Shaping Our Electricity Future (SOEF) Advisory Council Meeting #9 Minutes





Date: September 24th, 2024 **Time:** 10:00 - 16:00

Venue: Herbert Park Hotel, Ballsbridge, Dublin 4

Chairs: Liam Ryan, Alan Campbell

Council Member Attendees:

| Name | Representing |
|--------------------------|--------------------|
| Brendan Kelly | Renewables |
| Bobby Smith | Storage |
| Brian Mongan | Demand Response |
| David Graham | Renewables |
| Frank Burke | Storage |
| Graham McWilliams | Large Energy Users |
| Jag Basi | Conv. Production |
| Kate Garth | Renewables |
| Laura Mehigan | Renewables |
| Lisa Foley | Consultant |
| Margaret Nee | Renewables |
| Mark Fitch | New Technology |
| Noel Cunniffe | Renewables |
| Paddy Finn | Demand Response |
| Paddy Fitzgerald | Conv. Production |
| Paul Blount | Storage |
| Paul Lennon | Gas Networks |
| Peter Harte | New Technology |
| Rory Mullan | Consultant |
| Seamus Howard | Manufacturer |
| Stacy Feldmann | Conv. Production |
| Thomas O'Sullivan | New Technology |
| David Laverty (online) | Academia |
| James Delahunt (online) | Consultant |
| Mark Alexander (online) | TSO |
| Robin McCormick (online) | Consultant |
| Marie Therese Campbell | UR |
| Robert O'Rourke | CRU |
| Linzi Hyvart | DfE |
| Sarah Brady | DfE |
| Zoe Crowe | DfE |
| Teresa Fallon | ESB Networks (DSO) |

Apologies:

| Apologies, | | | | |
|-----------------|--------------------|--|--|--|
| Name | Representing | | | |
| Harry McCracken | Renewables | | | |
| John Fitzgerald | New Technology | | | |
| Jonathon Wisdom | TSO | | | |
| Neil Morris | Large Energy Users | | | |

| Brian Diskin | DECC |
|------------------|--------------------|
| Fergal McParland | DECC |
| Tony Hearne | ESB Networks (DSO) |
| John Melvin | CRU |
| Leo Strawbridge | DfE |
| David Hill | NIE Networks (DSO) |
| Trevor Harron | NIE Networks (DSO) |
| Colin Broomfield | UR |

Introduction - Liam Ryan, Alan Campbell, TSOs

• Liam Ryan and Alan Campbell welcomed all to the first meeting of the new membership including invited guests. The importance of the event was highlighted and how EirGrid and SONI need the input of all present and their stakeholders to learn from the experiences of others. Attendance in person at the event was emphasised as favoured, every fourth meeting of the Advisory Council will take place in Belfast and members were encouraged to provide feedback via the feedback survey to enable organisers to enhance the event for the benefit of all.

SOEF v1.1 Q&A - Workstream Leads, TSOs

- **TSOs** provided an update across the four main workstreams of Markets, Operations, Networks and Engagement to prompt the Q&A session.
- Note: Member asked if the Scheduling and Dispatch Programme (SDP) Tranche 1 target date of April 2025 was at risk given that modifications are not approved by the Regulatory Authorities (RAs). It was confirmed by the TSOs that it is recognised that these are complex changes to the market and that the RAs must undertake their due diligence. The TSOs and RAs recognise the importance of these changes and are working closely on same. SDP Tranche 1 is still targeting April 2025. A member stated the need for tighter language when describing the status of programmes such as SDP as investor confidence is hugely important. The TSOs confirmed that they are trying to be as transparent as possible. Regular updates will continue to be provided at the monthly industry workshops.
- Note: Member queried LCIS phase 2 procurement and if it would be a similar product to that procured in phase 1. The TSOs confirmed that they were considering it at present but would not comment further at this time to avoid any perception of providing a commercial advantage. The TSOs will consult on it in the next couple months.
- Note: Member noted that the DLR first trial had gone very well and asked if there was a plan for a large scale roll out. The TSOs confirmed that what may appear as a quick and easy solution sometimes requires an outage for deployment as there is equipment in the stations such as line droppers, bay conductors and busbars that may require uprates at either end of the overhead line circuit to be replaced which may affect a quick delivery and the opportunities that DLRs may provide. To mitigate this, the TSO is investigating deployment of DLR technology in the stations as a temporary solution until permanent work can be facilitated in the stations. The TSOs are currently prioritising the DLR projects listed in SOEF Roadmap v1.1. The TSOs also noted that the signals from the DLR devices need to be transferred to the National Control Centre (NCC), and although this has been implemented for one manufacturer there are fixes to the IT systems that need to be implemented to accommodate other manufacturers as roll out continues. Members noted that industry is eager to see results of the DLR trial.
 - ACTION: The TSOs to share the performance of the Lisheen-Thurles DLR project trial.
- **Note:** *Member* asked about the timing of a Hybrids solution. The TSOs confirmed that a Technical Assessment on sharing of MEC behind a single connection point had been shared with the Commission for Regulation of Utilities (CRU) and it is expected that a regulatory consultation will issue soon.
- Note: Members acknowledged the breadth of work happening across EirGrid and SONI and whether the TSOs were resource equipped for the scale of work that lies ahead. The TSOs are also faced with "known unknowns" for example Network Code changes. It was confirmed by the TSOs that the multi-year forward work programme is crucial to allowing the TSOs understand what the market priorities are. The RAs are covering this topic later in this session. Members confirmed that there are also impacts to market participants and that a forward work programme would help to decode the resourcing and IT system asks, including the ability to pivot across several programmes. The TSOs confirmed that the status of 'in-flight programmes" will be presented at the Oct 2024 industry session.
- Note: Member was keen to understand the progress of the North-South Interconnector. It was confirmed that the northern section of the line is in the process of being handed over to NIE which is a significant milestone, the Northern Ireland Utility Regulator (UR) has given approval to NIE to start the works, and that construction is expected to commence by the end of 2024. On the southern section of the line, EirGrid has handed over the voluntary agreements to ESBN and the compulsory purchase process is being handled by CRU, it is anticipated that construction will commence in 2025/26. Ideally construction would commence on both sections of the line simultaneously, but this is not possible.

