



**Trading and Settlement Code
Policy Parameters 2018**

Decision Paper

SEM-17-071

14 September 2017

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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-16-059) that for the period from 1 January 2017 to 31 December 2017:

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

The recent consultation paper (SEM-17-051), published on 19 July 2017, undertook a review of the effectiveness of PCAP and PFLOOR with a view to setting their values for the period 1 January 2018 up until I-SEM Go-Live. The same values as have been used since the beginning of the SEM were proposed in the consultation paper. This decision paper provides a final decision on the matter, following receipt of respondents' comments.

The calculation of VOLL for 2018, 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-16-059) that for the period from 1 January 2017 to 31 December 2017:

- α should be set at 0.1;
- β should be set at 0.9; and
- δ should be set at 5.

The consultation paper (SEM-17-051), published on 19 July 2017, presented some analysis of the behaviour of Uplift for the period 1 May 2016 to 30 April 2017 and proposed values for the three Uplift values (α , β and δ) for the year 2017. The same values as those used in 2017 were proposed in the consultation paper. This decision paper provides a final decision on the matter, following receipt of respondents' comments.

2. Comments from Respondents

The SEM Committee received two responses to the consultation paper (SEM-17-051) from the following parties:

- Bord Gáis Energy (BGE)
- Power NI Energy Limited – Power Procurement Business (PPB)

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

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

The other respondent supports the SEM Committee's proposal to leave the values of the policy parameters for 2018 unchanged and considers the proposal to retain the parameters justified for the duration of the application from 1 January 2018 to I-SEM Go-live in May 2018.

Neither respondent commented on specific parameters.

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 the period from the 1 January 2018 until I-SEM Go-Live. The consultation paper (SEM-17-051) published on 19 July 2017 contained analysis of recent data which supported this proposal.

3.2 Respondent's Comments

No specific comment was made on the PFLOOR and PCAP

3.3 SEM Committee Response and Final Decision

The SEM Committee has therefore decided to leave PCAP and PFLOOR unchanged at €1,000/MWh and minus €100/MWh respectively for the year t 1 January 2018 until I-SEM Go-Live. It should also be noted that the Trading and Settlement Code gives the SEM Committee the power to change the values of 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 $\alpha + \beta = 1$. Prior to 2015, the uplift parameters had been set to $\alpha = 0$, $\beta = 1$, $\delta = 5$ every year. In 2013 and 2014 further analysis was carried out and following consultation the uplift parameters were set to $\alpha = 0.1$, $\beta = 0.9$, $\delta = 5$ for 2015.

In considering the uplift parameter values for 2018, the RAs undertook statistical analysis to examine the performance of uplift which was included in the consultation paper (SEM-17-051) published on 19 July 2017. In that paper, the SEM Committee proposed that the values of the uplift parameters for the year 2018 should remain unchanged as follows:

- α should be set at 0.1;
- β should be set at 0.9; and
- δ should be set at 5.

4.2 Respondent's Comments

No specific comment was made regarding the uplift parameters.

4.3 SEM Committee Response and Final Decision

The SEM Committee has decided to leave the uplift parameters unchanged for the period 1 January 2018 until Go-Live and that these should be as follows:

- α should be set at 0.1;
- β should be set at 0.9; and
- δ should be set at 5.

5. Value of Lost Load

5.1 Background

Paragraph 4.95 of the Code requires the RAs to consider and determine a Value of Lost Load (VOLL) four months before the start of the first Capacity Period in each Year. In AIP-SEM-07-484², decided that:

- For the period from 1 November 2007 to 31 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 HICP³ (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](#).

5.2 Final Decision

The relevant data for the calculation of the 2018 VOLL using the specified methodology are as follows:

	Weight	July 2016	July 2017	% Change
Irish HICP (2015=100)	2/3	100.6	100.4	-0.20%
UK CPI (2015=100)	1/3	100.6	103.2	+2.58%
Weighted Average	1			+0.73%

On this basis, given that VOLL for 2017 was €11,047.73/MWh and using the specified methodology, VOLL for the calendar year 2018 is:

$$€11,047.73/\text{MWh} \times (+0.73\%) = 11,047.73 \times 1.0073\% = \mathbf{€11,128.26/\text{MWh}}$$

² <https://www.semcommittee.com/publication/value-lost-load-market-price-cap-and-floor-decision-paper>

³ The UK HICP is identical to and better known as the UK Consumer Prices Index (CPI).

6. Decision on the Policy Parameters for 2018

As detailed in this paper, the SEM Committee has decided to leave the values of the policy parameters for the period 1 January 2018 until I-SEM Go-live unchanged as follows:

- PCAP at €1,000/MWh;
- PFLOOR at minus €100/MWh;
- Uplift Parameter α to be set at 0.1;
- Uplift Parameter β to be set at 0.9; and
- Uplift Parameter δ to be set at 5.

In addition, the VOLL for the year 2018 has been calculated as €11,128.26/MWh.