



ANNUAL CAPACITY PAYMENT SUM

INDICATIVE VALUE FOR 2008

DATE: 1 JUNE 2007

Introduction

On 14 March 2007 the Regulatory Authorities published a Decision document regarding the methodology for the determination of the Capacity Requirement¹ and on 18 May 2007 published a Decision document regarding the Best New Entrant peaking Plant fixed cost for 2007. On the basis of these documents the final value of the Annual Capacity Payment Sum for 2007 was published on the 18 May 2007.

This paper sets out an indicative value for the Annual Capacity Payment Sum for 2008, the associated values of the Capacity Period Payment Sums and the basis upon which these numbers have been determined. The Regulatory Authorities are of the view that participants should not legitimately expect the data utilised in determining the indicative value for 2008 to be the same as that data used to determine the final value (due to be published in August 2007). Accordingly the figures presented in this paper should be treated with caution.

Background

The Capacity Payment Mechanism (CPM) under the Single Electricity Market (SEM) is a fixed revenue mechanism which allocates an amount of money (the Annual Capacity Payment Sum – referred to here as *the annual sum*) determined prior to the start of each year into monthly amounts (Capacity Period Payment Sums). This money is collected from Suppliers pro-rata based on their actual demand and is paid to Generators pro-rata based on their availability². Determination of the annual sum is based on the product of two numbers:

- A volume element (the Capacity Requirement) - the quantity of capacity required to just meet an all-island adequacy standard; and
- A price element – the fixed costs of a Best New Entrant (BNE) peaking plant.

¹ <http://www.allislandproject.org/en/capacity-payments-consultation.aspx?article=64eb1095-92de-4ae2-a053-19a3cfc2307b>

² The payment mechanism considers the value of capacity at any given point in time rather than paying out on a purely pro-rata basis. Precise details of the payment and charging process can be obtained from the Trading and Settlement Code (<http://www.allislandproject.org/en/change-control.aspx>)

Values of ACPS_Y and CPPS_C for 2008

The following sets out the data and methodology utilised by the Regulatory Authorities to provide an indicative estimate of the value of the Annual Capacity Payment Sum for 2008.

Capacity Requirement

Data and Methodology

The Capacity Requirement for 2008 has been estimated in accordance the methodology set out in the aforementioned Decision document. The data employed was as follows:

- The Demand forecast was based on the forecasts employed by the TSOs for the 2007-2013 Generation Adequacy Report (GAR) and the 2007-2013 Seven Year Generation Capacity Statement (SYGCS);
- Unit capacities were provided by market participants - when the Regulatory Authorities wrote to all Generation License holders in their respective jurisdictions requesting unit capacity data for 2007, each party was also asked to stipulate if any changes to this data was envisaged for 2008
- The Generator Units expected to be registered in the market systems (and therefore entitled to CPM payments in 2008 and, consequently, considered in the determination of the Capacity Requirement) were determined as all those units in excess of the deminimis level set out in the Trading and Settlement Code, plus those units which, through discussions with their owners, it was considered that they would be likely to be registered;
- The Scheduled Outage Duration for each Generator Unit were the same as those used for the 2007 determination;
- The Forced Outage Probabilities for each Generator Unit and Interconnector were the same as those used for the 2007 determination;
- Commissioning and Decommissioning dates for Generator Units in 2008 were as provided by the TSOs based on best available data;
- The Capacity Credit for Wind Power Units was established by reference to Figure 2-2 in the 2007-2013 GAR and the entire wind capacity on the island of Ireland, as taken from the 2007-2013 GAR and SYGCS; and
- The Generation Adequacy Standard was set to 8 hours Loss of Load Expectation per year.

Qualifications

In using the above data the Regulatory Authorities recognise that some of the data may differ from that used to determine the final value of the Annual Capacity Payment Sum for 2008 (due to be published in August 2007) and therefore the Regulatory Authorities wish to highlight that the figures presented here should be treated with caution.

Indicative Capacity Requirement for 2008

Using the above data and the methodology set out in the Decision document, the Indicative Capacity Requirement for 2008 is 7200MW.

Fixed Costs of a BNE Peaking Plant

Data and Methodology

The data employed to estimate the fixed costs of a BNE peaking plant was based on the data presented for 2007 in the aforementioned Decision document. As noted by the Regulatory Authorities in the document announcing the Indicative value of ACPS for 2007, the Regulatory Authorities have undertaken a review of this 2007 data so as to apply it to 2008. The Regulatory Authorities have concluded that, for the purposes of providing an indicative value of the annual sum for 2008, a

number of the base data items should be inflated by a Harmonised Index of Consumer Prices. The value to be used was determined as the geometric average of the HCIP values for Rol for the last 3 years (2004 to 2006 inclusive). This gave a value of 1.024. The data used in the BNE calculation which has been subject to this indexation are:

- Site procurement costs;
- All the pre-financial close costs;
- Electrical connection costs;
- Pre-operation O&M costs;
- All the recurring costs

All other matters (technology choice, fuel choice etc.) remain as utilised in determining the BNE cost for 2007. This data gives an annualised fixed cost for the identified technology choice (and location) of €85.34/kW per annum.

The inframarginal rent calculation has been undertaken in the same manner as for 2007 but using prices forecast for 2008 while the Ancillary Service revenue has been estimated using forecast prices for 2008. Together these deliver a total revenue forecast for the BNE peaker for 2008 of €6.18/kW.

Qualifications

As with the determination of the Capacity Requirement, the Regulatory Authorities recognise that the data used in the estimation of the fixed costs of a BNE peaking plant presented in this paper may yet be subject to change. Consequently the Regulatory Authorities wish to highlight that the figures displayed here should be treated with caution.

Indicative Fixed Costs of a BNE Peaking Plant for 2008

On the basis of the above input data and methodologies described, the Indicative Fixed Cost of a BNE Peaking Plant for 2008 is €79.16/kW.

Indicative value of ACPS_Y for 2008

On the basis of the above calculations the Indicative value of the Annual Capacity Payment Sum (ACPS_Y) for 2008 is €569,952,000.

Using the methodology set out in the Decision document on Capacity Payment Factors in December 2006 the indicative values of the Capacity Period Payment Sums (CPPS_c) for 2008 are:

Month	Amount
Jan	€53,344,047
Feb	€51,602,752
Mar	€51,019,670
Apr	€43,050,000
May	€40,598,406
Jun	€39,047,938
Jul	€39,591,264
Aug	€41,425,322
Sep	€41,255,698
Oct	€49,447,999
Nov	€59,143,062
Dec	€60,425,842

The final value of ACPS_Y (and the values of CPPS_c) for 2008 will be published in August 2007.