- **Note:** *Member* enquired about Offshore engagement on the south coast. EirGrid confirmed that the DMAP was due before the Oireachtas. The marine usage licence will allow a number of routes to be identified and on which to carry out surveys. EirGrid will need to identify sites for substations and routes to substations and perform land and subsea investigations. Consultations with fisheries and landowners will be extremely important.
- Note: Member questioned the Networks workstream update which is consistently reporting a RAG status of green and how this is likely an unconstrained view. The TSOs confirmed that the status remains at green for delivery of the key infrastructure projects and that the enabler projects are mitigating the risks such as the HV Interface Forum, the Joint Outage Transformation Programme and separate workstreams on planning and land access. The member asked that the annual update across the milestones in the SOEF Roadmap v1.1 issues in advance of the February 2025 Advisory Council meeting.
- Note: Member noted that their fleet in the south has experienced a significant increase in dispatch down levels over the summer months, taking cognisance of the reduction in demand in the summer months, rooftop solar and summer outages. Member proposed shifting the outage programme across the year and moving more outages into the winter. The TSO confirmed that traditionally the outage window is March to October but last year outages were taken all year round except for 2 weeks at Christmas. It was noted that a presentation would follow after lunch on the market drivers for interconnector imports and dispatch down levels.
- **Note:** *Member* asked about an update to the Operational Policy Roadmap. The TSOs confirmed that they were kicking off the review and the update is expected to issue in December 2024 / January 2025.

Joint RA Markets Update - Marie-Therese Campbell (UREGNI), Robert O'Rourke (CRU)

- The *RAs* gave a very insightful presentation on the context and challenges for market changes, the new all-island market programmes governance and the current all-island programmes, potential market projects, solutioning and the SEM Strategy development. Feedback was welcomed on what SEMC should be focussed on, how best to align the programmes and how to prioritise.
- *Note: Members* thanked the RAs for working on the multi-year forward work programme on markets and welcomed the governance process to streamline issues and reach targeted decisions.
- **Note: Member** noted that the SEM Strategy is updated annually whereas the CRU and UR Strategies cover multiyears. It was proposed that the SEM Strategy should look beyond 12 months, but comfort was taken that the SEM forward work programme is in development.
- **Note: Member** noted that there is alignment on the scale and pace of change being unprecedented however in the near-time industry needs to prioritise programmes, secure funding and develop resource plans; all this needs to happen in parallel in order to bring before company Boards for approval of same.
- **Note: Member** called out the need for Network Charging Reform; CRU confirmed that this is a jurisdictional responsibility. Although this was not included on the slides it is included in the National Energy Demand Strategy in Ireland.
- Note: Member warned that there is a need for a clear distinction between a Call for Evidence and a Consultation. Experience tends to show that a call for evidence becomes the minded to path for a consultation which should not be the case. Members asked the RAs for consultation complexity to be reduced, for greater governance on consultations and for better consultations in general. Member noted that it would be useful if consultations driven by European legislation were impacted north and south as equally impacting system and market operators with all-island market.

