



**Single Electricity Market  
(SEM)**

**Repricing and Price Materiality  
Threshold Parameter Consultation**

**SEM-19-042  
30 August 2019**

## EXECUTIVE SUMMARY

Under the Trading and Settlement Code, if, as part of an upheld Pricing Dispute it is determined that there is a manifest error in the pricing calculation which leads to a change in price greater than a certain Price Materiality Threshold, the price is recalculated and included in resettlement. Within this Consultation Paper, this is referred to as 'repricing'.

Settlement Reruns adjust the financial positions of Participants to reflect any differences between the data used for Initial Settlement and any updated data received (for example, final meter data). Settlement Reruns are scheduled to take place in the 4<sup>th</sup> month after the trading date and in the 13<sup>th</sup> month after the trading date. Within this Consultation Paper, this process is referred to as 'resettlement'.

Between the period of 1 October 2018 to 11 June 2019 there are a number of Imbalance Pricing Periods (5-minute prices) and Imbalance Settlement Periods (30-minute prices) that are subject to an upheld dispute, and therefore require repricing, as per Section E.3.8 of the Trading and Settlement Code. Any such repricing will need to be accounted for in resettlement and the current Market Operator solution for repricing does not automatically apply the approved 5% Price Materiality Threshold in the calculation.

This Consultation Paper considers the impact of four different scenarios on repricing (and thus on M+13 resettlement which is scheduled for November 2019) and requests feedback from interested stakeholders on each option. This paper aims to consider the balance required at this stage of the market between certainty of prices from 1 October 2018 and the accuracy of prices due to a number of manifest errors in the pricing system up to 11 June 2019.

1. The first option is to apply repricing for the period from 1 October 2018 to 11 June 2019 using the currently approved 5% Price Materiality Threshold. This would involve a significant delay to repricing which would not be completed until after M+13 resettlement. Further ad-hoc resettlement would be required for the period from 1 October 2018 to 11 June 2019.
2. SEMO has submitted a proposal to the RAs to change the value of the Price Materiality Threshold from 5% to 0%. This is published with this Consultation Paper. SEMO's submission proposes to change the value of the Price Materiality Threshold to 0% on a temporary basis, until such time as an I.T. solution that is capable of applying materiality is delivered. The submission states that repricing at a 0% Price Materiality Threshold may allow for the timing of repricing and M+13 resettlement to align.
3. The third option is to raise an Urgent Modification to the Trading and Settlement Code, to amend Section E.3.8 on a temporary basis with the intention of not carrying out repricing from 1 October 2018 to 11 June 2019. This would be based on the fact that a number of manifest errors were present in Imbalance Prices during this period on which trading decisions were made and in the context of the impact of any further delay to repricing of this period to market participants.
4. The fourth option is to raise an Urgent Modification to the Trading and Settlement Code, to amend Section E.3.8 on an enduring basis in order to require any repricing

to be completed by the 13<sup>th</sup> month of the Settlement Calendar at the latest. If it was not completed within this timeline, the Market Operator would be required to write to the RAs setting out the reason for the delay and requesting approval not to carry out repricing for the time period in question. This would still require the Market Operator to correct any manifest error associated with the requirement for repricing and publish the corrected Imbalance Settlement Price within 1 Working Day of making the correction in accordance with Section E.3.8.1, but would provide a mechanism to account for any unanticipated market issues which may delay repricing for a longer time period. This would have the effect of SEMO not carrying out repricing for the period before M+13 resettlement commences in 2019.

Interested stakeholders' views on each proposal are invited and can be submitted to [Karen.Shiels@uregni.gov.uk](mailto:Karen.Shiels@uregni.gov.uk) and [gkelly@cru.ie](mailto:gkelly@cru.ie) until 27 September 2019.

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# 1. Introduction

## 1.1 Background

An Imbalance Settlement Price is calculated as the average of each of the 5-minute Imbalance Prices within a 30-minute Imbalance Settlement Period. Under the Trading and Settlement Code, if as part of an upheld Pricing Dispute it is determined that there is a manifest error in the pricing calculation which leads to a change in price greater than a certain Price Materiality Threshold, the price is recalculated and included in resettlement. Within this Consultation Paper, this is referred to as 'repricing'.

