



**Directed Contract
Subscription Guidelines**

AIP-SEM-07-145

10th May 2007

Table of Contents

1	Introduction	1
2	Dates for Directed Contract Subscriptions	1
3	Execution of Master Agreement.....	1
4	Supplier Eligibility.....	2
5	Pricing of Contracts	2
5.1	Strike Price	2
5.1.1	Natural Gas	3
5.1.2	Coal	3
5.1.3	Gasoil	3
5.1.4	Low Sulphur Fuel Oil	4
5.1.5	Carbon.....	4
5.1.6	Foreign Exchange	4
5.2	Pricing Formula	4
6	Subscription Window	5
6.1	Daily and Aggregate Subscription Limits	5
6.2	Subscription Logistics.....	7
7	Supplemental Subscription Window	9
7.1	Subscription Logistics.....	9
7.2	Oversubscription.....	10
7.3	Notification of Subscriptions	10
8	Management of Credit Cover Prior to and during the Subscription Window	11

1 Introduction

The Commission for Energy Regulation (“CER”), in consultation with the North Ireland Authority for Utility Regulation (jointly referred to as the Regulatory Authorities), have directed ESB Power Generation (“ESB PG”) to offer Contracts for Differences to licensed retail suppliers in Ireland and Northern Ireland. The Regulatory Authorities have provided the form of contract that is to be used, have specified the aggregate volumes to be offered, and have specified the method by which the contracts will be priced. In addition, the Regulatory Authorities have specified a subscription process by which licensed retail suppliers may enter into these “Directed Contracts” during a specified time frame. All licensed retail suppliers serving customers in Ireland or Northern Ireland as of 1 May 2007 are eligible to participate in the Directed Contracts subscription process. In addition, new entrants serving customers in Ireland or Northern Ireland as of 25 June 2007 will be permitted to participate in the supplemental subscription window, as described in Section 7 below.

This document contains guidelines designed to facilitate and to clarify the subscription process for suppliers. The guidelines were developed by ESB PG in consultation with the Regulatory Authorities.

2 Dates for Directed Contract Subscriptions

The “Subscription Window” will run from 1 June 2007 through 29 June 2007.

The “Supplemental Subscription Window” will run from 2 July 2007 through 13 July 2007.

3 Execution of Master Agreement

Any eligible supplier wishing to enter into Directed Contracts during the Subscription Window must have executed the Master Contract for Differences Agreement prior to 1 June 2007. The executed agreement must be in the form published by the Regulatory Authorities on 3 April 2007.

Any eligible supplier wishing to enter into Directed Contracts during the Supplemental Subscription Window must have executed the Master Contract for Differences Agreement prior to 2 July 2007. The executed agreement must be in the form published by the Regulatory Authorities on 3 April 2007.

Suppliers that have not executed the Master Contract for Differences Agreement may not subscribe to Directed Contracts. Suppliers are also required to furnish their list of authorised traders and to have appropriate credit cover in place prior to commencement.

4 Supplier Eligibility

The Regulatory Authorities have sent to each eligible supplier a matrix showing the total megawatt quantity of Directed Contracts for which they are entitled to subscribe. These will be sent to suppliers in the week beginning 14 May 2007. The eligibility is broken down by quarter and by product, as illustrated in the table below.

	<i>[Supplier Name] Eligibilities for Directed Contracts with ESB PG</i>		
Quarter	Baseload Quantity (MW)	Mid-Merit Quantity (MW)	Peak Quantity (MW)
Nov-Dec 2007			
Q1 2008			
Q2 2008			
Q3 2008			

ESB PG has been provided with each supplier's eligibility and will confirm that each supplier's elections are within the eligibility parameters set by the Regulatory Authorities.

5 Pricing of Contracts

5.1 Strike Price

The strike price for each transaction will be set using the formula published by the Regulatory Authorities in the week beginning 14 May 2007 and associated forward fuel

prices. The forward price indices to be inputted to the formula for each fuel are described below.

