



SEM Contracting 2011/'12: Information on DCs, NDCs & PSO-related CfDs

An RA Information Paper

SEM-11-061

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1. Introduction

1.1 Background

Since 1st November 2007 the Northern Ireland Authority for Utility Regulation (Utility Regulator) and the Commission for Energy Regulation (CER), together referred to as the Regulatory Authorities or RAs, have jointly regulated the all-Island wholesale electricity market known as the Single Electricity Market (SEM) covering both Northern Ireland and the Republic of Ireland. Further details on the project can be found on the AIP website at www.allislandproject.org.

The SEM includes a centralised gross pool (or spot) market which, given its mandatory nature for generators (above 10 MW) and suppliers, is fully liquid. In this pool electricity is bought and sold through a market clearing mechanism, whereby generators bid in their Short Run Marginal Cost (SRMC) and receive the System Marginal Price (SMP) for each trading period for their scheduled market quantities, as well as other revenue streams. Suppliers purchasing energy from the pool pay the SMP for each trading period along with other costs.

Risk Management is an integral element of the efficient and effective operation of the SEM. To date there have been offerings of 2-way Contracts for Differences (CfDs) which have enabled generators and suppliers to manage and hedge the wholesale price - i.e. SMP - risk inherent in the SEM. CfDs assist both wholesale and retail competition to the ultimate benefit of final customers. This is because the ability of generators and suppliers to enter into and access contracts enhances the financial certainty, flexibility and innovation of participants in both the wholesale and retail markets.

1.2 Types of CfDs Available

There are currently three types of CfD being offered publically in the SEM. Details on the different types are provided at SEM-10-057 at the following link:

http://www.allislandproject.org/GetAttachment.aspx?id=e83a335f-8366-416c-a6fe-96a0d54b1721

In brief, the three types of CfDs available are:

- Directed Contracts (DCs), whose volume, price and eligibility is set by the RAs as part of the SEM market power mitigation strategy. Information on DCs for the next tariff year was published in the RAs' "Directed Contracts 2011/'12 Quantification and Pricing" decision paper, published on 17th June 2011 (SEM-11-045). The DC subscription windows for the next tariff year have recently closed;
- CfDs associated with the Public Service Obligation (PSO) levy in Ireland. On 1st June
 the RAs published a paper, SEM-11-027, which included information on PSO-related
 CfD offerings/products for the next tariff year; and,
- Non-Directed Contracts (NDCs), where generators can offer CfDs which suppliers
 are free to bid for. To date the parties who have offered significant quantities of
 NDCs to participants in the market are ESB PG and NIE Energy PPB. NDCs offered

by NIE Energy PPB are related to the PSO levy in Northern Ireland. Previously, information on NDCs for the next tariff year was published in SEM-11-020, on 13th April.

1.3 Purpose of this Paper

The purpose of this Information Paper from the RAs is:

- To provide information on the DC strike prices for the next tariff year, which were calculated during the recent DC subscription windows - please see section 2 of this paper;
- To update on the timing of the auctions for PSO-related CfD offerings/products for the next tariff year, further to SEM-11-027 published in June. Please see section 3 of this paper for information on this - please note there is no change to the products or volume on offer; and,
- To update on the ESB PG and NIE PPB NDCs on offer for the next tariff year, further
 to what was published in SEM-11-020. Information on ESB PG's offerings of NDCs
 over a new public "Over the Counter" facility, which provides for more supplier
 interaction in contract price/volume setting, is also included. Please see section 4 for
 details on this.

2. DC Prices for Next Tariff Year

For information, this section outlines the DC strike prices for the period 1st October 2011 to 30th September 2012, resulting from the DC subscription windows in June and July 2011. The RAs' decision paper on DCs for the tariff year can be viewed at the following link:

http://www.allislandproject.org/en/market_decision_documents.aspx?article=ab4bc686-7ece-41e3-a84a-02802f666ac3

The DC strike prices were calculated daily during the subscription windows using fuel and CO₂ prices from specified indices in conjunction with the established DC price formulae. The prices for each product during the primary and supplemental subscription windows are outlined in €/MWh and £/MWh in the tables below.

