

## DS3 Programme Advisory Council Meeting Minutes

**Date:** 21/09/2016  
**Time:** 10:30 – 15:30  
**Venue:** The Sandymount Hotel  
**Chair:** Jon O' Sullivan  
**Attendees**

Name	Surname	Organisation
<b>Rodney</b>	Ballentine	NIE
<b>Robert</b>	O'Rourke	CER
<b>Michael</b>	Conlon	DIT
<b>Joe</b>	Duddy	RES
<b>Tony</b>	Hearne	ESB
<b>Andrew</b>	McCorriston	UREGNI
<b>Gerry</b>	McTiernan	DCENR
<b>Patrick</b>	Mohr	NTMA
<b>Jag</b>	Basi	ESBI
<b>Graham</b>	Stein	National Grid
<b>Peter</b>	Thomas	Nordex
<b>Peter</b>	Harte	Element Power
<b>Mo</b>	Cloonan	CER
<b>Carsten</b>	Junge	GE
<b>Paddy</b>	Finn	Electricity Exchange
<b>Colin</b>	Spain	GAELECTRIC
<b>Graham</b>	Brennan	SEAI
<b>Donal</b>	Smith	Bord Gais
<b>Brian</b>	Carroll	DCENR
<b>Colm</b>	O Conaill	DCENR
<b>Jane</b>	McArdle	SSE
<b>Denis</b>	McBride	AES
<b>Colin</b>	D'Arcy	Tynagh Energy
<b>Bob</b>	Hanna	DCENR
<b>Jon</b>	O'Sullivan	EirGrid
<b>David</b>	Cashman	EirGrid
<b>Ian</b>	Connaughton	EirGrid
<b>Diarmaid</b>	Gillespie	EirGrid

**Apologies:**  
 Mark McGranaghan, Mary Doorly

## Industry Perspective:

- Graham Brennan delivered a presentation describing SEAI's All Electric Aran Islands Project. The presentation outlined the history of the project regarding the initial studies that took place, the EV three year trial and the community energy efficiency program progress to date.
- Jag Basi presented to the council on his views of the importance of correct prices, signals and incentives to be set when considering the implementation of system services for the DS3 program. Concerns were highlighted over whether regulatory tariffs will allow the market to operate correctly.
- Colin Spain next gave a presentation on DS3's auction design from a new entrant perspective. The presentation highlighted that new entrants need to have their risk highlighted to them. Colin Spain commented on the great technical work completed for DS3 and highlights the concern that procurement and commercial models don't allocate risk appropriately. It was stated that DS3 needs to consider new entrants moving forward, and recommends a separation of existing participants and new entrants

## Actions from the Last Meeting:

David Cashman discussed actions from the last meeting.

- Four years of total system inertia for 15 minute intervals has been published to the EirGrid box folder for public viewing. A graph presenting the system inertia and SNSP for a sample week is shown.
- The new Advisory Council members that have filled the vacant four positions were introduced.
- Updates on the system wide RoCoF studies were provided as part of the RoCoF studies presentation.

## DS3 Programme Update:

Jon O'Sullivan provided an update to the Advisory Council on the re-structuring of the approach of the DS3 program to achieving its goals.

- JOS outlined that industry must refocus with regard to the overall objectives of the DS3 program.
- DS3 needs to increase the capacity of wind on the system to meet policy objectives while maintaining curtailment at an acceptable level.
- JOS highlighted the requirement for significant changes for the next number of years to allow for operations at higher levels of renewables. This includes changes to operational metrics such as SNSP, system inertia and the number of sets running on the island. DS3 needs to be considered in terms of these objectives rather than just deliverables in the work stream plans.
- It was pointed out that there are several interdependencies with the implementation of the ISEM project. DS3 project plans will need to reflect the delivery of ISEM and consider possible interactions between the projects. DS3 deliverables to the control centres will need to be coordinated with ISEM.
- JOS proposed that future reporting on DS3 will be in the context of DS3 outcomes rather than individual work streams and deliverables. The Advisory Council agreed with this approach.

- There was a discussion around new connections and technologies that could impact system operation beyond 2020. It was proposed that DS3 needs to consider system impacts that are beyond 2020. This includes increased solar and demand side participation. It was proposed that the Advisory Council would consider these areas under their remit and that increased membership may be required. There was broad agreement that the Advisory Council should consider system operations challenges beyond 2020.

## **RoCoF:**

### **Generator Studies Project:**

David Cashman provided an overview on the progress of the RoCoF implementation project.

- The TSOs have reviewed reports from Category 1 generators that have submitted their RoCoF generator studies. These units are now in a six month testing process which requires generators to conclude testing by 1st March 2017. Some generators have indicated that controller upgrades are required to meet the new standard and may need additional time to complete the testing process.
- There was a discussion regarding the study submissions and the generator consensus to the standard. DC stated that responses have typically been that it will be possible to reach the 1 Hz/s RoCoF target.
- Three generators have completed the RoCoF testing process and have been issued contracts for the RoCoF remuneration scheme. Payments to generators from this scheme occur when generators have completed testing and will be backdated to the date of submission of the study report.
- It was noted that the study on impact of RoCoF on Demand Customers has been finalised and is available for review on the TSO website. A point was raised whether the TSOs would be doing further investigations in this area. The TSOs noted that they will be engaging with demand customers through the RoCoF process and will consider further work in the area.