For the avoidance of doubt, the prices in the formula are denominated in Euros per therm or Euros per tonne, as appropriate. The fuel indices below therefore have to be converted from Sterling pence per therm (in the case of Natural Gas) and US Dollars per metric tonne (in the case of Coal, Gasoil and Low Sulphur Fuel Oil) into Euros using the spot daily Sterling-Euro and spot daily US Dollars-Euro exchange rate. The Natural Gas price also has to be converted from Euro cents per therm to Euros per therm by multiplying by 100.

Appendix 1 sets out further detail on how the fuel prices will be calculated, and makes specific provision for Q4 2007, which is a two month quarter.

5.1.1 Natural Gas

The Settle price (in pence Sterling per therm) for the Quarterly Intercontinental Exchange ("ICE") Natural Gas Futures as reported in European Spot Gas Markets published by Heren Energy will be used.

5.1.2 Coal

The Average of the Bid and Ask prices (in US dollars per tonne) for quarterly Forward Coal API2 swap transactions as reported daily in Argus Coal Daily International will be used. If no price is available from "Argus Coal Daily International" for a given quarter, the price for the most recent quarter will be used.

5.1.3 Gasoil

For pricing periods prior to January 2008 the Mid Point quarterly price (in US dollars per metric tonne) for swap transactions for 0.2% Gasoil cargoes in NWE including cost, insurance and freight (CIF), as reported by Platts Forward Curve Oil will be used. For pricing periods including and subsequent to January 2008, the Mid Point quarterly price for swap transactions for 0.1% Gasoil CIF cargoes in NWE, as reported by Platts Forward Curve Oil will be used. If no price is available from Platts for a given quarter, the price for the most recent preceding quarter will be used.

Note that Platts publish the Gasoil cargo swap prices as a differential to their Gasoil Frontline Swap. Therefore to get the actual price for Gasoil to use in the Directed Contract strike price formula it is necessary to add the mid-point value of the above index to the mid-point value of the Gasoil Frontline Swap.

5.1.4 Low Sulphur Fuel Oil

The Mid Point quarterly price (in US dollars per metric tonne) for swap transactions for 1% free on board (FOB) fuel oil cargoes in Northwest Europe ("NWE"), as reported by Platts Forward Curve Oil will be used. If no price is available from Platts for a given quarter, the price for the most recent preceding quarter will be used.

5.1.5 Carbon

The daily price weighted average closing price (in euro per tonne) reported by the London Energy Brokers Association (LEBA) for a given calendar year will be used. The calendar price for a given year will apply to all quarters falling within that year.

5.1.6 Foreign Exchange

The forward fuel prices to be used in the daily strike price calculation will be converted to Euro per tonne using the daily spot Dollar-Euro foreign exchange rate and into Euro per therm using the daily spot Sterling-Euro foreign exchange rate, as defined in the Master agreement.

5.2 Pricing Formula

The Regulatory Authorities have reserved the right to alter and republish the pricing formula during the Subscription Window and the Supplemental Subscription Window. The formula may be altered if there is recognition that it is no longer correct. This could occur where the range of fuel prices under which it was developed no longer applies or where there is a significant change in future plant availability.

6 Subscription Window

6.1 Daily and Aggregate Subscription Limits

On each business day¹ during the Subscription Window, suppliers can elect to enter into transactions for a percentage of their eligibility for each product.

To do so, suppliers must inform ESB PG of:

- a) the product that is being subscribed (baseload, mid-merit or peak); and
- b) the percentage quantity that is being subscribed.

The quantity must be expressed as a whole number percentage of that supplier's eligibility for that product. Where a supplier's election does not constitute whole percentages, ESBPG shall round the subscription down to the nearest whole number percentage. Suppliers may elect different percentages of the different products. Suppliers also may choose not to elect a particular product.

The quantity subscribed for a given product on a given business day is subject to a minimum and a maximum.

