

DS3 Programme Advisory Council Meeting Minutes

Date: 24/05/2016
Time: 10:30 – 15:30
Venue: The Mount Conference Centre, Belfast.
Chair: Robin McCormick
Attendees

Name	Surname	Organisation
Rodney	Ballentine	NIE
Robert	O'Rourke	CER
Conlon	Michael	DIT
Joe	Duddy	RES
Hearne	Tony	ESB
Andrew	McCorriston	UREGNI
Gerry	McTiernan	DCENR
Patrick	Mohr	NTMA
Grainne	O'Shea	ESB
Graham	Stein	National Grid
Peter	Thomas	Nordex
Jonathan	Pollock	NIE
David	Lindsay	CER
Willem	Uijlings	DNV GL
Mary	Doorly	IWEA
Robin	McCormick	EirGrid
Jon	O'Sullivan	EirGrid
David	Cashman	EirGrid
Ian	Connaughton	EirGrid
Eoin	Sweeney	EirGrid

Apologies:

Peter Harte, Colin Spain, Carsten Junge, Donal Smith, Kevin Chan, Paddy Finn, Graham Brennan, Mick Hogan, Mark McGranaghan.

Industry Perspective:

- JOS gave an update from Colin Spain who was absent from the council meeting at late notice. An outline of the key points of his presentation was given.
- Graham Stein gave an overview of his role in National Grid and how future system planning is carried out in Great Britain. The presentation outlined details on SOF (System Operability Framework) for 2016 and the EFCC (Enhanced Frequency Control Capability) project.

Action from the Last Meeting:

- David Cashman discussed actions from the last meeting.
- A presentation on inertia figures for the system was given. This included an overview of annual inertia duration curves and an average daily inertia heat-map for the last three years.
- There was discussion around membership of the Advisory Council and it was pointed out that there would be three conventional generator seats to be filled in advance of the next meeting.
- It was agreed to carry over both actions to the next meeting following further discussions on both. The action regarding membership has now changed slightly to cover an assessment of what roles and skillsets are missing from the advisory council going forward.

Action Items

1. TSOs to write to generators to investigate if there would be commercial sensitivities with publishing regular data (e.g. hourly) for the total system inertia. This could then be published on the EirGrid website in a similar manner to the frequency data **(TSOs)**
2. TSOs to publish the daily max, min and average inertia data and associated heat maps on the website whilst Action 1 above is being completed **(TSOs)**
3. Council members to provide feedback on membership of the Advisory Council. This should consider what skillsets would be useful for the council going forward considering longer term issues out to 2025 and beyond. **(All)**
4. TSOs to issue a request for submissions of applications to fill vacant positions on the council (currently 1 Renewable and 3 conventional positions vacant) **(TSOs)**
5. TSOs to provide an update at next Advisory Council on the System Wide RoCoF studies to date **(TSOs)**

DS3 Programme Update:

- The TSOs highlighted recent internal changes within EirGrid and that the DS3 programme will now fall under the remit of the newly formed Innovation Team of which Jon O'Sullivan (JOS) is manager.
- JOS highlighted that the current workstream plans which have been published this month provide a high level roadmap of the tasks to be implemented in DS3 over the coming years. A review of the key areas of focus is currently being performed and an update on future DS3 plans will be presented at the next council meeting in September. JOS raised the point that DS3 is not only about RoCoF and System Services, albeit these are important areas for industry. He stated the need to focus more generally on some of the other binding constraints which will be required to achieve our 2020 targets whilst keeping curtailment at acceptable levels.
- The 55% SNSP Operational Limit trial was completed and results showed no significant issues with the system being operated over 50% SNSP. The SNSP was above 50% for almost 10% of the trial period. Following the trial a new operational limit of 55% SNSP has been approved internally and came into effect in the control room in March 2016.
- The Operational Capability Outlook (OCO) was presented and discussed showing our projections for increasing the SNSP Operational limit up to 75% by 2020. JOS noted that he sees 60% SNSP limit by Q4 2016 as achievable but many of the major binding constraints

such as RoCoF and minimum number of sets need to be resolved to move to higher levels of SNSP Operational limit and beyond. JOS also noted that significant change will be taking place in the control centres over the coming years due to I-SEM implementation. It will be important to schedule changes due to SNSP around the changes taking place due to I-SEM.

- It was noted that the EU are currently looking at the ethics of priority dispatch as part of the upcoming winter outlook package which could potentially mean a phase out of priority dispatch over the coming years.

