

Single Electricity Market Committee

Policy Parameters 2012

Decision Paper

SEM-11-073

2nd September 2011

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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-10-059) for the period from 1st January 2011 to 31st December 2011 that:

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

The recent Consultation Paper (SEM-11-056), published on 6th July 2011, 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 2012. 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 2011, 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 Regulatory Authorities last year decided (SEM-10-059) for the period from 1st January 2010 to 31 December 2011 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-11-056), published on 6th July 2011, presented some analysis of the behaviour of Uplift for the period May 2009 to April 2011 and proposed values for the three Uplift values (α , β and δ) for the year 2012. 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 five comments to the consultation paper from the following parties:

- The Consumer Council (Northern Ireland)
- Endesa Ireland
- Energia
- NIE PPB
- Synergen

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 2012. The Consultation Paper (SEM-11-056) published on 6th July 2011 contained analysis of recent data which supported this proposal.

3.2 Respondent's Comments

Three of the five respondents (Endesa Ireland, NIE PPB and Synergen) supported the SEM Committee proposal that the existing values should be retained for PCAP and PFLOOR.

The Consumer Council believes that it is important that PCAP is set at a level which will promote efficiencies by generators, which will lead to lower prices for consumers, rather than protecting generators from making a financial loss. They also suggest that a lower PCAP of €700/MWh may be feasible and that this would reduce the level of potential volatility, reduce risk and therefore make price forecasting more accurate through increased certainty. The Consumer Council also says that given the levels of risk involved it may not be appropriate to use different parameters but that a detailed assessment should be undertaken.

Energia are of the view that there is no basis for the continuation of PCAP and that its continuation exposes generators unnecessarily to the risk of generating at a loss. Energia also believe that year ahead modelling using prevailing fuel prices does not mitigate the risk.

Energia also reiterated their concerns in relation to the continuation of a negative PFLOOR and how that could hinder financing of renewable projects.

3.3 Final Decision

The SEM Committee notes the points made by the Consumer Council in relation to the level of the PCAP and the potential for reducing it. However, as suggested in the Consultation Paper, the analysis carried out to date does not support reducing the PCAP. Also one of the purposes of the PCAP is to stop extreme prices (VOLL) resulting for reasons other than a generators SRMC rather than to act as a regulatory price limiting mechanism.

The SEM Committee also notes the arguments made by Energia in relation to the continued existence of the price cap. However, the price cap has been in place since market start and during that time significant fuel prices have occurred and the SEM Committee believes that the PCAP has not hindered the functioning of the market.

The SEM Committee has decided to leave PCAP and PFLOOR unchanged at €1,000/MWh and minus €100/MWh respectively for the year 1st January to 31st December 2012.

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 2012, the RAs undertook further statistical analysis to examine the performance of Uplift which was included in the Consultation Paper (SEM-11-059) published on 6th July 2011. In that paper, the SEM Committee proposed that the values of the Uplift Parameters for the year 2012 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 2012 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 2012 value of VoLL using the specified methodology are as follows:

	Weight	July 2010	July 2011	% Change
Irish HICP (2005=100)	2/3	105.4	106.5	+1.04%
UK HICP (2005=100)	1/3	114.3	119.4	+4.46%
Weighted Average	1			+2.18%

On this basis, given that VoLL for 2011 was €10,295/MWh and using the specified methodology, VoLL for the calendar year 2012 will therefore be:

$$€10,295/\text{MWh} \times (+2.18\%) = 10,295 \times 1.0218 = \mathbf{€10,519.75/\text{MWh}}$$

6. Decision on the Policy Parameters for 2012

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 2012 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 2012 has been calculated as €10,519.75/MWh.