- The minimum subscription will be 1% of eligibility for that product, the Minimum Daily Limit.
- The maximum subscription will be 10% or 10 MW, whichever is greater. The method for calculating whether 10% or 10 MW determines the applicable cap is set forth below:
 1. For each product type and each quarter, ESB PG will calculate what percent 10 MW is of the supplier's eligibility in that quarter and for that product type. If eligibility is zero for a particular quarter and product type, then this percentage is not applicable for that quarter and product type. Each figure will be rounded to the nearest whole percentage point. An example is provided in the table below.

¹ Business days are Monday through Friday, excluding Monday June 4th.

	[Supplier Name] Eligibilities for Directed Contracts with ESB PG			[Supplier Name] <i>10 MW is This Percent of Directed Contract Eligibilities (Rounded)</i>		
Quarter	Baseload Quantity (MW)	Mid-Merit Quantity (MW)	Peak Quantity (MW)	Baseload	Mid- Merit	Peak
Nov-Dec 2007	30	120	120	33%	8%	8%
Q1 2008	40	100	130	25%	10%	8%
Q2 2008	20	90		50%	11%	n/a
Q3 2008	20	50		50%	20%	n/a

2. Separately for each product type, ESB PG will determine the lowest percentage of the quarterly percentages calculated in Step 1 above.
3. For each product type, the maximum percentage the supplier can elect on any given day is the maximum of 10% and the percentage calculated in Step 2 above. Steps 2 and 3 are illustrated in the table below.

Product	Minimum Percentage from Step 2	<i>Applicable Maximum from Step 3</i>
Baseload	25% (From Q1 2008)	<i>Max of 10% and 25% is: 25%</i>
Mid-Merit	8% (From Nov-Dec 2007)	<i>Max of 10% and 8% is: 10%</i>
Peak	8% (From Nov-Dec 2007 or Q1 2008)	<i>Max of 10% and 8% is: 10%</i>

In the event that a supplier submits a subscription that:

- Exceeds the Maximum Daily Subscription Limit (whether as a result of multiple elections on a given day, or a single election), ESB PG will calculate the maximum volume consistent with the Maximum Daily Subscription Limit and will deem the subscription to be for that amount.
- On any given day a supplier submits a subscription which exceeds its Total Eligibility Matrix as per the matrix in Section 4 above, ESB PG will calculate the maximum volume consistent with the Total Eligibility Matrix and will deem the subscription to be for that amount.

- For an amount less than the Minimum Daily Limit, ESB PG will deem the subscription in respect of that day to be zero for that product.

6.2 Subscription Logistics

Subscriptions by eligible suppliers must be made between 8.30am and 10.00am on business days during the Subscription Window.

Suppliers may advise ESB PG of subscriptions:

- 1) by telephone; or
- 2) by facsimile.

Note that all subscriptions made by telephone will be recorded.

In the facsimile or telephone call, the supplier must provide the following data:

- Supplier Name
- Date
- Baseload percentage subscribed (if any)
- Mid-merit percentage subscribed (if any)
- Peak percentage subscribed (if any)

If multiple elections are submitted by a supplier for a given trading day, ESBPG will aggregate the volumes nominated.

For the avoidance of doubt, in the case whereby a subscription is executed by recorded voice call, no voice conversation may be deemed to be unconditional acceptance of the subscription by ESB PG. Any acceptance shall be subject to further checks that the subscriptions (that day, or in aggregate, as may be appropriate in each case):

- Do not exceed Maximum Daily Subscription Limits and Total Eligibility as set out in the Total Eligibility Matrix for the supplier in question; and
- Are not less than the Minimum Daily Limits;
- Do not breach the credit provisions set out in Section 8 of this document.

ESB PG will convert the percentages of eligibility into MW quantities by quarter and product. In addition, ESB PG will use the transaction pricing formulae set by the Regulatory Authorities to determine transaction prices by product and by quarter. The Regulatory Authorities have specified that ESB PG shall input end-of-day forward fuel and emissions prices into the Directed Contract pricing formulas to set the transactions prices. Hence, while the subscriptions will be made in the 8:30 AM to 10:00 AM period, the transaction prices will not be known until end-of-day fuel and emissions prices are released in the late afternoon.

