

Single Electricity Market Committee

Policy Parameters 2013

Decision Paper

SEM-12-077

30 August 2012

Table of Contents

1. Introduction.....	3
2. Comments from Respondents.....	5
3. PCAP /PFLOOR.....	6
4. Uplift Parameters.....	8
5. Value of Lost Load.....	9
6. Decision on the Policy Parameters for 2012.....	10

1. Introduction

The SEM Trading and Settlement Code (the Code) sets out a number of policy parameters which are determined by the Regulatory Authorities (RAs) on an annual basis.

VoLL/PCAP/PFLOOR

In accordance with paragraph 4.12 and 4.95 of the Code, the Regulatory Authorities (RAs) are required to determine the following three administered prices:

- the Value of Lost Load (VOLL);
- the Market Price Cap (PCAP); and,
- the Market Price Floor (PFLOOR).

Following consultation last year, the RAs decided (SEM-11-073) for the period from 1st January 2012 to 31st December 2012 that:

- PCAP will remain unchanged at €1,000/MWh;
- PFLOOR will remain unchanged at minus €100/MWh.

The recent Consultation Paper (SEM-12-042), published on 15th June 2012, undertook a review of the effectiveness of PCAP and PFLOOR with a view to setting the values for the period 1st January to 31st December 2013. The same values as have been used since the beginning of the market were proposed in the consultation paper. This paper provides a final decision on the matter, following receipt of respondent's comments.

The calculation of VOLL for 2013, using the methodology decided upon in 2007, is set out in this paper to meet the requirement in paragraph 4.95 of the Code.

Uplift Parameters

Under paragraphs 4.70 and 4.71 of the Code, the RAs are also required to determine three parameters used in the calculation of Uplift¹. These are:

- The Uplift Alpha value α , which governs the importance of the Uplift Cost Objective, such that $0 \leq \alpha \leq 1$;
- The Uplift Beta value β , which governs the importance of the Uplift Profile Objective, such that $0 \leq \beta \leq 1$ and such that $\alpha + \beta = 1$; and,
- The Uplift Delta value δ , to constrain the overall impact on revenue in each Trading Day t arising from the Uplift calculation, such that $\delta \geq 0$.

¹ For more on the background to the methodology and objectives of Uplift in the SEM see the following: Objectives of the Function to Include Start-Up and No-load Costs in SMP(AIP/SEM/92/06), SMP Uplift Objectives – Decision Paper (AIP/SEM/142/06), SMP Uplift Parameters Consultation (AIP/SEM/230/06), and SMP Uplift Methodology and Parameters – Decision Paper (AIP/SEM/51/07)

Following consultation, the SEM Committee last year decided (SEM-11-073) for the period from 1st January 2012 to 31 December 2012 that:

- α should be set to a value of zero;
- β should be set to a value of 1; and,
- δ should be set to a value of 5.

The Consultation Paper (SEM-12-042), published on 15th June 2012, presented some analysis of the behaviour of Uplift for the period May 2011 to April 2012 and proposed values for the three Uplift values (α , β and δ) for the year 2013. The same values as have been used since the beginning of the market were proposed in the consultation paper. This paper provides a final decision on the matter, following receipt of respondent's comments.

2. Comments from Respondents

The SEM Committee received two responses to the consultation paper from the following parties:

- Endesa Ireland
- Power NI PPB

Responses received are published with this Decision Paper.

3. PCAP /PFLOOR

3.1 Proposals presented in the Consultation Paper

The SEM Committee proposed to leave PCAP and PFLOOR unchanged at €1,000/MWh and minus €100/MWh for 2013. The Consultation Paper (SEM-12-042) published on 15th June 2012 contained analysis of recent data which supported this proposal.

3.2 Respondent's Comments

Endesa Ireland agreed with the proposals in the Consultation Paper and that the Policy parameters should remain as they are in the current year.

Power NI PPB agreed that PFloor should be in line with the SEM Committee proposal. However, PPB suggested that the PCAP should be reduced from €1000/MWh to €750/MWh for 2013. In their response PPB cited the June Consultation Paper which states that a lower PCAP would have been equally effective in achieving the objectives of a price cap in the SEM.

3.3 Final Decision

The SEM Committee notes the points made by PPB in relation to reducing the PCAP to €750/MWh.

Respondents to previous Policy Parameter consultations have made arguments for and against the existence and level of the PCAP.

For example in their 2011 response (SEM-11-073(c)) Energia suggested that *“the case for and beneficial effects of price caps in electricity markets in general is highly questionable but especially in the context of the Single Electricity Market (SEM) where Value of Lost Load (VOLL) acts as a natural price cap and bidding short run marginal cost (SRMC) is a licence condition of generators monitored by the market monitor”*.

