DS3 Programme Advisory Council Meeting Minutes

Date: 19/05/2018
Time: 10:00 – 15:05
Venue: EirGrid, Dublin
Chair: Jon O' Sullivan
Attendees:

Full Name	Company/Organisation
Paul Blount	ABO Wind Ireland LTD
Bobby Smith	CRU
Robert O'Rourke	CRU
Harry Molloy	CRU
Paul Ahern	DCCAE
Peter Harte	Element Power
Jag Basi	ESB
Tony Hearne	ESB N
Carsten Junge	GE
Peter Kavanagh	ISEA
Anne-Marie McCague	IWEA
Rodney Ballentine	NIE Networks
David Hill	NIE Networks
Olivier Neu	SEAI
Donal Smith	Switchedin
Andrew McCorriston	UReg
Rory Mullan	NIRIG
Karen O'Doherty	SONI
Jon O' Sullivan	EirGrid
Ian Connaughton	EirGrid
John Young	EirGrid
Noel Cunniffe	EirGrid
Eoin Clifford	EirGrid
Lorraine Whyte	EirGrid
Daniel Dixon	EirGrid
Peter Wall	EirGrid

Apologies:

Colin Darcy, Graham Stein, Graham Brennan, Federico Rueda Londono, Joe Duddy, David Connolly, Mark McGranaghan, and Paddy Finn.

Industry Perspective – Peter Kavanagh, ISEA

- The current favourable environment for solar in Ireland was noted.
- ISEA comments on the RESS policy document were discussed.
    - *Auction Structure:* ISEA had sought a technology specific auction, as they feel a technology neutral auction in the absence of price discovery may lead to inappropriate outcomes as noted in recent UK auctions.
    - *Eligibility Criteria*: ISEA consider that projects should require land rights, generator planning consent and a signed grid connection agreement in order to qualify for a RESS auction. ISEA believe the current auction timelines, connection fees and bonding requirements are unattractive to investment.
    - *Timelines:* Suggested that deadlines for delivery of connection be more flexible with erosion of support, bid bonds and long stops used to incentives project delivery rather than simple deadline.
        - Suggested that auction timelines be aligned with PSO.
    - *Community element:* ISEA emphasised that they support the community element. PK noted that IWEA have a community template available on their website for companies to avail of.
        - How would engagement be measured in the tendering process? ISEA suggest a standardised approach to ensure projects with higher uptakes are not disadvantaged in the auction process.
        - It was noted that care was required in order to define community accurately and ensure the integrity of the community auction, with learnings from other jurisdictions available.
- Industry queried solar's plans to avail of DS3 System Services funding.
    - Invertors solar have the technical capability to provide some DS3 services, but ISEA are unaware of units who have short-term business plans focused on DS3 System Services revenue.
- Discussion held on the 2010 SEM Committee decision regarding the priority dispatch of renewables and its impact on the TSO ability to control the system.
    - Noted that the RES auction will see a large increase in solar on the system, sooner than the TSO originally expected.
    - Discussion held on constraints and curtailment.
    - TSO noted the importance of an appropriate design structure while also ensuring the resilience of the power system.

Dispatch and Balancing Costs – Peter Harte, Element Power

- An overview of the presentation on operational constraints and dispatch was provided.
- Industry would like to see other metrics being used to gauge the success of the energy market – not on a purely cost perspective.
- Industry suggested a different perspective, the system could potentially operate with no conventionals and at 100% SNSP.

- Industry noted that this was simply a thought exercise for the DS3 Advisory Council to discuss and investment in grid infrastructure to allow for these potential options would need to be included in the analysis.
- Industry sees a need for a dynamic market with options/products available for tender in both the DS3 and I-SEM market. Industry explained that a restricted market, which removes market incentives, will result in participants leaving the sector and causing unintended problems for the TSO to address.

