Future Power Markets Update

ISSUE NO.9 | June 2024









Future Power Markets

The Future Power Markets 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:

- Strategic Markets Programme (SMP)
- Future Arrangements for System Services (FASS)
- Scheduling and Dispatch Programme (SDP)

Additional workstreams include:

- Long Duration Energy Storage (LDES)
- Energy Market Policy (EMP)









Strategic Markets Programme

SMP has a wide scope, a significant portion of which are changes required for Celtic Interconnector Go-Live and enabling increased flexible technology incorporating:

- **Full EU Integration:** The Celtic Interconnector, that is due to go-live in Q4 2026, requires the SEM Markets and Operational Systems to be compatible with European standards, which includes re-coupling the day-ahead market but also new arrangements for coupled intraday markets and participation on the EU balancing platform
- **Post-Brexit Trading Arrangements:** Changes to the trading of electricity between the SEM and GB to increase market efficiency
- Balancing Market Reform: Changes to the balancing market to enable flexible technology.

EU Integration

Primary legal contract signed between TSOs in the Core Capacity Calculation Region (CCR), the Core TSOs Cooperation Agreement (CoA), with effective date of 1st July 2024;

Work ongoing to develop High Level Requirements for EU Integration - requiring changes to market rules and schedules, operating processes and system scheduling;

Current Celtic Interconnector go-live is planned for Q4 2026, and integration with EU markets will need to be in place for this date.



Post-Brexit Trading Arrangements

No update.

Balancing Market Reform Updates

High level requirements for Balancing Market Reform initiatives are under development;

Once agreed, these will be assessed for code and system changes required and put into project delivery plans.



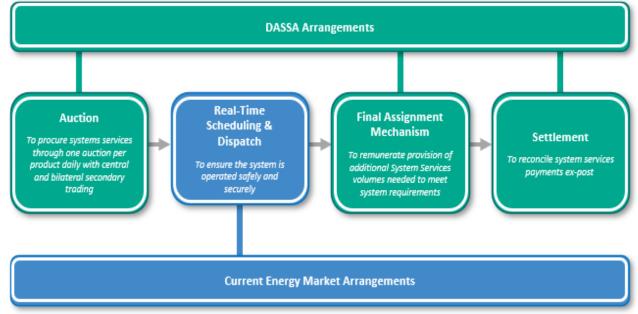




Future Arrangements for System Services

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 (SEMC) request
- The implementation of a Day Ahead System Service Auction (daily auction/DASSA), Layered Procurement Framework and **Fixed Term Contracts**
- The creation of a System Services market code and updates to relevant codes and licenses.
- The TSOs are currently working on the development of the DASSA Design Overview of the DASSA Design Recommendations Paper, due in July 2024.
- The Consultation paper on the TSOs' DASSA Product Review and Locational Methodology was published on 6th June and is available at the following links: EirGrid & SONI. A 6-week consultation period is now open until 18th July. A virtual information session was held on 19th June by the TSOs.
- The TSOs are continuing to work on the development of the System Services Charge consultation paper.
- The TSOs and RAs are still engaging in relation to the funding application submitted by the TSOs on 16th February 2024. Funding approval will be required to continue work on the programme.









Scheduling and Dispatch Programme

The Scheduling and Dispatch programme aims to:

- o To enhance the scheduling and dispatch systems and processes in Ireland and Northern Ireland
- To bring about compliance with the Clean Energy Package (CEP) and the treatment of variable Non-Priority Dispatch Renewables (NPDR)
- Facilitate low/zero carbon grid technologies such as Batteries, Synchronous Condensers in support of the broader goals of renewables and System Non-Synchronous Penetration (SNSP) penetration targets.
- > The Scheduling and Dispatch Programme is composed of six initiatives, split into two tranches, with tranche 1 targeting a go live of April 2025:

Tranche 1: SDP-01 Operation of Non-Priority Dispatch Renewables (NPDR)

SDP-02 Energy Storage Power Station (ESPS) integration

SDP-04 Wind dispatchability improvements

Tranche 2: SDP-03 Fast Frequency Response (FFR)

SDP-05 Reserve services scheduling and dispatch

SDP-06 Synchronous condenser scheduling and dispatch

- Design is now complete for Tranche 1 initiatives. This is covered under a public facing milestone which was reported as complete at the Industry workshop on 5th June.
- Additional SDP Tranche 1 delivery milestones have also been shared with industry at the June industry workshop. With this, phase 2 for Tranche 1 is complete.
- RAs have published the consultation paper for SEM-13-011 annex (Constraint and Curtailment).