Settlement refers to the financial settlement of payments and charges under the Trading and Settlement Code through the determination of payments, charges, fees and costs by the Market Operator. Following Initial Settlement, Settlement Reruns are completed by the Market Operator in accordance with the Settlement Calendar. These are scheduled to align with the receipt of updated meter data with reference to each Imbalance Settlement Period and take account of increases and decreases in demand and generator output and all applicable charges and payments for each Participant. The aim of such Settlement Reruns is to adjust the financial positions of Participants to reflect any differences between the data used for Settlement and any updated data received. Settlement Reruns are scheduled to take place in the 4<sup>th</sup> month after the trading date and in the 13<sup>th</sup> month after the trading date. Within this Consultation Paper, this is referred to as 'resettlement'.

Between the period of 1 October 2018 to 11 June 2019 there are a number of Imbalance Pricing Periods (5-minute prices) and Imbalance Settlement Periods (30-minute prices) that are subject to an upheld dispute, and therefore require repricing, as per Section E.3.8 of the Trading and Settlement Code. The majority of these upheld disputes arose due to a number of manifest errors<sup>1</sup> identified in the pricing calculation, which were addressed through Software Release C, deployed by SEMO on 11 June 2019.

Under Section E.3.8 (b) of the Trading and Settlement Code, SEMO is required to publish corrected Imbalance Settlement Prices within 1 Working Day of making a correction to a manifest error (which also requires correction of 5-minute Imbalance Prices), subject to the approved Price Materiality Threshold being applied. These corrected prices have not yet been published and the method to pragmatically address this issue in the context of the new market is the subject of this Consultation Paper.

SEMO's current repricing solution can only apply the Price Materiality Threshold as approved by the RAs in SEM-17-046 on a manual basis. The RAs also understand that the commencement of repricing by SEMO is also dependent on successful testing of Software Release D, currently scheduled for October. In this context, this Consultation Paper aims to find the correct balance between accuracy of prices and certainty of settlement outcomes for the period since market go live.

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<sup>1</sup> A list of the manifest errors detected in the calculation of the Imbalance Price from 1<sup>st</sup> October 2019 to 11<sup>th</sup> June 2019 is published on slide 99 of the [Market Operator User Group Presentation](#) from May 2019.

This Consultation Paper considers the impact of four different scenarios on repricing (and thus on M+13 resettlement which is scheduled for November 2019) and requests feedback from interested stakeholders on each option;

1. Application of repricing for the period from 1 October 2018 to 11 June 2019 using the currently approved 5% Price Materiality Threshold.
2. Application of an amended Price Materiality Threshold of 0% on a temporary basis, until such time as an I.T. solution that is capable of calculating materiality is delivered.
3. Raising an Urgent Modification to the Trading and Settlement Code, to amend Section E.3.8 on a temporary basis with the intention of not carrying out repricing from 1 October 2018 to 11 June 2019.
4. Raising an Urgent Modification to the Trading and Settlement Code, to amend Section E.3.8 on an enduring basis in order to require any repricing to be completed by the 13<sup>th</sup> month of the Settlement Calendar at the latest. This would have the effect of SEMO not carrying out repricing for the period before M+13 resettlement commences in 2019.

While the aim of this Consultation Paper is to provide Market Participants with pragmatic options for progressing this issue on a timely basis, the RAs are cognisant of the issues this raises in terms the correct application of the Trading and Settlement Code, particularly in relation to Sections E.3.8.1 and B.19.3.1. These issues will be reviewed in more detail as part of the yearly audit the TSC from the commencement of the new market arrangements.

## 1.2 Option 1: Application of Repricing in accordance with the current 5% Price Materiality Threshold.

The Price Materiality Threshold refers to the threshold which is approved from time to time by the Regulatory Authorities under paragraph B19.3.1(b) of the Trading and Settlement Code, which is applied in the event of a Pricing Dispute or where a manifest error is identified by the Market Operator for the purpose of Repricing. The relevant Section of the Code states;

*'B.19.3.1 All decisions in relation to the resolution of a Dispute or a manifest error identified by the Market Operator as per paragraph E.3.8.1 are subject to the Settlement Recalculation Threshold and a Price Materiality Threshold determined as follows:*

- (a) *a Settlement Recalculation Threshold shall be proposed by the Market Operator from time to time and approved by the Regulatory Authorities. The Market Operator shall publish the approved Settlement Recalculation Threshold within 5 Working Days of receipt of the Regulatory Authorities' approval or two months before it commences to apply, whichever is the later; and*

- (b) *a Price Materiality Threshold shall be proposed by the Market Operator from time to time and approved by the Regulatory Authorities. The Market Operator shall publish the approved Price Materiality Threshold within 5 Working Days of receipt of the Regulatory Authorities' approval or two months before it commences to apply, whichever is the later.'*

The Price Materiality Threshold tests when a change to input data as a result of an upheld dispute causes a change in the price of greater than a certain threshold. If the threshold is exceeded, the price is recalculated and included in a Settlement re-run. For the purpose of the new market arrangements, which went live on 1 October 2018, in SEM-17-046 the SEM Committee decided to set the Price Materiality Threshold at 5%.

