making a settlement.
- AT (EirGrid) advised that a briefing session with the industry will take place Q2 2013 on the Enhanced Performance Monitoring Project. Invites will be sent to the JGCRP Members and the DS3 circulation list. A short update will be provided at the next JGCRP meeting in May.