Scheduling and Dispatch: Phase 2 Milestones

SOEF Milestone ID	Milestone	Dates	
Tranche 1	Requirements Definition Complete for Scheduling and Dispatch Programme Tranche 1 Initiatives	September 2023	V
Tranche 1	System Design Complete for Scheduling and Dispatch Programme Tranche 1 Initiatives	March 2024	√
Tranche 1	TSC, CMS & GC Mods Review Complete for Scheduling and Dispatch Programme Tranche 1 Initiatives by the relevant review group (Mods Committee, Grid Code Review Panel, Capacity Market Workshops respectively)	March 2024	~
	Requirements Definition Complete for Scheduling and Dispatch Programme Tranche 2 Initiatives	July 2024	
	Publication of milestones for Scheduling and Dispatch Programme Tranche 2 Initiatives	September 2024	

Scheduling and Dispatch: Phase 3 Milestones

SOEF Milestone ID	Milestone	Dates	
Tranche 1	System Build Commenced for Scheduling and Dispatch Programme Tranche 1 Initiatives	March 2024	✓
Tranche 1	Publication of key milestones for testing and go-live, including revised ISEM Technical Specification of Scheduling and Dispatch Programme Tranche 1 Initiatives	June 2024	✓
Tranche 1	Regulatory Authority approval for Trading and Settlement Code (TSC), Capacity Market Code (CMC) & Grid Code Mods (GC) for Scheduling and Dispatch Programme Tranche 1 Initiatives	June 2024	
Tranche 1	Publication of Technical Specification for Scheduling and Dispatch Programme Tranche 1 Initiatives	July 2024	ı
Tranche 1	Vendor System Build and Test Complete for Scheduling and Dispatch Programme Tranche 1 Initiatives	Dec 2024	P
Tranche 1	TSO/MO System Test and Validation Complete for Scheduling and Dispatch Programme Tranche 1 Initiatives	Mar 2025	Published
Tranche 1	Participant Interface Test (PIT) Commences for Scheduling and Dispatch Programme Tranche 1 Initiatives	Mar 2025	June
Tranche 1	Participant Interface Test (PIT) Complete for Scheduling and Dispatch Programme Tranche 1 Initiatives	Mar 2025	
Tranche 1	Cutover activities Commences for Scheduling and Dispatch Programme Tranche 1 Initiatives	Mar 2025	2024
Tranche 1	Confirm Go Live Decision for Scheduling and Dispatch Programme Tranche 1 Initiatives	April 2025	J
Tranche 1	Implementation and Go Live for Scheduling and Dispatch Programme Tranche 1 Initiatives	April 2025	
Tranche 2	Implementation and Go Live for Scheduling and Dispatch Programme Tranche 2 Initiatives	Oct – Dec 2025	

Additional Market Developments

Long Duration Energy Storage

EirGrid and SONI are continuing to engage with regulators and industry to brief on progress within the LDES workstream. Insights from these meetings will play a key role in determining the timelines and next steps for this programme.

Energy Market Policy

- > TSOs recently met both UK and EC representatives to agree next steps regarding Multi Regional Loose Volume Coupling (MRLVC). There are technical questions regarding procurement and other aspects that will need to be addressed by the TSOs in advance of the commencement of any concept validation phase.
- FirGrid and SONI are continuing with their own independent analysis on the implications for SEM of MRLVC and other design changes to the GB market. They are engaging with key stakeholders regarding the work.







Future Power Markets Programmes: Consolidated View of Key Dates



06 November

09 October

Programme April 24 May 24 July 24 Aug 24 Sep 24 Oct 24 Nov 24 June 24 ESPS Modification Follow-Up Publication of Delivery schedule 05 Apr LDES DASSA Summary view. See FASS Phased Implementation DASSA Auction Design Auction Design ◆ DASSA Auction Design SEMC Decision Recommendations Roadmap for full view of programme milestones. Paper Workshop FASS Code Phased Product Review and Development Implementation Locational Methodology Panel TOR Roadmap 2 Consultation Paper **EMP** ◆FPM Industry Workshop FPM Industry Workshop Industry Workshop

03 July

07 August

11 September





11 April



05 June

Contact Information

If you require further information on what has been published in this update, please email:

futurepowermarkets@eirgrid.com or futurepowermarketsNI@soni.ltd.uk

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.