It is important to note that the Price Materiality Threshold serves two roles depending on the circumstances in which it is applied.

In the first instance, the Threshold is designed to impact on participants behaviour, specifically, to attempt to minimise the number of disputes raised to only those disputes with a material impact on the price. For 'one-off' disputes, in the normal course of events, the Price Materiality Threshold check is performed prior to a dispute being accepted by the Market Operator, or if an issue is raised with the Dispute Resolution Board, before it hears a dispute. The RAs understand that in these cases, regardless of whether the Price Materiality Threshold is ultimately met, if a dispute is upheld, the price will be recalculated. Section B.19.4.1 of the TSC states that *'The Party raising a Pricing Dispute shall provide supporting evidence to enable the Dispute Resolution Board to assess under paragraph B.19.9.3 the likelihood that the matter being disputed will, if the Dispute is upheld, satisfy the Price Materiality Threshold.'*

The second role of the Threshold arises in cases where the Market Operator has identified a manifest error in pricing, and a range of imbalance prices must be recalculated. In this circumstance, the Price Materiality Threshold is applied to each price to be recalculated. It is this particular circumstance that is the main focus in this consultation.

The current Market Operator solution for repricing recalculates and publishes Imbalance Prices automatically regardless of the materiality of the change, overwriting previously published reports in the system and website as part of this process. This means that any application of the 5% threshold would need to be carried out manually and SEMO has informed the RAs that this would be a time-consuming process with the risk of manual errors arising as part of the process. This would involve a significant delay to repricing which would not be completed until after M+13 resettlement. Further ad-hoc resettlement would be required for the period from 1 October 2018 to 11 June 2019.

On this basis, it is the RAs' view that application of the 5% Price Materiality Threshold from 1 October 2018 is not an appropriate way forward due to the time this process would take to

complete and the impact on price certainty for market participants. Respondent's views on this issue are invited.

**Consultation Question 1:** Is your preference for repricing from 1 October 2018 to 11 June 2019 (and from 11 June 2019 onwards) to proceed based on the current price materiality threshold of 5%?

### 1.3 Option 2: Application of Repricing using a temporary Price Materiality Threshold of 0%

Section B.19.3.1(b) of the Trading and Settlement Code requires SEMO to propose a Price Materiality Threshold from time to time to be approved by the Regulatory Authorities. On 1 August, SEMO submitted a report to the Regulatory Authorities recommending that the Price Materiality Threshold should be changed to from 5% to 0% on a temporary basis, until such time as an I.T solution that can calculate materiality is delivered. SEMO's report, 'Recommended Values for SEM Price Materiality Threshold', is published with this Consultation Paper.

The SEMO submission sets out the rationale for proposing that the Price Materiality Threshold is temporarily set to 0% based on the volume of upheld disputes that require repricing and the design of the current system solution for repricing. At present, this would require materiality to be manually calculated outside of the system which may not be practical or achievable within desired timelines. SEMO's current timeline for repricing, as communicated to the [Market Operator User Group](#) on 20 June 2019, is based on a 0% price materiality threshold being applied on a temporary basis.

The RAs have reviewed the submission and engaged with SEMO on this matter and view this as a practical approach to enable repricing to conclude as soon as possible and provide price certainty to market participants. The RAs also view the proposed time-limited nature of this parameter change as appropriate until such time as an updated repricing solution to manage the 5% Price Materiality Threshold can be implemented.

However, the RAs also understand that a number of market participants have highlighted the continued uncertainty that they are facing given the amount of time it has taken for repricing to occur. It has also been highlighted that trading decisions between 1 October 2018 and 11 June 2019 were made on balancing market prices at the time which may change following repricing due to the defects present in the pricing calculation at the time. Given the volume of Imbalance Pricing Periods due to be repriced, the application of a 0% Price Materiality

Threshold may also impact Market Participants in terms of the time required to review and verify past time periods.