DS3 Programme Status Update – Ian Connaughton, EirGrid

- TSO discussed the DS3 Advisory Council status report.
  - Key programme achievements were discussed since the May DS3 Advisory Council.
- An update was given on the System Services procurements - Regulated Arrangements Procurement (11 Services) and the new Regulated Arrangements Procurement service, FFR.
- The programme timelines were discussed.
  - Current challenges were acknowledged by the TSO, including the tight timeline for the development of the business requirements for Market to Physical, the contract consultation and OJEU notice for Volume Capped, and the delayed 2018 QtP trial.
  - The impact of Brexit was also noted as a potential risk to the programme.

Action: TSO to present on the top programme risks at the next Advisory Council.

DS3 Transitional Plan – Karen O'Doherty, SONI

- TSO provided an overview of the 2017 published DS3 work stream plans.
  - The overall propose of DS3 was reviewed.
  - TSO provided an update on the status of the programme.
- The proposed restructure was shown to the Advisory Council. The restructure aims to offer clarity on the deliverables and who is responsible for the deliverables.
  - 70% & 75% SNSP replan is included.
  - Discussion held on 2019 timelines.
- The TSO will publish the DS3 close out reports and programme replan in October 2018.

Volume Capped – John Young, EirGrid

- An overview was given by the TSO on the recently published SEM Committee decision paper on the System Services Volume Capped procurement.
  - The new timeline was presented.
  - Stakeholder engagement and more communication with industry is planned.
- Next steps include a contract consultation in October, which will last 6 weeks.
- The TSO noted that the need for future procurement needs will be reviewed looking holistically across all arrangements.

2018 QtP Trial – Daniel Dixon, EirGrid

- The TSO provided an explanation of the Qualification Trials Process (QtP).
- TSO gave an overview of the 2017 trial and the lessons learnt. The report is available here.
- The 2018 QtP aims to look at solar, DSO/TSO interactions and other technologies.
    - DD emphasised that the TSO will be focusing on collaboration with the DSO, as it is expected that more services will be coming in at a distribution system level.
- Industry would like to see more engagement between the TSO and the 2017 QtP participants to ensure that their learnings have been addressed in the future trials.
- DSO emphasised the need for early engagement with the TSO on QtP and other related issues.
    - The TSO acknowledged this.
- It was clarified by the TSO that solar reserve capability could be tested in the next QtP.

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

- An overview of RoCoF was given by the TSO – 67% across both jurisdictions is now RoCoF compliant.
    - There are units behind schedule and issues remain in Ireland and Northern Ireland. However, the TSO hopes that by the next Advisory Council, a number of large units will have become RoCoF compliant.

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

- An overview of ESB Network RoCoF status was outlined - wind is now considered complete.
- Non-wind is on track: 292 MW out of 330 MW complete.

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

- An overview of NI RoCoF status was outlined by RB: 98% or 1.1 GW of Large Scale Generation has now been successfully changed. 4 sites remaining - these sites are expected to test in October 2018.
- A RoCoF update was given on the 1,500 Small Scale Generation (SSG) sites.
    - NIE Networks have assigned 20 G59 approved contractors, contact details are available on the NIE N website.
    - 976 sites have returned their letters to NIE N, worth approx. 301 MW.
        - Changes complete now stands at 5.9%.
    - It was noted that 500 sites have not responded.
        - Discussion ongoing with the UR on the best way to address this cohort.
        - Non-compliance of the D code can lead to disconnection, but it was noted that this would be a decision for the UR.
- Concern raised by industry on the effects of the delay and the financial impacts as a result of this.
    - Was noted that the cost of RoCoF compliance is small in comparison to wind curtailment (cost by site is expected at approx. £500).

- Issues with payment of RoCoF changes to SSG units were acknowledged, as those who have already completed RoCoF changes could be entitled to the same level of remuneration.