RoCoF:

Generator Studies Project:

- David Cashman provided an overview on the progress of the RoCoF implementation project.
- The generator studies are progressing with several reports received over recent weeks. The majority of Category 1 units are expected to submit on time. The deadline for submission of reports is Tuesday May 31st. The TSOs published the final report of the RoCoF Alternative Solutions Project in April. At this stage no further analysis is planned in this area but the report highlighted some solutions that could be employed if the generator studies or TSO-DSO project could not be implemented.
- The settlement system for GPI and remunerations is being finalised currently with a detailed generator testing programme currently being developed internally.

TSO-DSO Implementation Project:

- Since the previous Advisory Council meeting there has been little further engagement from embedded windfarms with 40% of MW still outstanding. DSOs have reiterated it is vitally important to get the remainder of these relays changed in the coming months.
- A meeting is planned with non-wind generator OEMs for the 30th May in Portlaoise to discuss the roll-out of new settings for these units. To date uptake of settings changes by these generators is slow.
- In Northern Ireland, Strathclyde University were appointed to carry out research into the risks of introducing up to 2Hz/s RoCoF protection settings for embedded generators using the same methodology as used in GB.
- The studies carried out by Strathclyde can be divided into four work packages with the first two work packages on DG Registers and Stability Analysis now complete and the final two work packages on schedule for completion. Results to date appear to indicate that any associated G59 amendments will be adequate for future system and generator conditions.
- In Northern Ireland, the consultation on RoCoF changes up to 2 Hz/s within 500ms has been completed with a “response to consultation” issued to the Utility Regulator and it was agreed after to implement the D-Code modification inline with any Grid Code modification.

System Services:

TSO Update:

- An update was given on the Interim and Enduring Project Plans by the TSOs. It was noted that the Interim Arrangements appear to be on course for 01 October 2016. The Auction design

decision was confirmed to be delayed by the SEMC on 23 May 2016. The timelines for a number of the enduring arrangements workstreams will now need to be reassessed given this.

- An industry forum and a bidders conference were held in April on the Interim Arrangements
- The Enduring Scalar design and Interim Tariffs consultation have closed and we are currently working through the responses.
- The Interim Procurement tender submission process is open and due to close on 25 May with a large number of submissions expected to be received.
- The specific details of the qualification trials are being developed currently with a consultation paper expected to issue over the next 1-2 weeks. The aim of the qualification trials is to allow new services to enter into the central procurement arrangements in a prudent manner whilst maintaining the reliability of the system. The first round of qualifier trials is expected for Q1 2017 which will cover the three new “fast” services and also prove that new technologies can provide some of the existing services.
- An update on the interim performance scalar methodologies was provided. Since initially outlining the detailed concepts of how to performance monitor during the interim arrangements, data packages based on historical data has been issued to existing HAS customers with an invitation to attend bilateral meetings to discuss the details of their package and the process more generally. The methodologies of interim performance monitoring are currently out for consultation with industry as part of the Interim Contracts consultation due to close on 03 June 2016.
- It was noted by some members of the advisory council that the calculation assumptions used in the Interim Tariffs consultation appear to show a reduction in revenue for some providing units on the existing 7 seven system services.
-

Regulatory Update:

- Robert O'Rourke (CER) – provided a Regulatory Authorities update on the Auction Design decision. The Auction Design will be reviewed again by the regulators. This will result in the Auction commencing from 2018 rather than 2017. The specifics of what this auction will look like are yet to be confirmed.
- A question was raised as to whether an Auction was needed and would the RA's be reconsidering this. It was pointed out that there are EU competition criteria which must be adhered to and it was the preference of the RAs to run some form of Auction.
- In relation to October 2017 it is still expected that parts of the enduring arrangements can proceed with some form of regulated tariff methodology used for all 14 services but the specifics of what this will be is yet to be confirmed.
- The RAs are seeking input from industry on what form of engagement would be suitable for developing the auction.

Smart Power Factor Study:

- Eoin Sweeney (EirGrid) presented on the results of the Smart Power Factor study trial which began in April 2016.
- The purpose of the trial is to reduce the Mvar range seen at the 110 kV connection point (Omagh 110 kV in this specific example) and thus provide a more predictable Mvar profile at the transmission level.
- To date the trial has been ongoing for close to one month and the results so far appear to indicate that the trial results match closely to what was assumed in the simulations. Also, there have been no signs of stability issues at the windfarms themselves during the trial period.

Assessment of higher RoCoF events on demand Customers:

- Willem Uijlings (DNV GL) provided a summary on his study of the impact of higher RoCoF settings on large demand customers.
- The study assessed potential issues that may arise for a number of different demand users for RoCoF levels up to 2 Hz/s. The results from the analysis appeared to show that in the majority of cases the risk of impact to a demand customer with respect to a 1 Hz/s RoCoF is low. Some power electronic controlled loads could be impacted by a RoCoF of 1 Hz/s if the controls or protections are not appropriately set. It was stated that this risk would be low given that most devices are employed in systems where RoCoF levels can vary.