### **TSO-DSO Implementation Project:**

David Cashman, Tony Hearne and Rodney Ballentine provided individual overviews on the progress of the TSO-DSO implementation project.

- Currently 50% of setting changes rolled out to wind farm sites in Ireland. There are currently on-going discussions with non-wind embedded generators, with TH concerned regarding the difficulty in getting engagement because of a lack of an incentive for these sites.
- The University of Strathclyde have completed studies on large scale WP 1-3 generation in NI. Results of sensitivity analysis were presented based on the research completed on risks of fatalities and out of phase re-closures due to islanding for a number of cases.
- Roll out of setting changes in NI to commence once NIE N have engaged with HSE NI and UR, which is due to happen in the coming weeks.

### **Voltage Control/ Reactive Power work stream:**

Tony Hearne gives an update on the ESNB voltage control and Reactive Power work stream

- ESB Networks have installed the Nodal Controller onsite in Cauten and are developing algorithms with the project vendor. The Nodal Controller project continues to advance despite issues regarding compliance with one of the proposed participants in the trial. Other sites are

also coming online and will be issued appropriate signalling requirements. It is expected that trialling of the nodal controller will commence in early 2017.

Rodney Ballentine gives an update on the NIE N voltage control and Reactive Power work stream

- NIE Networks have completed a study of embedded (non-cluster) controllable wind farm connections in Northern Ireland to assess how far lagging existing wind farms can be set to without breaching Distribution Code standards. Following discussions it has been agreed for NIE Networks to implement the proposed new settings for each windfarm.

## System Services:

### TSO Update:

Ian Connaughton provided an update on the System Services

- IC first provided an overall project progress update, outlining the milestones currently being worked through and the progress with the interim arrangements.
- The TSOs are currently at end of the procurement process, with a large volume of responses to procurement. All contracts were sent out last week.
- IC outlines that the central procurement process was open to any technology to enter. The QTP will allow for technologies to prove their performance capabilities and to prove how accessible they are to being measured in providing a service.
- QTP provides chance for those who didn't get accepted to the interim tariff process to prove their technologies. QTP hoped to begin in Q1 of 2017.
- Control centre tools additional changes for Oct 1<sup>st</sup> live date, are currently being implemented.
- Units were accepted or rejected from the interim arrangements based on the evidence they were able to provide to back up their submitted data for the procurement. The TSO felt that if sufficient evidence was there to prove and measure a capability, then it met the criteria. The method through which units were accepted or rejected for the Central Procurement Process was outlined.
- QTP will help fine tune performance metrics and settlements calculations, for the upcoming enduring arrangements.
- Concerns were highlighted by members regarding some of the key parts of the interim procurement process. Members highlighted that timelines were restrictive for getting agreement on figures in the schedule sections. It was recognised that the additional time granted did alleviate some of the issues. The TSO's will complete a lessons learned process in relation to central procurement the outcomes of which will feed into QTP and 2017 procurement processes.

### 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.

- The QTP paper and enduring arrangements are currently being considered by the RAs. The QTP paper has been delayed due to timelines for internal RA approval process. It was noted by a panel member that outcomes of these papers play a large part on the work of industry. It was important for industry to have foresight of specific dates for publication of these papers.
- A question was asked in relation to the potential for the interim tariffs to remain for next year. The regulator responded that 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.

### **Power Off & Save Project:**

David Phelan from Electric Ireland gave a presentation to the Advisory Council about Electric Ireland and EirGrid's Power Off and Save project.

- The aim of the project is for customers to reduce electricity costs while providing a service to support the electrical power system.
- The project launched earlier this year and trialling of dispatching customers is expected in October. The project will last for 18 months with the hope of sufficient events taking place so analysis can be done on customer behaviour when load reduction signals are sent. Customers will be contacted to reduce their load when an event occurs and can do this through manual switch off, using smart energy controllers or using smart heating systems.
- The project has potential to provide a number of different system services to the TSO and offers many valuable learning outcomes based on the customer response patterns.

### **Frequency control: Testing on EWIC at 500 MW exporting capacity**

Diarmaid Gillespie delivered an overview of EWIC testing and proposals for increasing the export capacity.

- Currently distribution wind farms have high frequency trip points at 50.5 Hz and transmission wind farms have high frequency trip points at 50.8 Hz. The long term plan is to push these high frequency trip points out in the future.
- The motivation for the over-frequency scheme is to increase the export limit on the island which will ultimately benefit the system through reduced DBC costs and reduced wind curtailment.
- The presentation outlined studies and system testing that have been carried out to date for increasing the export levels. Results were presented on recent system testing where EWIC was ramped from 500 MW to 0 MW to simulate a trip event. This testing helped validate previous study analysis and informed the TSO in terms of developing the interim over-frequency scheme.
- The TSOs hope to have an interim scheme in place by the end of the year. The next steps are to engage with stakeholders to deliver the proposed settings changes for the interim scheme. The interim scheme will then be trialled by the TSOs for a period of time.
- The TSOs are aiming to roll out a wider scale enduring scheme that will mitigate risk against over-frequency events. This roll-out will likely take place over a longer period of time once the interim scheme has been established.