The Irish market redesign process formally began in early 2014 with the publication of a consultation on the high level design of the wholesale electricity market to replace the current single electricity market (SEM). As well as the implementation of the EU target model, the redesign aims to improve security of supply, promote the integration of renewables, spur competition, maximise efficient use of interconnectors and provide a more stable investment climate for the Irish electricity sector.

Trading had initially been scheduled to commence on the new market on 1 October 2017, but at the end of last year, the regulators recommended a seven-month delay of the go-live date to 23 May 2018. This was because market participants requested more time to trial the market’s various systems and services ahead of the launch.

BACKGROUND
The current all-island Irish single electricity market (SEM) was created from what were two separate power markets in Ireland’s neighbouring jurisdictions. The market, which was launched in November 2007, is regulated jointly by the Republic of Ireland’s Commission for Energy Regulation (CER) and the Utility Regulator in Northern Ireland.

The SEM differs from most major European power markets in that it has just one dominant generator in majority state-owned ESB, which produced over 47% of all-Irish electricity in 2016. There have been concerns for a number of years that ESB could exert excessive market power due to its large share of the market.

Generators bid volumes into a gross mandatory pool, from which suppliers then purchase power for a universal system marginal price (SMP) calculated to meet electricity demand on a half-hourly basis. Electricity is dispatched from the central pool for a price determined four days after it has been generated.

Market participants are able to hedge positions by buying contracts at fortnightly over-the-counter (OTC) trading sessions hosted by broker Tullett Prebon. Additionally, parties are able to hedge by buying directed contracts which ESB is obliged to sell at a fixed price.

The SEM has been plagued by stagnating liquidity in recent years, as smaller counterparties have struggled to enter the fortnightly OTC sessions. Independent generators have cited the credit and collateral required to trade with larger players as a significant barrier to entering the market. The market redesign process has also contributed to coagulating liquidity, as participants focus their attention on the transition.

TRADING ARRANGEMENTS
I-SEM will facilitate trading over a much greater number of delivery periods, including a balancing market, intra-day, day-ahead and forward markets.

The short-term intra-day and day-ahead markets will be the main focus for physical trade in I-SEM. Emphasis is being given to centralised physical trading in the spot market with the intention of maximising liquidity and competition in these time frames. The forward market will take the form of a financially settled model as opposed to a physical market, in order to allow participants to hedge positions. The regulators took the decision to opt for a financial curve, because they deem I-SEM to be of
insufficient size to support a sufficiently liquid physically-settled forward market.

Day-ahead trading in I-SEM will consist of daily auctions with a gate closure of 11:00 Dublin time for power to be delivered the following day. In establishing the new day-ahead market, I-SEM will join the multi-regional coupling (MRC) project, which currently consists of 19 countries, accounting for around 85% of Europe’s power consumption. MRC is intended to maximise the efficiency of cross-border allocation on the day-ahead market, leading to price convergence between regions. Nord Pool and EPEX SPOT will operate competing day-ahead and continuous intra-day auctions for the market.

I-SEM will introduce an aggregator of last resort (AOLR) scheme that will provide smaller generators a means of reducing risk when bidding into the newly-developed short-term markets. The aggregator will allow generators, particularly those with intermittent wind assets, to group together and submit single orders rather than having to trade in the market as individuals. The arrangements for the aggregator will be written into the market rules, with a predefined formula setting out how much wind will bid into each market.

**INTERCONNECTION**

Bringing the Irish market more closely in line with the rest of Europe and increasing cross-border electricity trade is a cornerstone of the redesign process.

The Irish power market is unique from other European markets in its limited interconnection with neighbouring countries. At present, Ireland is connected solely to the UK via two 500MW cables: the Moyle interconnector, which runs between County Antrim and South Ayrshire, and the East-West interconnector, which links County Dublin with Flintshire.

Interconnection between Ireland and Europe is set to increase by the mid-2020s due to the planned Celtic interconnector with France. Irish operator EirGrid and French TSO RTE signed a memorandum of understanding to proceed with the project last year. The 700MW cable project received €3.8m of initial funding from the European Commission in 2015. It then secured €4m of support from the Connecting Europe Facility – an EU fund established to upgrade Europe’s energy infrastructure.

Infrastructure within Ireland has also come under the spotlight during the redesign process. The island currently suffers from severe bottlenecks between the jurisdictions. In order to mitigate this and allow more efficient trading on the island, a new 1.5GW north-south interconnector is planned. The link was initially expected to come online soon after I-SEM goes live, in 2020, but the project has faced numerous legal and political challenges which are highly likely to cause substantial delays.

**CAPACITY REMUNERATION MECHANISM**

I-SEM will see the current capacity payment mechanism (CPM) being replaced with a more sophisticated capacity remuneration mechanism (CRM).

Under the existing CPM arrangement in SEM, money from a single pot is distributed equally to all available generators in Ireland. The new arrangements are intended to ensure sufficient generation capacity is secured for times when all-island demand spikes or when supply is restricted by low renewable output or outages.

