

Single Electricity Market Committee

Policy Parameters 2011

Decision Paper

SEM-10-059

25th August 2010

Table of Contents

1. Introduction.....	3
2. Comments from Respondents	5
3. PCAP /PFLOOR.....	6
4. Uplift Parameters.....	7
5. Value of Lost Load	8
6. Decision on the Policy Parameters for 2011	9

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-09-067) for the period from 1st January 2010 to 31st December 2010 that:

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

The Consultation Paper (SEM-10-043), published on 7th July 2010, 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 2011. 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-09-095) for the period from 1st January 2010 to 31 December 2010 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-10-043), published on 7th July 2010, presented some analysis of the behaviour of Uplift for the period November 2007 to April 2010 and proposed values for the three Uplift values (α , β and δ) for the year 2011. 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 RAs received two comments to the consultation paper from the following parties:

- NIE PPB; and,
- The Consumer Council (Northern Ireland).

Both respondents welcomed the opportunity to comment on the consultation paper.

One respondent stated that it had no reason to dispute the RA's analysis and therefore agrees that the existing values should be retained for PCAP, PFLOOR and the Uplift parameters.

One respondent, whose full submission has been published along with this paper, questioned the parameters impact on consumers, noting that it is important that the regulatory structures look to minimise the cost of energy to consumers. The RAs agree that in making any decision, it is important that the impact on consumers be ascertained.

One respondent noted the comment in the consultation paper that no generator would be expected to generate at a loss if its short-run marginal cost (SRMC) is higher than PCAP and queried the reason why this is. The respondent also noted that losses made by generators should not be subsidised by consumers. The SEM Committee believe that in the longer term, it is not appropriate for generators to run at a loss if their SRMC is above the PCAP. The RAs continue to see merit in consulting on the value annually to ensure it is set at the most efficient level. The RAs presented analysis in the consultation paper that showed that PCAP has not been hit, except for one instance due to an issue with the market systems and this has subsequently been repriced. Therefore the situation has not arisen where a generator's SRMC is higher than PCAP.

One respondent wished for the data to be analysed on an annual basis only. The RAs believe this is a good suggestion and will take this into account in next year's consultation paper.

This respondent also commented that given the levels of risk involved, it may not be appropriate to use different parameters; however it may be appropriate to run additional analysis to examine under what parameters, if any, would result in lower costs to consumers alongside an acceptable level of risk. The RAs agree with this suggestion and consider merit in examining which are the least cost solutions overall.

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 2011. The consultation paper (SEM-10-043) published on 7th July 2010 contained analysis of recent data which supported this proposal.

3.2 Respondent's Comments

As discussed in section 2 of this paper, one respondent noted that it had no reason to dispute the RA's analysis and therefore agrees that the existing values should be retained for PCAP and PFLOOR.

The second respondent stated that "given the levels of risk involved, it may not be appropriate to use different parameters. However it may be appropriate to run additional analysis to examine under what conditions, if any, would result in lower costs to consumers alongside an acceptable level of risk". The RAs agree with this comment and consider it appropriate that these values are consulted upon annually to ensure it is adequately set.

3.3 Final Decision

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 2011.

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 2011, the RAs undertook further statistical analysis to examine the performance of Uplift which was included in the consultation paper (SEM-10-043) published on 7th July 2010. In that paper, the SEM Committee proposed that the values of the Uplift Parameters for the year 2011 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

As with PCAP and PFLOOR, one respondent agrees that the existing values should be retained for the policy parameters and the second respondent noted that it may not be appropriate to use different parameters, given the levels of risk involved.

4.3 Final Decision

The SEM Committee has decided to leave the Uplift parameters unchanged for the period 1st January to 31st December 2011 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 2011 value of VoLL using the specified methodology are as follows:

	Weight	July 2009	July 2010	% Change
Irish HICP (2005=100)	2/3	106.7	105.4	-1.22%
UK HICP (2005=100)	1/3	110.9	114.3	+3.07%
Weighted Average	1			+0.21%

On this basis, given that VoLL for 2010 was €10,273/MWh and using the specified methodology, VoLL for the calendar year 2011 will therefore be:

$$€10,273/\text{MWh} \times (+0.21\%) = 10,273 \times 1.0021 = \mathbf{€10, 295/\text{MWh}}$$

6. Decision on the Policy Parameters for 2011

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 2011 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 2011 has been calculated as €10,295/MWh.