11/10/23

Future Power Markets Update

ISSUE NO.1 | October 2023









Introduction

I am pleased to update you on the work of the Future Power Markets (FPM) team. Central to our work is ensuring that the market is ready to facilitate up to 80% renewable energy share in electricity (RES-E) by 2030.

As the grid adopts, and adapts to, increased variable renewable sources coming on stream, the market needs to quickly adjust to support the investment needed to deliver the unprecedented changes to the grid in the lead up to 2030 and beyond.

The monthly FPM newsletters will serve as an important communication channel to share updates on key FPM related programmes and workstreams. If you have questions and/or comments, please get in touch with the team through our dedicated email address: <u>futurepowermarkets@eirgrid.com</u>.

- David Carroll, Head of Future Power Markets





Future Power Markets

The Future Power Markets (FPM) team is focused on how the ambition of up to 80% renewable energy share in electricity (RES-E) will be facilitated through the market.

The team's work spans across a number of core project areas, including:

- Future Arrangements for System Services
- Scheduling and Dispatch Programme

Additional workstreams include:

- Long Duration Energy Storage
- Energy Market Policy





Future Arrangements for System Services

The design and implementation of Future Arrangements for System Services (FASS) includes:

- "To deliver a competitive framework for the procurement of System Services, that ensures secure operation of the electricity system with higher levels of non-synchronous generation." in line with the Single Electricity Market Committee request
- The implementation of a Layered Procurement Framework (quarterly auctions/LPF), a Day Ahead System Service Auction (daily auction/DASSA) and Fixed Term Contracts
- The creation of a System Services market code, and updates to the relevant codes and licences.
- DotEcon/Afry recommendations paper and Transmission System Operator (TSO) <u>cover note was published</u> on September 7th, 2023
- Industry workshop on the DASSA arrangements was held on September 20th, 2023. Bilateral industry meetings to follow
- TSO/Regulatory Authorities (RA) engagement on priority topics for the SEMC Decision such as LPF Secondary Trading is ongoing
- Mobilisation of key workstreams such as volume forecasting and product review is underway.



Jun '23 Jul '23 Aug '23 Sep '23 Oct '23 Nov '23 Dec '23 Jan '24 Feb '24 Mar '24 Apr '24 May '24 Jul '24 Jul '24

HL Roadmap: FASS Phased Implementation

Please note, current timelines for both LPF and DASSA Arrangements have been condensed as much as possible. Proposed roadmap is contingent on clarity of scope by way of September 2023 SEMC decision.

L		egend	
	1 TSO Milestone	1 SEMC Milestone	4
	TSO consultation/ bilateral period	RA consultation/ bilateral period	



Scheduling and Dispatch Programme

The Scheduling and Dispatch programme aims to:

- Enhance the scheduling and dispatch systems and processes in Ireland and Northern Ireland Ο
- Bring about compliance with the Clean Energy Package (CEP) and the treatment of variable Non-Priority Dispatch Ο **Renewables (NPDR)**
- Facilitate low/zero carbon grid technologies such as Batteries, Synchronous Condensors in support of the broader goals of renewables and System Non-Synchronous Penetration (SNSP) penetration targets.
- An industry workshop was held on the 6th September 2023. Bilateral meetings are on-going. Future industry workshops to follow a monthly cadence, with the next scheduled for October 5th, 2023
- Plain English description of the trading and settlement and grid code changes of SDP_02 (ESPS) published
- SDP 02 (ESPS) T&SC mod to be submitted to mods committee on 5th October, 2023
- Detailed design phase has commenced for all three initiatives of Tranche 1.



Additional Market Developments

Long Duration Energy Storage

Development of Storage Procurement Mechanism

It has been made clear through Shaping Our Electricity Future (SOEF v1.1) and the Climate Action Plan '23 that Long Duration Energy Storage (LDES) will act as a key facilitator in the mass integration of renewable generation going forward. This programme aims to remove potential barriers to LDES investment through the creation of a new procurement mechanism.

Benefits of Long Duration Energy Storage

Establishing a needs case for the integration of LDES to determine the extent of its benefits was extremely important. Through multiple PLEXOS model runs which utilised varying amounts of LDES, it was determined that the inclusion of storage directly correlated to increases in RES-E levels, and a significant drop in both carbon emissions and dispatch down levels.

*A more detailed look into the cost benefit analysis and procurement options for LDES can be found in the Call for Evidence consultation that will be released in October 2023.



Energy Market Policy

Electricity Market Design

Legislative activities to reform the EU Electricity Market Design continue at an EU level. EirGrid and SONI are closely following the developments and are heavily involved with the ENTSO-E Taskforce that works closely with the European Commission.

EU and UK to negotiate on MRLVC

The EU-UK Trade and Cooperation stipulates that Multi Region Loose Volume Coupling (MRLVC) will be implemented between all EU and UK electricity markets. Negotiations on MRLVC between the Commission and the UK's Department for Energy Security and Net Zero (DESNZ) are ongoing. We understand that next steps will be communicated towards the end of the year.

Capacity Calculation Region

Five responses were received to the public consultation on SEM's integration to Core CCR, which is a milestone for the Celtic Interconnector. Together with Réseau de Transport d'Électricité (France), EirGrid and SONI has responded to the respondents. A formal submission to join CORE CCR will 6 be made in November to the EU Agency for the Cooperation of Energy Regulators (ACER).

Contact Information

If you require further information on what has been published in this update, please email <u>futurepowermarkets@eirgrid.com</u>

Disclaimer: While reasonable care and precaution has been taken to ensure its accuracy, this report and the information contained herein is provided without warranties or representations of any kind with respect to (without limitation) its quality, accuracy and completeness. All information contained herein is subject to change without notice.

EirGrid (as Transmission System Operator for Ireland), SONI (as Transmission System Operator for Northern Ireland) and SEMO (as the Single Electricity Market Operator for Ireland and Northern Ireland) take no responsibility for any inaccuracies, errors or omissions in this report, and exclude to the fullest extent permitted by law liability for any loss or damage arising from use of this report or reliance on the information contained herein. Any actions taken on foot of this report and the information contained herein are taken at the user's sole risk and discretion, and parties are advised to seek separate and independent opinion in relation to matters covered by this report.