Key Dependencies and Capabilities Needed for Future Operational Policy Changes - Eoin Kennedy, EirGrid TSO

- **Eoin Kennedy** gave a presentation which highlighted that the Shaping Our Electricity Future (SOEF) Roadmap and the Operational Policy Roadmap chart are a pathway to delivery of 2030 climate targets. It was stated that while the SOEF Programme covers a wide range of important work areas which need to be progressed, particular focus is needed on delivering in the following areas:
 - Operational capability enhancements
 - Delivery of System Services
 - o Transmission constraint removal
 - Resolving customer performance issues
- Note: Member asked why the TSOs would need more reserve products when there are c.1000 MW batteries providing reserves. It was confirmed by the TSOs that the upward response capability is currently sufficient but there is less downward response capability available as import capacity on batteries is not symmetrical. It was also noted that the required reserve volume will increase with the arrival of the Celtic interconnector as the single largest infeed will increase from 500 MW to 700 MW. Dispatchable consumption will be investigated in the Balancing Market Reform as part of the Strategic Markets Programme (SMP) including the scheduling of Long Duration Energy Storage (LDES) of 100+ hours, assuming our system architecture can be changed to deliver the reforms required. It was also pointed out by the TSO that battery participants may decide to trade in the Day Ahead Market (DAM) and in the Balancing Market (BM) and therefore may not be available for reserves.

- **Note: Member** stated that 'frequency regulation' should be a new system service and that it should be separate and distinct from other response / reserve services. The TSOs stated that, following a consultation as part of the FASS programme, they have prepared a Product Review Recommendations Paper covering the reserve services and submitted it to the RAs. The TSOs also stated that they regularly have discussions with international counterparts on how they approach the design of these types of services.
- Note: Member confirmed that as regards reducing the minimum number of conventional units from 7 (4 in Ire and 3 in NI) to 3 or less, that investment signals were needed to allow the existing units on the system to move to renewable fuel. Clarity was sought on incentives to investors, a timeframe and the future jurisdictional composition. The TSOs reaffirmed that the timing of future relaxation of the minimum number of conventional units constraint is linked to timing of the delivery of LCIS projects.

Market Drivers for IC Imports and Dispatch Down - Michael Atcheson, SONI TSO

- Michael Atcheson of SONI gave a presentation on the market drivers for interconnector imports and dispatch down levels. There was an initial focus on the priority to the dispatch of certain generation types as required by European, Ireland and Northern Ireland legislation. The slides illustrated that the SEM is the most expensive market in Europe and because of this it will continue to import across the interconnectors due to the market design which is behaving exactly as it was designed to when prices are higher in the SEM it will import cheaper electricity and suppress the overall price of electricity for the end consumer. Lack of full coupling between SEM-GB is also not helping the situation, with TSO studies showing that MRLVC (Multi Region Loose Volume Coupling) as proposed in the Trading & Cooperation Agreement even less efficient. The TSOs noted that assetless units are driving Intra Day (IDA) flows in the intraday markets and that some participants are driving higher prices in the SEM.
- Note: Member noted the benefits of imports on interconnectors with the resultant suppression of prices to the end consumer however it was resulting in challenging outcomes particularly in the summer months with much higher dispatch down levels than anticipated. The TSOs noted that the DAM and the IDA markets were the most efficient way of meeting demand recognising the local intraday post Brexit arrangements, stated that Multi Regional Loose Volume Coupling (MRLVC) would most likely make the current arrangements worse, and that full coupling is the desired solution.
- **Note: Member** asked if the current trends are likely to continue and suggested that more modelling is needed if the current interconnector flows persist into the future.
- Note: Member noted that the current dispatch down levels coupled with the auction price caps would make business cases difficult to justify to lenders, member noted that it is also damaging viability of existing projects. The same member was confident that demand growth in the right places is the best solution. Interconnector trades were suggested as a solution but the TSOs reaffirmed that GB could be experiencing the same problems as the SEM during high wind periods and may not wish to trade out of the interconnector schedule. Another member stated that zonal pricing could be a solution noting that the market is working as designed but not as it should. GB are also possibly moving to Zonal pricing so this may not improve the situation.
- **Note: Member** questioned the calculation of SNSP using interconnectors and that there was no guarantee that interconnectors were transferring green electrons.
- Note: Member stated that the EU's Carbon Border Adjustment Mechanism (CBAM) could play a part in the future in changing the price and flow of electricity on the interconnectors.

 ACTION: Members to set up a taskforce with an EirGrid and SONI representative to address concerns around market drivers for interconnector imports and dispatch down levels.

Enduring Connection Policy (ECP) 2.4 Constraint Reporting (Process and Timelines) - Marc Senouci, EirGrid TSO

- *Marc Senouci* gave a presentation on ECP 2.4 constraint reporting which focussed on process and timelines. EirGrid plans to publish 12 regional constraints reports that will provide ECP 2.4 customers with information on potential dispatch down levels in each region. Timeframe for completion of this work is Q4 2024. The TSO confirmed that the 13 study scenarios includes 5 core scenarios and 8 flexible/sensitive scenarios (industry feedback has been sought and received).
- **Note: Member** asked if LDES could be included in the modelling. The TSO stated that if there is enough information on LDES and time available that it could potentially be considered in the ECP modelling. Another member asked for flexible electrification of heat to be included and it was confirmed that there is some representation of electrification in the modelling.
- **Note: Member** enquired about an additional Moneypoint to France interconnector to be included in the ECP modelling. The TSO confirmed that it is very difficult to model the behaviour of interconnectors but that a number of interconnector sensitivities were expected to be included.