Within two business days following subscription, ESB PG will send to the supplier a transaction confirmation in the form of Schedule 6 of the Directed Contract Master Agreement for each transaction entered into. (Each subscription for a given product is considered a transaction. Hence, if on a given business day a supplier subscribes to all three products, this would constitute three transactions.) The transaction confirmation will contain the megawatt quantities and prices by quarter. The transaction confirmation will reflect any adjustments made to subscriptions to reflect breaches of Maximum or Minimum Daily Limits, Total Eligibility or the credit provisions set out in Section 8.

The supplier will have the opportunity to review the accuracy of the transaction confirmation and request corrections if necessary pursuant to the terms of Section 3.6 of the Master Contract for Differences Agreement. Notwithstanding the provisions of the Master Contract for Differences Agreement in this regard, and for the avoidance of doubt, in the event that the price information contained in the confirmation differs from the calculated price under the pricing formula then the price formula calculation shall prevail. Similarly, in the event that the MW quantity information contained in the confirmation differs from the valid percentage of eligible volume subscribed, then the latter shall prevail.

7 Supplemental Subscription Window

The Supplemental Subscription Window is designed to give suppliers who have fully subscribed their eligibility during the initial Subscription Window an opportunity to enter into additional Directed Contract transactions.

New entrants who were licensed in the current year and are not affiliated with any existing market participant will also be permitted to participate in the Supplemental Subscription Window. The Regulatory Authorities will inform ESB PG of any new entrant eligibility and ESB PG will monitor new entrant activity during the Supplemental Subscription Window to assure that subscriptions by new entrants do not exceed eligibilities. New entrant eligibility will be notified to ESB PG by the Regulatory Authorities.

Suppliers who participated in the initial Subscription Window will only be eligible to participate in the Supplemental Subscription Window if they subscribed 100% of their eligibility in all products (baseload, mid-merit and peak). A supplier who is fully subscribed for baseload (say), but not fully subscribed for peak will not be permitted to make additional elections during the Supplemental Subscription Window.

At the end of the initial Subscription Window, ESB PG will notify those suppliers who have taken 100% of their allocation of all Directed Contracts of the unsubscribed quantities that remain. ESB PG will provide notice of unsubscribed quantities for each product (baseload, mid-merit and peak) and for each quarter. The eligibility of suppliers will be reset for the purposes of the Supplemental Subscription Window and each supplier who was fully subscribed during the initial Subscription Window will be separately eligible to take the all of the unsubscribed quantities over the course of the Supplemental Subscription Window, subject to the daily subscription limits described below.

7.1 Subscription Logistics

Suppliers making quantity elections during the Supplemental Subscription Window will be required to do so in the same manner in which the elections were made during the initial Subscription Window.

Specifically, the subscriptions must be made between 8:30 AM and 10:00 AM on business days during the Supplemental Subscription Window.

Further, as was the case during the initial Subscription Window:

- Supplier elections will be subject to a minimum of 1%, the Minimum Daily Limit. Suppliers also may choose not to elect a particular product.
- Supplier elections will be subject to a maximum of 10% or 10 MW, the Maximum Daily Limit, as illustrated above.
- Supplier elections must be specified as whole number percentages.
- Suppliers may elect different percentages of the different products.

ESB PG shall apply the same rules as during the initial Subscription Window for breaches of Maximum or Minimum Daily Limits (the Total Eligibility Matrix does not apply during the Supplemental Subscription Window).

Where a supplier's election does not constitute whole percentages, ESB PG shall round the subscription down to the nearest whole number percentage.

7.2 Oversubscription

If the available Directed Contract quantities for a given product are oversubscribed as a result of multiple suppliers' electing the same transaction on the same day during the Supplemental Subscription Window, those suppliers' elections will be scaled down on a pro rata basis until 100% of the available Directed Contract quantities are subscribed.

7.3 Notification of Subscriptions

At the end of each business day within the Supplemental Subscription Window, ESB PG will notify the Regulatory Authorities of the total cumulative MW quantity (by product and by quarter) of Directed Contract subscribed to up to and including that date. ESB PG will also notify the Regulatory Authorities of the volumes transacted by supplier by product type on a daily basis during the subscription window.

