DS3 Programme Advisory Council Meeting Minutes

Date: 24/01/2017
Time: 10:00 – 15:45
Venue: The Oval, Dublin
Chair: Jon O' Sullivan
Attendees:

Full Name	Company/Organisation
Mo Cloonan	CRU
Bobby Smith	CRU
G.Mc Trevor	DCCAE
Paul Ahern	DCCAE
Gerald McTiernan	DCCAE
Michael Conlon	DIT
Paddy Finn	Electricity Exchange
Peter Harte	Element Power
Jag Basi	ESB
Tony Hearne	ESBN
Carsten Junge	GE
David Connolly	IWEA
Ronan Mullan	Mullan Grid
Graham Stein	National Grid
Rodney Ballentine	NIE
Peter Thomas	Nordex
Patrick Mohr	NTMA
Joe Duddy	RES
Cathal Martin	SSE Renewables
Donal Smith	Switchedin
Colin Darcy	Tynagh
Andrew McCorriston	UReg

Apologies:

David Connolly, Denis McBride, Jo Aston, Mark O'Malley and Paul Bell.

Industry Perspective – Paul Ahern, DCCAE

- Presentation gives a summary of the Policy Design and planning phase of the Renewable Electricity Support Scheme (RESS). Acknowledgement that as consultation responses are still being reviewed, no update can be given yet on the outcome. Stressed that cost effectiveness for the consumer is the core policy principle, while balancing other criteria.
- DCCAE acknowledged assumptions were made in the report. Outputs of the report included:
    - Community engagement - Outcome could see support given to developers.
    - Importance of a trusted intermediary in promoting communities engagement highlighted. Discussion held on the UK experience of community focus for renewable supports and potential risks and issues.
    - Auction Mechanism - based on ownership, scale, location, capacity, and access to the grid.
        - Technology - neutral or technology specific auctions. There was general agreement on the importance of clarity for the investment sector.
- The full report is available on the DCCAE website. Ongoing discussion with the RA for the need to manage competition and risks.
- DCCAE acknowledged EirGrid/SONI's submission on RESS and the use of DS3 payments in regards to the price auctions and the billing strategy, as well as the points made about the challenges involved in community engagement and appropriate use of the grid.
        - TSO raised potential challenges with regard to technology neutral approach. With suitable period of warning Grid Code can be changed to meet the needs of specific technologies connecting to the network.

Industry Perspective – Peter Harte, IWEA

- Presentation given on the Irish Wind Energy Association (IWEA) key concerns for wind related to DS3. Supportive of the 75% SNSP and the alignment of the grid with DS3 technology. General agreement that EirGrid and SONI are continually improving curtailment issues.
    - Concerns raised over the potential delays around connection process ECP 1. Suggested that those that have already been included in DS3 be ranked and the top would qualify for competitions.
    - Request made by IWEA for a cost effectiveness study on SIR payments.
    - Concerns raised on curtailment caused by conventional generation at min Gen.
- TSO clarified that Generators are not the cause of curtailment of wind – these are likely to be positioned negative reserve balance and protecting the grid.
- TSO highlighted that operational policy changes require trials. Trials are ongoing for the mid-2020 scenarios, EirGrid/SONI looking at the 2030 system.

- Industry raised concerns over the amount of minor changes to Grid Code compliance. Due to the large amount of testing with RoCoF, it is difficult to justify the cost of minor changes in a business case.
    - TSO recognises this, hoping to move toward extensive monitoring instead, while moving prudently on a soft launch of EPMS phase 1 and System Services.

DS3 Programme Status Update – Ian Connaughton, EirGrid

- Update given which covered the success of launching the 65% SNSP trial. Noted that a new All Island wind record has been reached. Noted that there will be a six-month freeze on Control Centre changes as required for I-SEM go-live.
- A query was raised about location preference for tenders and policies.
    - TSO response - Constraints on a competition for certain services is possible depending on technical requirement. Question raised on guarantees made in relation to service providers begin constraint, would the consumer or the investors take on the risk? This will need to be addressed with the RA.