However, counter arguments were made by the Consumer Council in Northern Ireland where they suggested in their 2011 response that *“Given that other measures are in place to prevent prices spiking a lower level in the PCAP of €700/MWh may be feasible. This would reduce the level of potential volatility, reduce risk and therefore make price forecasting more accurate through increased certainty. This could result in more efficient pricing, leading to benefits for consumers, which will ultimately be realised through lower final prices”*.

In the 2011 Decision Paper (SEM-11-073) the SEM Committee addressed the arguments for and against the removing or reducing the PCAP and decided that PCAP would remain at the level it had been at since market start. Further to this, there does not appear to be any new evidence as to why the PCAP should be changed now. As above, PCAP has been set at the current level since market start in 2007.

The SEM Committee has therefore decided to leave PCAP and PFLOOR unchanged at €1,000/MWh and minus €100/MWh respectively for the year 1st January to 31st December 2013.

It should also be noted that the Trading and Settlement Code gives the SEM Committee power to change the PCAP and PFLOOR which would be an option should the need arise.

4. Uplift Parameters

4.1 Proposals presented in the Consultation Paper

The Uplift values calculated over the optimisation time horizon are optimised to meet two objective functions:

1. Minimising Uplift revenues (the cost objective); and,
2. Minimising Shadow Price distortion (the profile objective).

These functions are weighted within the optimisation by two Uplift parameters, α and β . In addition, a third Uplift parameter, δ , constrains the overall impact on revenue of the Uplift calculations.

The Code defines that α and β are complementary, such that $0 \leq \alpha \leq 1$, $0 \leq \beta \leq 1$ and $\alpha + \beta = 1$. The Regulatory Authorities concluded in the Decision Paper on the 2010 Uplift parameter values (SEM-09-095) that $\alpha = 0$, $\beta = 1$, $\delta = 5$ were the most appropriate Uplift parameters and that they provided the most appropriate balance of costs and price stability.

In considering the Uplift Parameter values for 2013, the RAs undertook further statistical analysis to examine the performance of Uplift which was included in the Consultation Paper (SEM-12-042) published on 15th June 2013. In that paper, the SEM Committee proposed that the values of the Uplift Parameters for the year 2013 should remain unchanged as follows:

- α should be set at zero;
- β should be set at 1; and,
- δ should be set at 5.

4.2 Respondent's Comments

No respondent suggested that the SEM Committee should make any changes to the Uplift Parameters.

4.3 Final Decision

The SEM Committee has decided to leave the Uplift parameters unchanged for the period 1st January to 31st December 2013 and that these should be as follows:

- α should be set at zero;
- β should be set at 1; and,
- δ should be set at 5.

5. Value of Lost Load

5.1 Background

The RAs are required under the Code to set a value for the Value of Lost Load (VoLL) in €/MWh four months before the beginning of the calendar year to which it applied. In AIP-SEM-07-484, the RAs announced their decision, after due consideration of the responses to a Consultation Paper published in 2nd July 2007, that:

- For the period from 1st November 2007 to 31st December 2008, the VoLL would be set to €10,000/MWh; and,
- Its value in subsequent calendar years would be determined by taking its values in the preceding year and up-rating it by applying the weighted average of the year-on-year increase in the Irish Harmonised Index of Consumer Prices (HICP) (using a weight of two-thirds) and the UK HICP (using a weighting of one-third) in the July of the preceding year by comparison with that a year earlier.

The sources for the data on HICPs were cited as the [Central Statistics Office](#) (CSO) in Ireland and the [Office for National Statistics in the UK](#).

4.2 Final Decision

The relevant data for the calculation of the 2013 value of VoLL using the specified methodology are as follows:

	Weight	July 2011	July 2012	% Change
Irish HICP (2005=100)	2/3	106.5	108.6	+1.97%
UK HICP (2005=100)	1/3	119.4	122.5	+2.60%
Weighted Average	1			+2.18%

On this basis, given that VoLL for 2012 was €10,519.75/MWh and using the specified methodology, VoLL for the calendar year 2013 will therefore be:

$$€10,519.75/\text{MWh} \times (+2.18\%) = 10,519.75 \times 1.0218 = \mathbf{€10,749.08/\text{MWh}}$$

6. Decision on the Policy Parameters for 2013

As detailed in this paper, the SEM Committee decides to leave the values of the policy parameters for the period 1st January to 31st December 2013 unchanged as follows:

- PCAP at €1,000/MWh;
- PFLOOR at minus €100/MWh;
- Uplift Parameter α to be set at zero;
- Uplift Parameter β to be set at 1; and,
- Uplift Parameter δ to be set at 5.

In addition, the VoLL for the year 2013 has been calculated as €10,749.08/MWh.