Please note that this year no Baseload Contracts were offered for Q3 '12 and no Peak Contracts were offered for Q1 '12, but the strike prices for these contracts from the DC formulae are included below for comparative purposes.

	Baseload					Midmerit					Peak		
	Q4 2011	Q1 2012	Q2 2012	Q3 2012		Q4 2011	Q1 2012	Q2 2012	Q3 2012	Q4	2011	Q1 2012	
Primary Window													
27th June	€70.87	€71.43	€66.74	€66.25		€78.86	€78.39	€72.71	€72.72		€107.04	€98.05	
28th June	€71.71	€72.47	€67.65	€67.19		€79.80	€79.53	€73.70	€73.76		€107.90	€99.11	
29th June	€71.64	€72.38	€67.54	€67.07		€79.73	€79.42	€73.55	€73.59		€107.78	€98.99	
30th June	€71.86	€72.65	€67.95	€67.46		€79.97	€79.71	€74.00	€74.05		€107.99	€99.23	
1st July	€71.06	€72.01	€67.37	€66.96		€79.07	€79.01	€73.39	€73.50		€107.20	€98.59	
4th July	€72.00	€72.99	€68.32	€68.01		€80.11	€80.08	€74.39	€74.60		€108.11	€99.54	
5th July	€72.83	€73.96	€69.27	€68.91		€81.05	€81.13	€75.39	€75.57		€108.96	€100.58	
6th July	€72.52	€73.64	€68.99	€68.61		€80.71	€80.80	€75.08	€75.24		€108.66	€100.29	
7th July	€73.21	€74.41	€69.49	€69.10		€81.49	€81.66	€75.61	€75.75		€109.36	€101.14	
8th July	€72.64	€73.81	€68.96	€68.56		€80.86	€81.00	€75.03	€75.16		€108.80	€100.49	
11th July	€72.41	€73.72	€68.64	€68.24		€80.60	€80.91	€74.66	€74.77		€108.57	€100.42	
Supplemental Window											·		
18th July	€72.84	€74.27	€69.09	€68.68		€81.08	€81.51	€75.15	€75.22		€108.93	€100.87	

		Base	eload			Midmerit				
	Q4 2011	Q1 2012	Q2 2012	Q3 2012	Q4 2011	Q1 2012	Q2 2012	Q3 2012	Q4 2011	Q1 20
rimary Window										
7th June	£63.05	£63.55	£59.38	£58.94	£70.16	£69.74	£64.69	£64.70	£95.23	£
8th June	£64.12	£64.80	£60.49	£60.08	£71.36	£71.12	£65.90	£65.96	£96.48	3 £
9th June	£64.46	£65.13	£60.77	£60.35	£71.74	£71.46	£66.18	£66.22	£96.98	£
Oth June	£64.86	£65.57	£61.33	£60.89	£72.18	£71.94	£66.79	£66.83	£97.47	£
st July	£64.31	£65.17	£60.97	£60.60	£71.56	£71.50	£66.42	£66.52	£97.02	£
th July	£64.91	£65.80	£61.59	£61.31	£72.22	£72.19	£67.06	£67.25	£97.46	£
th July	£65.43	£66.45	£62.23	£61.91	£72.82	£72.89	£67.73	£67.89	£97.89	£
th July	£64.89	£65.90	£61.74	£61.40	£72.22	£72.30	£67.19	£67.33	£97.23	£
th July	£65.31	£66.38	£61.99	£61.64	£72.70	£72.85	£67.45	£67.58	£97.56	£
th July	£64.88	£65.93	£61.60	£61.24	£72.22	£72.35	£67.02	£67.13	£97.18	£
1th July	£63.77	£64.93	£60.45	£60.10	£70.98	£71.26	£65.75	£65.85	£95.62	£
upplemental Window	 <u></u>									
8th July	£63.60	£64.85	£60.33	£59.97	£70.80	£71.17	£65.62	£65.68	£95.11	£

3. PSO-related CfDs for Next Tariff Year

In recent years CfDs associated with the PSO levy in Ireland have been offered in the SEM for contract liquidity purposes.