Rate of Change of Frequency (RoCoF) – TSO Update – John Young, EirGrid

- An update was given on the units that are behind schedule and the issues remaining in Ireland and Northern Ireland.
- It was recognised that a number of large units were behind schedule, in most cases to do with specific complications for the generators.
- Increased engagement with all parties has taken place and continued effort on what needs be done to get the remaining units over the line.
    - EirGrid/SONI acknowledged the hard work done on all sides to get here.
- Concern raised over the red RAG status on SSG in NI but not the Large Generators in NI and IE.
    - TSO acknowledge query and will consider appropriate status.
- **Action:** EirGrid/SONI to review and update RoCoF RAG status.

Rate of Change of Frequency (RoCoF) – NIE N Update – Rodney Ballentine, NIE Networks

- An overview of NIE Network RoCoF status was outlined. Since last Friday, 90% of MW from LSG has been successfully changed.
- Recent SSG consultation closed with three responses received.
- Next step, to agree methodology for addressing the 1,000 SSG sites.
    - Discussion held on potential solutions. Key enablers could include an outsourced resource to support stakeholders to make the required changes. It was noted that NIE Networks does not have funding to provide this service.
- The expected timescale for modifying SSG interface settings is approximately 18 months.
    - RA will review this with NIE Networks & the TSO. SEM committee required to make any decisions on an All-Ireland course of action.

- Acknowledged that RoCoF could cause a significant delay to the 2020 deadline and affect the success of the Control Centre Tools work stream.
    - Suggestions were made including; RA sending out the letters to SSG stakeholders and the sanction of temporary disconnection for non-compliance etc.
    - It was pointed out that any network charges that place penalties based on non-compliance issues for different types of users in Northern Ireland would need to be made by the Department for the Economy.
- Industry questioned if the RoCoF will be re-evaluated? How to incentivise the late large Generators to meet RoCoF modification?
    - TSO: RoCoF timelines will be reviewed and modified if needed. Generators need to be ready for the new RoCoF standard and GPI is continued for those that have missed the deadline.
- **Action:** EirGrid/SONI will review the impact of a RoCoF timeline change.

Rate of Change of Frequency (RoCoF) - ESB N Update – Tony Hearne, ESB Networks

- An overview of ESB Network RoCoF status was outlined. Almost all wind is now complete and non-wind is ahead of target.
- Recognised that some issues need to be addressed with a small number of sites.

Over-Frequency Generation Shedding Schedule (OFGS) - Eoin Sweeney, EirGrid

- Background and rationale for this piece of work provided. It was explained that the outcome of OFGS will be the 'Enduring Scheme'. In the meantime, the 'Interim Scheme' is in place.
- An overview was given on the completion of the EWIC 500 Trial. TSO highlighted the positive results of the trail.
- Next steps: Summary report of the OFGS will be published in the coming weeks.
    - Query made on whether all wind sites in Ireland have changed their OFGS settings.
- **Action:** EirGrid/SONI to engage with ESB Networks on OFGS settings and provide update at the next DS3 Advisory council.

Nodal Controller – TSO Update – Barry O'Connell, EirGrid

- Presentation given on the Nodal Controller project, explaining the need for SSRP. Explained how there will be a reduction in online reactive power by 2020. There is 50% of wind generation connected to the distribution system in Ireland and 90% in Northern Ireland. At the moment, TSO do not have access to reactive power from these wind farms. The nodal controller will allow the TSOs access this capability while maintaining limits on the Distribution system.
- NIE gave an overview of the Northern Ireland pilot project at Magherakeel. The project is likely to be run in June 2018 and will take 1 year to prove.
- ESB gave an overview of the pilot project in Ireland at Cauteen. The trial is due to go live in January 2018 and will run through until May 2018.