Discussion Topic: Energy Storage Policy Framework - John Finnegan, DECC

- John Finnegan gave a presentation on the Energy Storage Policy Framework. John reminded all present that the goal of the Policy Framework is to support Ireland in achieving its 2030 climate action targets and address the electricity grids immediate and near-term needs, by incorporating the optimum amount of electricity storage required up to 2040. The Policy Framework was developed and reviewed with the assistance of the CRU and the System Operators, EirGrid and ESB Networks, through the Storage and System Services working group, as part of the Accelerating Renewable Electricity Taskforce. The need for the framework was highlighted in the Climate Action Plan 2019, 2023 and 2024.
- A public 'Consultation on Developing an Electricity Storage Policy Framework for Ireland' received 68 responses. The key learnings from the consultation identified greater alignment between key stakeholders and Government, and 'Missing Money' i.e. existing market structures and arrangements do not provide a sufficient revenue stream for investment in (longer term) storage.
- John gave a high-level overview across the main chapters, annexes and policy action implementation timelines including stakeholders.
- **Note: Member** noted the need to review the environmental costs of lithium-ion batteries vs. a pumped storage plant which is superior environmentally. DECC confirmed that the framework is technology neutral, is plan-led, represents the heat sector and acknowledged the need for bulk energy time shifting. It was reiterated that raw materials are moving to the circular economy.
- **Note: Member** confirmed satisfaction with the action on revenue stacking, which is very important to investors, a call was made for the investment signals before the end of 2024 considering that DS3 tariffs have been reduced significantly. The need to make the procurement of storage competitive was highlighted.
- **Note: Member** questioned where LDES may sit in the hierarchy of priority dispatch. DECC noted how pumped storage can solve system security challenges, the need for reserves to support peak shaving and a dunkelflaute period and recognised the complexity of energy storage utilisation.

Transmission Renewable Hubs - Elin Ahlund, EirGrid TSO

- Elin Ahlund described the concept of transmission renewable hubs (or regional developments) being substations where multiple energy projects connect, each hub solution is individually designed to suit the area and its needs, each hub will include new high voltage circuits (110, 220, 400kV) to connect back to transmission system, similar to the concept previously used in the south-west. The current approach is based on Station Level HUBs and Regional HUB Networks. A combined plan-led and developer-led approach has been adapted, renewable hubs need to be developed in collaboration with the industry and using the best aspects of both will make us achieve our targets quicker. The approach will be considered individually for each HUB project.
- There are three identified HUB solutions namely the North Dublin/East Meath HUB, the Midlands HUB and the Southeast HUB. Speed will be key to the success of the hubs and the need to have sight of developers' plans.
- **Note: Member** noted that the pipeline analysis for wind and solar is shared with EirGrid every year. Member asked if the hubs /regional developments were deliverable, EirGrid noted the grid delivery challenges but reaffirmed that this was a master plan.
- Note: Member asked in relation to next steps and if these hubs /regional developments could be included in
 constraint analysis scenarios. A member also noted that developers cannot be expected to fund anything other
 than the developer portion of the works and it was agreed that the funding strategy would need to be addressed.

Greenlink Interconnector - Maria Madders, EirGrid TSO

• Maria Madders gave a comprehensive update on the Greenlink interconnector project which focused on the location, geography, scale, capacity, operating model, key milestones, programme success to date and the recent interconnector ramping trial and consultation.

Closing Messages - Liam Ryan, EirGrid TSO

- Next meeting to be conducted in Dublin, in February 2025.
- The slide presentations, meeting minutes, and actions will issue to the Council following this meeting.

Schedule of Advisory Council Meetings in 2025

- 6th February 2025 in Dublin
- 20th May 2025 in Dublin
- 23rd September 2025 in Belfast

Meeting Actions

| # | Topic | Action | Owner | Due | Meeting Xref |
|---|-----------------|--|-------------|----------------------------------|--|
| 1 | DLR Performance | The TSOs to share the performance of the Lisheen-Thurles DLR project trial. | EirGrid TSO | ACM #10 (raised at ACM #9) | SOEF v1.1 Q&A |
| 2 | Dispatch Down | Members to set up a taskforce with an EirGrid and SONI representative to address concerns around market drivers for interconnector imports and dispatch down levels. | Members | | Market Drivers for IC Imports and Dispatch Down |