In a paper published by the RAs on 1st June (SEM-11-027) the RAs decided (following consultation) that the PSO-related CfDs for the next tariff year will be offered on a quarterly basis, with 0.9 TWh offered for each quarter, about a month in advance of the quarter in question. This was in light of the DCs being offered on an annual basis and the fact that a significant volume of NDCs are likewise offered a year-ahead. The quarterly offerings also include the ability for suppliers to choose which month(s) in each quarter that they wish to purchase, thereby providing the flexibility for suppliers to synch their hedging volumes with monthly demand/customer volume predictions.

The RAs are continuing with this approach. The distribution of PSO-related CfD products decided on in SEM-11-027 is also continuing, i.e. baseload, mid-merit 1 and mid-merit 2 product will be broken down on a 50: 25: 25 capacity (MW) basis for each of the offerings.

The RAs are making just one change to the PSO-related CfDs detailed in SEM-11-027 and that is to the timing of the auctions. Previously, in SEM-11-027, the quarterly auctions offering 0.9 TWh were to be held on the one date/day about a month in advance in the quarter. Now the RAs have decided to split the quarterly offerings between two days, i.e. 0.45 TWh will be offered on each of two days a week apart. This change constitutes a useful risk mitigation measure for the end customer against the contracts being significantly "out of the money" due to unusual spikes in fuel or CO₂ prices on any given day. It may be of benefit to suppliers also by spreading out the offerings of PSO-related CfDs to a greater extent. The RAs believe that the benefits justify the extra work in setting the PSO-related CfD reserve prices more regularly.

The auction dates will still be held about a month before the quarter, with a new auction date a week before the one that was already planned. The auction dates are now as listed below.

- Half (0.45 TWh) of Q4 2011 product will be offered by ESB on Thursday 25th August 2011 and half (0.45 TWh) on Thursday 1st September 2011;
- Half (0.45 TWh) of Q1 2012 product will be auctioned by ESB on Thursday 24th November 2011 and half (0.45 TWh) on Thursday 1st December 2011;
- Half (0.45 TWh) of Q2 2012 product will be offered by ESB on Thursday 23rd February 2012 and half (0.45 TWh) on Thursday 1st March 2012; and,
- Half (0.45 TWh) of Q3 2012 product will be offered by ESB on Thursday 24th May 2012 and half (0.45 TWh) on Thursday 31st May 2012.

In addition, please note that any PSO-related CfD volume (for a month in each quarter) offered in the first auction, that is not sold, will then be offered in the second auction.

4. NDCs for Next Tariff Year

4.1 NDC Quantities/Offerings

Now that the DC subscription windows have closed for the next tariff year, this section updates on the NDC offerings for the next tariff year from ESB PG (which provides the majority of NDCs in SEM) and NIE PPB - further to information provided in SEM-11-027 of 13th April.

Any specific queries regarding this information should be directed to ESB PG or NIE PPB.

ESB PG

ESB PG has already sold 4.1 TWh of NDCs for the 2011/'12 tariff year. This was made up of the following annual offerings, where purchasers could chose which quarter/product to purchase.

GWh	Q4 11	Q1 12	Q2 12	Q3 12	Total
Base Load	660	873	491	415	
Mid Merit	330	260	231	234	
Mid Merit2	187	148	132	132	
Peak	29	22	0	0	4,100

Based on factors including forecast production, ESB PG is likely to have at least one more NDC auction for annual product and to sell CfDs during the year either by auction and/or via the brokered platform (see section 4.2 below).

The next annual ESB PG NDC auction is likely to happen in mid August for approximately 300 - 600 GWh. This auction is expected to include mid-merit/mid-merit 2 as well as baseload products. This is likely to complete ESB PG's sales programme for annual product for 2011/12.

Within-year auctions are also likely to happen monthly, dependent on supplier interest and on changes to ESB PG's production during the year. The exact breakdown of products and volumes will depend on ESB PG's forecast shape and supplier requirements, and are likely to include both auctions and sales via the brokered platform (see section 4.2 below).

ESB PG will publish an auction notice prior to each auction and will give final volumes in this notice.