Nodal Controller – NIE Networks – Rodney Ballentine, NIE Networks

- Presentation given setting out on overview of Northern Ireland Nodal Controller. The trial is using substations for stable operation. The Nodal controller could see a 20% improvement of unit's capabilities.
- The trial should see enough information collected to create a cost effective business case that will help turbine owners with their decision to engage.
- Overview of timelines given. A significant period will be Phase 3, when a decision will need to be made on the mechanism.
- The trial has been successful so far but currently waiting for the Q2 results.

Nodal Controller – ESB Networks – Tony Hearne, ESB Networks

- An overview of ESB Networks three-layered approach for the Nodal Controller was given and included an update on the 2018 period. It was acknowledged that the algorithm being used is quite difficult and a review is being undertaken of the performance of each turbine.
- Steps within this trial are managed using a traffic light system. On completion of the trial, auto mode should see the Nodal Controller being able to run itself.
- Overview covered timelines, currently 1 year behind schedule. A constraint commission has begun, a joint report will be sent to the CRU, and then a wider rollout is needed.
- Next step: a workshop with IWEA for Type B windfarms.
    - A concern was raised that the Nodal Controller could cause network issues due to sudden changes in the unit's active output/reactive power.
- **Action:** ESB networks to give update on any potential network concerns caused by the Nodal Controller at next DS3 Advisory Council.

Future Interconnection Study – Noel Cunniffe, EirGrid

- Introduction given to the 'Future Interconnection study', which is a technical feasibility study on the possible addition of a 750 MW interconnector to the Ireland and Northern Ireland power system.
- It was noted that the studies are based on the 2025 Low Carbon Living scenario from Tomorrow's Energy Scenarios 2017.
- The study investigated under frequency and over frequency events following the loss of a 750 MW import and export. Issues relating to RoCoF, frequency nadirs and frequency zeniths were encountered. The study presented viable mitigation measures to these issues which are implementable within the timeframe of an interconnector connecting to the power system.
- The outcome of the over-frequency assessment links back into the earlier steps for the OFGS discussion.
- The results of the study have been socialised with PCI status interconnector developers and meetings are being with neighbouring TSOs in Great Britain and France.

EU SysFlex – Noel Cunniffe, EirGrid

- Update given on Work Package 2 of the EU SysFlex project, an EirGrid led Horizon 2020 project.
- The study looks at the 50% RES 2030 scenarios for Europe and investigates the technical scarcities on the Ireland and Northern Ireland power system and the wider EU power system with high RES in 2030. The study includes technical analysis and production cost modelling analysis. The project intends to provide a roadmap for Europe in integration high levels of RES onto the power system focused on addressing technical challenges, breaking down market and regulatory barriers.
- The first output of the study is a Literature Review assessment of studies taken from across Europe, the United States and Australia. This will be completed by April and the results will be presented to the forum.
- **Action:** EirGrid/SONI to provide update on SysFlex Literature review at next DS3 Advisory Council.
- EU SysFlex technology trials will begin in 2019. Output from this will feed information back into the modelling analysis later in the project.
- An outline was given of the other work packages, including the SONI led Work Package 4.

AOB:

- EirGrid/SONI is looking for suggestions for Advisory Council replacements. TSO will confirm new members before the next DS3 Advisory Council.
- **Action:** EirGrid will send out a list of open membership positions for the DS3 Advisory Council.

Actions:

Action: EirGrid/SONI to review and update RoCoF RAG status.

Action: EirGrid/SONI will review the impact of a RoCoF timeline change.

Action: EirGrid/SONI to engage with ESB Networks on OFGS settings and provide update at the next DS3 Advisory Council.

Action: ESB networks to give update on any potential network concerns caused by the Nodal Controller at next Advisory Council.

Action: EirGrid/SONI to provide update on SysFlex Literature review at next DS3 Advisory Council.

Action: EirGrid will send out a list of open membership positions for the DS3 Advisory Council.