8 Management of Credit Cover Prior to and during the Subscription Window

Each supplier with Directed Contract (DC) eligibility intending to exercise any of its DC eligibility will need to have posted credit cover in advance of the subscription window.

The credit cover requirements during the subscription window are calculated as follows:

- The expected prices for each product in each quarter will be calculated based on the end of day fuel and carbon prices on the day that the RAs publish the DC pricing formula (the RAs currently intend to publish the pricing formulae on the 14th May).
- By 5pm on the day following the publication of the DC pricing formula by the RAs, ESB PG will issue a matrix of ESTSEM p,q^2 prices based on the close of previous day fuel prices.
- This matrix will be “baselined” for the duration of the Subscription Window (initial and Supplemental) for the purpose of credit cover calculations.
- The matrix will have the format set out below (the number in the matrix being purely illustrative)

	ESTSEM p,q		
	Baseload	Mid-Merit	Peak
Q4 2007 (November and December)	€ 70/MWh	€ 80/MWh	€ 90 /MWh
Q1 2008	€ 60/MWh	€ 70/MWh	n.a.
Q2 2008	€ 60/MWh	€ 70/MWh	n.a.
Q3 2008	€ 70/MWh	€ 80/MWh	€ 90 /MWh

- In keeping with the principles of the Master Agreement, each supplier is required to provide ESB PG with 15% of the value of the underlying energy in credit cover

² ESTSEM p,q is an estimate of the average SEM price, the calculation of which is set out in the Master Contract for Differences Agreement executed between the parties.

for any volumes they wish to subscribe to, based upon the DC Strike Prices. ESB PG has the right to decline any subscription volume in excess of the required credit cover in place.

- Therefore each supplier should calculate the maximum DC volume they may wish to subscribe to during the subscription window in MWh - see worked example below.
- If a supplier's elections exceed the amount of credit cover lodged then ESB PG will:
 - Calculate the maximum amount of product that the supplier can subscribe to
 - Accept the subscription for the maximum volumes consistent with the amount of collateral posted. Where the supplier has subscribed to more than one product on that day, ESB PG will accept the subscriptions for the different products pro-rata to the supplier's elected volumes in each product
 - Notify the supplier in question of any volumes which cannot be accepted
 - Send out confirmations for the accepted subscriptions consistent with the standard timetable for confirmations
- If a supplier subsequently posts additional credit cover before the end of the subscription window, they will be eligible for additional subscriptions up to the limit of the additional credit cover. The subsequent elections will be subject to the same constraints on Maximum Daily Limits and Total Eligibility. Therefore if the supplier in question does not lodge the additional credit cover until late in the subscription window they may be at risk of not being able to subscribe to its Total Eligibility as per the Total Eligibility Matrix.

Note that the above process has been designed based upon certain assumptions. ESB PG reserves the right to amend the above process if there are material changes in the following areas:

- The duration between the date the DC pricing formula is published (and hence the date the prices are "baselined" for the purposes of the upfront credit requirements) and the start of the Subscription Window.
- The duration between the start of the initial Subscription Window and the end of the Supplemental Subscription Window.

- Revisions to the DC strike price formula in accordance with the provisions set out in Section 5.2 above.

Once the subscription window (initial and supplemental) has been completed, the specific provisions covering credit during the subscription process as described in this section will expire. The normal monthly and intra-monthly margining provisions will apply as per the Master agreement.