The new CRM will consist of a competitive sealed bid auction where generators will compete to fulfil a pre-determined capacity requirement. This approach is likely to mean unsuccessful units that do not secure payments will become commercially unviable. EirGrid hopes the new competitive approach will reduce expensive surplus capacity in Ireland by only paying for enough generation units to meet the capacity requirement.

Successful generators will receive reliability options in the form of payments linked to the available capacity of generation units. The reliability option is a one-way contract for difference (CfD), which means generators will be paid a fixed option fee on top of selling their power into the market. These payments will mean plants must offer the amount of generation in their contract to the market. If the market price rises above the strike price, which has been set at €500.00/MWh, producers will be obliged pay the grid operator the difference between the market price and the strike price threshold.

The first capacity auction is due to take place on 15 December – a deadline to which EirGrid has recently reaffirmed its commitment despite delays to other aspects of the redesign. This auction will seek to secure generation for the capacity year running from the May
The relationship between Ireland’s renewables subsidy schemes and the wholesale power market has been a topic of much debate throughout the redesign process. Documents released by the Department of Communications, Climate Action and Environment (DCCAE) in June indicate in I-SEM renewable generators will be exposed to imbalance risk for the first time.

Renewable power generation in Ireland is subsidised by the renewable energy feed-in-tariff (REFIT) schemes, which are aimed at encouraging investment in the country’s green energy sector. REFIT payments are made to renewable generators as a top-up to revenues secured by those generators in the market under power purchase agreements. Payments are made based on SEM’s half-hourly spot price and take into account a number of considerations including technology costs and a provision for balancing costs.

Under I-SEM, REFIT support will be calculated based on the clearing price in the new day-ahead market. This support will not take into account costs incurred by renewable generators for fulfilling balancing commitments, meaning parties will be exposed to balancing risk which they are shielded from in the SEM.

The imbalance price will be calculated based on the marginal cost of actions taken by the grid operator in order to balance the system. This means if a renewable generator does not meet its contracted position on the day-ahead market they will have to purchase the shortfall for the imbalance price on the balancing market.

The principle of balancing responsibility is a key aspect of the third energy package intended to ensure generators bear financial responsibility for imbalances. As a result of this new arrangement, revenues may vary significantly, depending on the success of companies’ trading activities in the day-ahead market. It is hoped this measure will promote liquidity on the new market.

Support under the new renewable electricity support scheme, which is expected towards the end of 2018, will take the form of a floating feed-in-premium. This subsidy will guarantee renewable generators a minimum total income set at an auction strike price. This will mean at times when the wholesale power price rises above the auction strike price, generators will gain additional market revenues in addition to the subsidy, boosting their total income.

LIQUIDITY

Despite problems with low liquidity in SEM, the regulators have said they will not intervene to attempt to improve liquidity in the I-SEM forward market, following feedback from market participants.

Stakeholders have previously expressed concern that low liquidity in the new forward market could allow larger participants to take advantage of market power because of the increased number of trading periods available. However, ESB has refuted claims it will be able to exert excessive power over the market, citing its own projections for a decreasing market share in the coming years as interconnection with neighbouring markets increases.

CER and Utility Regulator had put forward two intervention proposals intended to improve liquidity in the new market, but these were met with a hostile reception from participants. The first proposal was a forward contract sell obligation (FCSO), a regulatory intervention that mandates a minimum volume that must be sold by generators on the forward market. There were some discussions about whether an FCSO would be placed on multiple generators or solely on incumbent ESB.

The second proposal was a market maker obligation (MMO), similar to the arrangement currently in place on the UK power market. An MMO requires certain larger market participants to ensure bid and offer information for certain key contracts is always available for trading. On the UK market, this takes the form of two daily hour-long market-making windows in the morning and afternoon which have been in place since 2014. Market participants cited the increased risk placed on market makers as a key reason for rejecting this intervention.

Following the decision not to intervene, CER and the Utility Regulator committed to a review of forward market liquidity 12-24 months after I-SEM launches. In the meantime, the regulators say they will encourage voluntary provision of FCSO and MMO services and will engage with participants as necessary to facilitate this.

OUTLOOK

The market redesign project remains on track with just seven months to go until the proposed launch date. That said, the SEM operator has said further delays to the launch could occur if unforeseen issues were to arise during the final stages of the process.

A full market trial is due to commence in December and is expected to run right up until the launch of I-SEM in May.
Christopher Somers is a market reporter at ICIS focused on the UK and Irish power markets. He also closely follows the Nordic energy sector. He has worked at ICIS for one year.

End-to-end testing of the market’s numerous new systems and services, the majority of which have been designed from the ground up, has been taking place throughout 2017 along with a programme of classroom-based training.

Following the go-live, the period to the UK formally leaving the EU in March 2019 will be a crucial litmus test for the operation of the new market. This interim phase will allow the market to operate fully for an extended period before the UK’s exit from the union throws up new, and as yet unforeseen, challenges for I-SEM.

About the Author

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Market Reporter

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