RoCoF Analysis 2018 - 2019 – Noel Cunniffe, EirGrid

- The TSO provided an overview of an All Island study based on RoCoF not moving. This was in response to the DS3 Advisory Council in May requesting to see the financial cost of the SNSP delay and replan (due to an increased curtailment placed on wind).
- The study showed a 6% increase in curtailment if the RoCoF limit remains at 0.5 Hz.
  - SNSP will remain at 65%.
  - To maintain inertia on the system, conventional generators will be constrained on more often.
- A new study will measure the amount of RoCoF non-compliant generation the system could withstand. The results of this study are expected in Q1 2019.

Action: TSO to present on finding of RoCoF study: the tolerable level of MW non-compliant at the next Advisory Council.

- DSO welcomes the revisit of the 40 MW limit.
- DSO is concerned as it lacks visibility of certain wind farms on the system.
- Industry emphasised the need for consistency of application regarding RoCoF, as non-complaint generators are still occurring GPI.
- TSO informed the Advisory Council, that a tri party discussion on SSG will take place between SONI, the UR and NIE Networks to agree next steps.

Oscillations – Peter Wall, EirGrid

- The study focused on observing the Very Low Frequency (VLF) oscillations over the last five months: Jan to May 2018. 3% of that period reported VLF oscillations on the system.
  - It was noted that this behaviour was first seen on the system in late 2009.
- The TSO discussed examples of VLF– 7 minutes of oscillation was presented.
- Summary of the current operational protocol for managing oscillations was given.
  - Discussion held on Active Power Control (APC) from wind farms.
  - Future study may create a model to investigate how APC reacts to larger oscillations.
- Industry noted that oscillations have been seen in North America.

Action: TSO to engage with industry on lessons learnt from oscillation in North America.

- The TSO explained that inertia and SNSP are not causing the oscillation; instead they're being witnessed at periods of moderate system levels.
- Next steps include creating models for future analysis, looking at the combination of generators, and the prioritisation of the use of APC by the Control Centre.
- Industry have concerns over the use of APC and its impact on wind revenue.

    - TSO is aware of these concerns, and noted that APC is only used when EWIC is exporting above 300 MW.
    - The TSO will also look into the possibility of a rotational system for APC in future.
    - TSO has recently engaged with several other TSOs on this topic.

EU SysFlex – Noel Cunniffe, EirGrid

- The TSO provided an overview of the EU SysFlex project and the aims of Work Package (WP) 2, the presentation focused on Task 2.2, 2.3 and 2.4.
    - Studies vary considerably in their installed RES capacity – from 6.5 GW to 15 GW.
    - Industry noted issues previously encountered with the WECC2 models.
        - TSO is aware of this issue and is undertaking its own review of the material.
        - NC emphasised that results presented are from draft simulations.
- The study investigates RoCoF remaining at 1 Hz/s for the island of Ireland and the effects this would have on SNSP and inertia levels.
    - TSO stated that the progress being completed on the island of Ireland for 2020 is significant in comparison to other system and their plans for 2030.
    - The TSO has been engaging with DCCAE on the National Energy & Climate Plan, 2030 RES-E targets, and the RESS auction design.
- Next steps were discussed; the study will consider production costs alongside other analysis such as societal benefits.
    - The TSO will request input and comment from industry over the next year.
    - The study will look at the marginal cost regarding market price considerations.
- Noted that the study takes interconnector trading into its considerations.
    - Industry raised the issue of accurate modelling of interconnector trading.

Action: TSO to present at the next Advisory Council on the continued draft EU-SysFlex results, and bring forward any uncertainties to the Advisory Council for comment.

AOB:

N/A.

Actions:

- **Action:** TSO to present on the top programme risks at the next Advisory Council.
- **Action:** TSO to present on finding of RoCoF study: the tolerable level of MW non-compliant at the next Advisory Council.
- **Action:** TSO to engage with industry on lessons learnt from oscillation in North America.
- **Action:** TSO to present at the next Advisory Council on the continued draft EU-SysFlex results, and bring forward any uncertainties to the Advisory Council for comment.