NIE PPB

NIE PPB has already sold approximately 479 GWh of NDCs for the 2011/'12 tariff tear. This volume is comprised of mid-merit, mid-merit 2 and peak contracts.

NIE PPB are planning on holding three more NDC auctions in the period up to 18th August 2011, in which they will offer mid-merit and mid-merit 2 contracts.

4.2 OTC Brokered Market Goes Live

NDC offerings in the SEM commenced with annual rounds of NDC auctions carried out by manual faxed-based process. In 2009 the annual NDC auctions progressed to the Tullett Prebon Multilateral Trading Facility. Since late 2009, within-year NDC auctions have also been held over this facility.

Following testing carried out by Tullett Prebon and market participants, an "Over the Counter" (OTC) Brokered Market went live on the Tullett Prebon on 30th June 2011. Three parties were active during this first window, while several other parties logged in to watch events on the OTC screen during the trading window. Two trades were transacted during this first trading window, with ESB PG selling NDCs on both occasions. It is expected that this facility will develop with increased counterparty interest and volumes traded.

The commencement of the OTC Brokered Market is a potentially significant addition to the provision of liquidity in the SEM. The features of the new OTC facility are:

- Trading Window is 2 hours.
- Any party can enter bids or offers for any product and volume on screen during the Trading Window. These can been edited/updated during the Trading Window.
- During a Trading Window, all counterparties can see the activity on the OTC screen. All bids and offers are visible with just counterparty details hidden.
- All counterparties are able to view the product, volume and price of any trade transacted.
- Credit Agreement and Master Agreements need to be agreed between parties and once in place parties are free to trade.

Screenshots of the 30th June OTC Brokered Market trading event are shown in Appendix 1 to this paper, for information. The benefits of this new OTC facility are as follows:

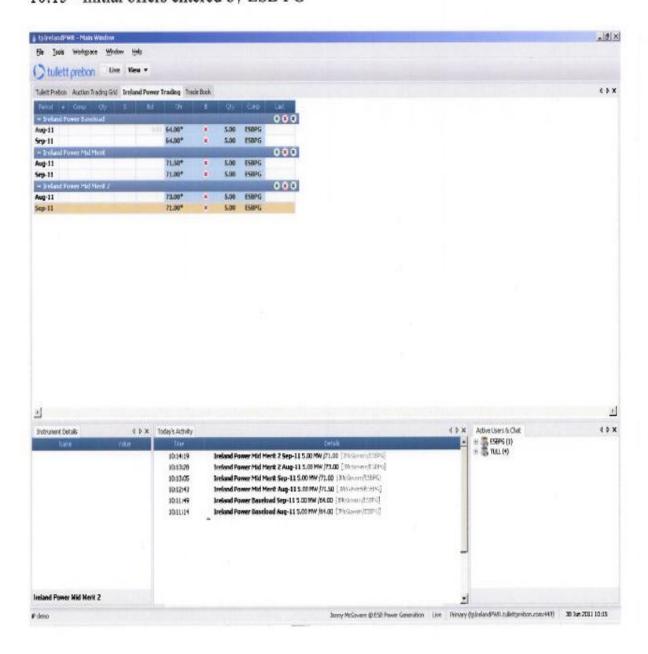
- It offers suppliers the opportunity to initiate trading for products and volumes that they require. This is a significant change from the NDC auction process, which is generator-led.
- Both generators and suppliers have a role in contract price determination, via offers and bids respectively (it is generators-only with the auction process), facilitating better price discovery for the contracts.
- More dynamic trading on the OTC markets both suppliers and generators can respond to interest shown during the auction window, in terms of both volume of power and also price.
- The OTC market allows any party the means to buy or sell power and facilitates market entry.
- Activity on the OTC market could help lead to the formation of a forward curve.