Worked Example

- Suppose a supplier decides that they may wish to subscribe to the following volumes:

	Baseload	Mid-Merit	Peak
Q4 2007 (November and December)	10,000 MWh	8,000 MWh	1,000 MWh
Q1 2008	5,000 MWh	4,000 MWh	n.a.
Q2 2008	5,000 MWh	4,000 MWh	n.a.
Q3 2008	10,000 MWh	8,000 MWh	1,000 MWh

- Then the supplier should calculate that the credit cover required to support their likely maximum DC subscription as follows:

	Baseload	Mid-Merit	Peak	Total
Q4 2007 (November and December)	€70/MWh x 10,000 MWh x 15% = €105,000	€96,000	€13,500	€214,500
Q1 2008	€ 45,000	€42,000	n.a.	€ 87,000
Q2 2008	€ 45,000	€42,000	n.a.	€ 87,000
Q3 2008	€105,000	€96,000	€13,500	€214,500
Total	€300,000	€276,000	€27,000	€603,000

- Therefore the supplier would need to have lodged a minimum of €603k collateral before the start of the Subscription Window in order to cover the intended volume as set out in the example.
- Suppliers may elect their preferred mix of baseload, mid-merit and peak product, subject to its eligibility matrix, provided that the value of the underlying energy calculated at the “baselined” prices above does not exceed the €603k collateral lodged.

Appendix 1: Fuel Indexation Methodology

The rules described below set out the methodology for applying fuel indices in the strike price calculation during the subscription window.

Note that Q4 2007 is a two month quarter. Given that there is significant intra-quarter seasonality, particularly for natural gas, the quarterly price is likely to be a material biased estimate of true fuel prices in the two-month “quarter”. This effect is taken account of in the formula below.

Natural Gas ICE, NBP

Quarter	Approach	Rationale
Q4 2007	Calculate: Q4 price = (November 2007 price + December 2007 price)/ 2	There is significant intra-quarter seasonality in NBP prices, and the Q4 prices is likely to be a downward biased estimate of November and December prices. The November and December 2007 prices will be available by May (Heren publish Balance of Current Month price plus the next six calendar months at monthly granularity).
Q1 2008	Use published quarterly price	Quarterly prices will be directly observable by the start of the subscription window
Q2 2008	Use published quarterly price	Quarterly prices will be directly observable by the start of the subscription window
Q3 2008	Use published quarterly price	Quarterly prices will be directly observable by the start of the subscription window

Coal (cif ARA Rotterdam, API2)

Quarter	Approach	Rationale
Q4 2007	Use the Q4 2007 price for the 2 month quarter	The November and December price will not be directly observable, but there is limited seasonality in coal prices
Q1 2008	Use published quarterly price	Quarterly prices will be directly observable by the start of the subscription window
Q2 2008	Use published quarterly price	Quarterly prices will be directly observable by the start of the subscription window
Q3 2008	Use the Q2 2008 price if published quarterly price is unavailable.	Quarterly prices may not be directly observable by the start of the subscription window.

Gas oil CIF NWE

Quarter	Approach	Rationale
Q4 2007	Calculate: Q4 price = (November 2007 price + December 2007 price)/ 2	The November and December 2007 prices are expected to be available by May (Platt's publish the next six calendar months at monthly granularity)
Q1 2008	Use published quarterly price	Quarterly prices will be directly observable by the start of the subscription window
Q2 2008	Use published quarterly price	Quarterly prices will be directly observable by the start of the subscription window
Q3 2008	Use the Q2 2008 price if published quarterly price is unavailable	Quarterly prices will be directly observable by the start of the subscription window

Low Sulphur Fuel Oil (1% FOB NWE)

Quarter	Approach	Rationale
Q4 2007	Use the Q4 2007 price for the 2 month quarter	The November and December price will not be directly observable, but there is limited seasonality in coal prices
Q1 2008	Use published quarterly price	Quarterly prices will be directly observable by the start of the subscription window
Q2 2008	Use published quarterly price	Quarterly prices will be directly observable by the start of the subscription window
Q3 2008	Use the Q2 2008 price if published quarterly price is unavailable	Quarterly prices may not be directly observable by the start of the subscription window

Carbon

Quarter	Approach	Rationale
Q4 2007	Use the LEBA closing weighted average price for 2007	LEBA do not publish quarterly granularity prices. However, this is not an issue as emissions limits apply annually, not quarterly
Q1 2008	Use the LEBA closing weighted average price for 2008	
Q2 2008	Use the LEBA closing weighted average price for 2008	
Q3 2008	Use the LEBA closing weighted average price for 2008	