Appendix 1: Screen Shots of New OTC Trading

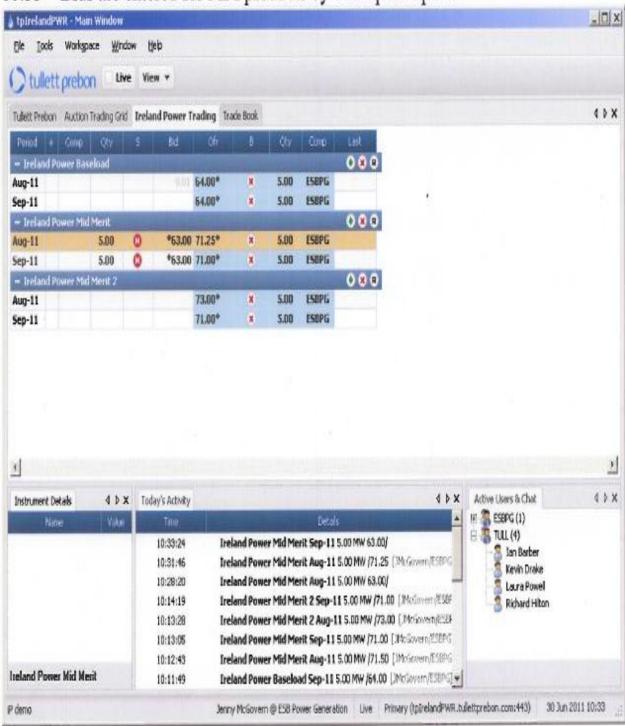
(zoom-in as needed)

Irish power Market - OTC Trading via Tullett Prebon Screenshots from first trading window on 30 June 2011

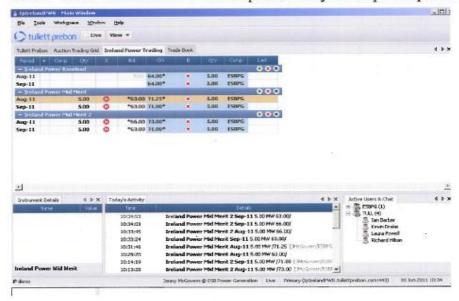
10:15 - Initial offers entered by ESB PG



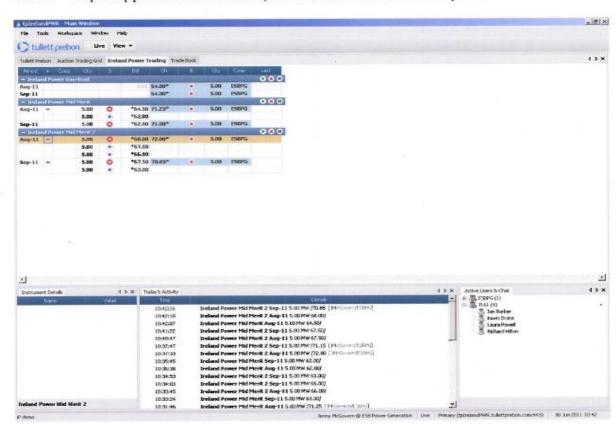
10:33 - Bids are entered for MM products by other participants

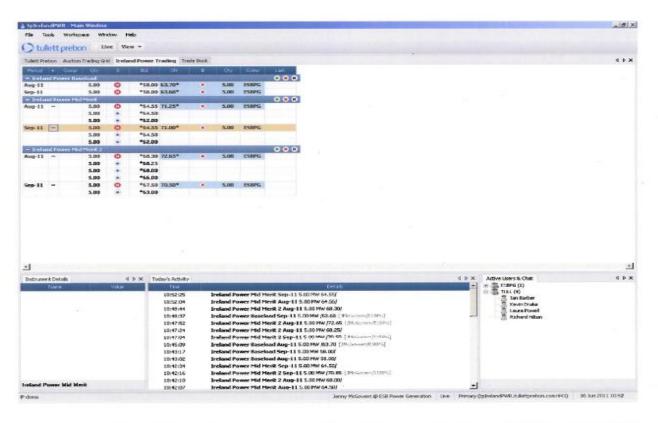


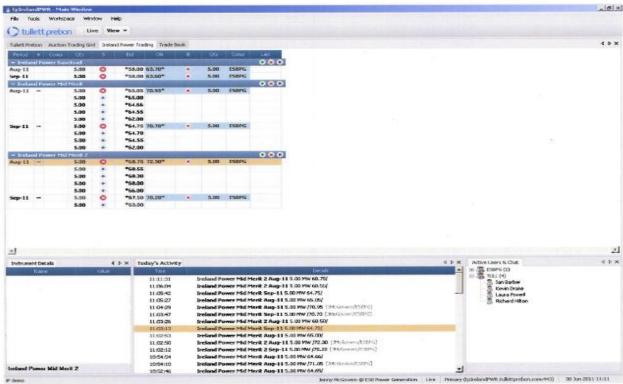
10:34 - Bids are entered for MM2 products by other participants

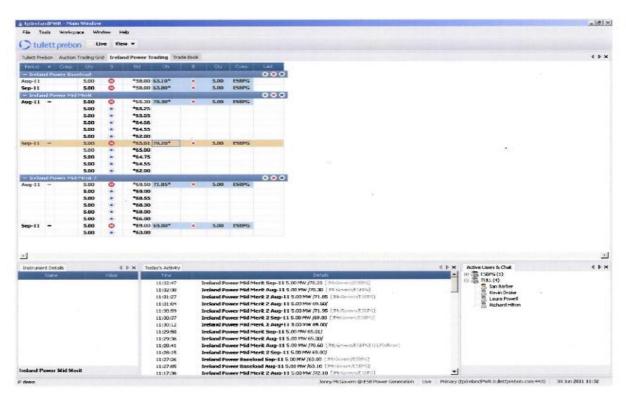


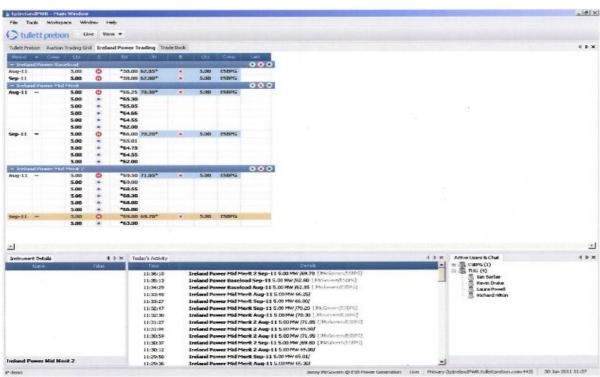
10:42 - Depth appears in the market, more than 1 bid for some products



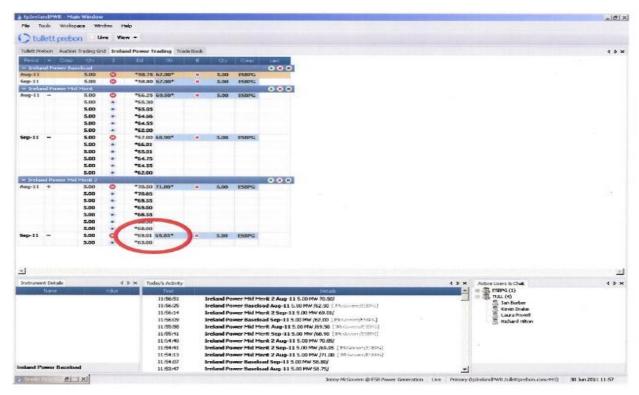




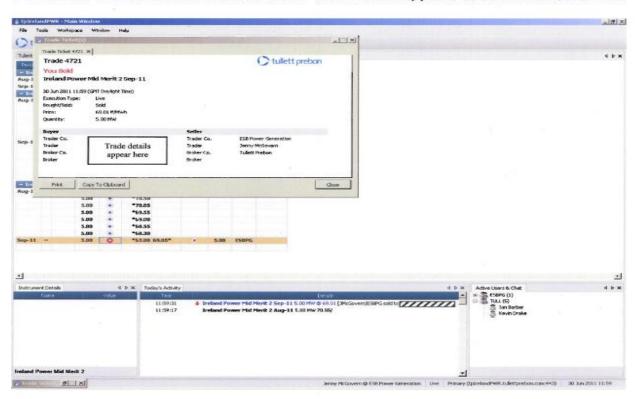




Prices beome close on Sept-11 MM2 as bids and offers converge



PG hits the closest bid and a deal is done- Trade ticket appears as confirmation of deal



Trade details are listed in trade book tab