The RAs are also concerned that setting the Price Materiality Threshold to 0% until an appropriate I.T. solution is delivered will also remove the behavioural effect of the Threshold which attempts to disincentivise minor disputes being raised by market participants.

Based on the information provided in SEMO's submission, interested stakeholders are invited to comment on the following questions.

**Consultation Question 2:** Do you agree with the proposal to apply a 0% price materiality threshold on a temporary basis?

If the price materiality threshold is changed to 0% on a temporary basis, stakeholder views are invited on whether this should be applied for repricing required for the period from 1 October 2018 to 11 June 2019 only or until such time as an updated repricing solution to manage the 5% Price Materiality Threshold can be implemented.

Do you see any issues with the proposed approach to repricing outlined in the 'Recommended Values for SEM Price Materiality Threshold' Report to the Regulatory Authorities?

## 1.4 Options 3 and 4: Amendment of Section E.3.8 of the Trading and Settlement Code

Another option which is being considered by the RAs would involve raising an urgent modification to the Trading and Settlement Code in accordance with Section B.17.16 of the Code. This could either entail an amendment to Section E.3.8 of the Code in order to remove the requirement for repricing to be conducted for the period from 1 October 2018 to 11 June 2019 only (Option 3) or to amend Section E.3.8 on an enduring basis in order to require any repricing to be completed by the 13<sup>th</sup> month of the Settlement Calendar at the latest (Option 4), which would have the effect of SEMO not carrying out repricing for the period before M+13 resettlement commences in 2019.

The relevant Section of the Code is shown below.

*‘E.3.8.1 If the Market Operator identifies a manifest error in a published Imbalance Settlement Price:*

*(a) within 5 Working Days of its publication (whether or not as a result of a Settlement Query or a Pricing Dispute); or*

*(b) as part of the resolution of a Pricing Dispute as per paragraph B.19.2.2 (a)*

*the Market Operator shall correct the manifest error and shall publish the corrected Imbalance Settlement Price as soon as possible and within 1 Working Day of making the correction.*

*E.3.8.2 If, in its decision in relation to a Pricing Dispute, a Dispute Resolution Board or a Court having competent jurisdiction determines that a published Imbalance Settlement Price has not been calculated in accordance with this Code and should be recalculated, then the Market Operator shall recalculate and publish the corrected Imbalance Settlement Price as soon as possible.*

*E.3.8.3 A published Imbalance Settlement Price may only be amended, adjusted, changed or varied in accordance with paragraph E.3.8.1 or E.3.8.2.’*

#### **1.4.1 Option 3 Amend Section E.3.8 with the intention of not carrying out repricing from 1 October 2018 to 11 June 2019**

The third option is to raise an Urgent Modification to the Trading and Settlement Code, to amend Section E.3.8 on a temporary basis and remove the requirement for repricing from 1 October 2018 to 11 June 2019. The rationale for such an approach would be based on the fact that for the period from 1 October 2018 to 11 June 2019, a number of defects associated with the go-live of the new market arrangements were present in the pricing calculation which would not be present under an enduring business as usual period of market operation. This approach also takes account of the context of the continued uncertainty for market participants associated with any further delay to repricing and the fact that a number of manifest errors were present in Imbalance Prices during this period on which trading decisions were made.

Another approach would be to raise a modification to temporarily suspend the requirement for repricing until an I.T. solution capable of implementing the Price Materiality Threshold is in place, however in the RAs’ view this may negatively impact on Market Participants with upheld Pricing Disputes over a longer time period. Following the implementation of Software Release C, a number of manifest errors impacting on Imbalance Prices have been addressed and it is the RAs’ view that SEMO should be in a position to manually apply the price materiality threshold to any upheld disputes after 11 June 2019 until an enduring solution is implemented.

#### 1.4.2 Option 4 - Amend Section E.3.8 in order to require any repricing to be completed by the 13<sup>th</sup> month of the Settlement Calendar at the latest.

The fourth option is to raise an Urgent Modification to the Trading and Settlement Code, to amend Section E.3.8 on an enduring basis in order to require any repricing to be completed by the 13<sup>th</sup> month of the Settlement Calendar at the latest. If any repricing due to an upheld dispute or identified manifest error was not completed within this timeline, the Market Operator would be required to write to the RAs setting out the reason for the delay and requesting approval not to carry out repricing for the time period in question. Based on such a change, SEMO would not carry out repricing for the period before M+13 resettlement commences in 2019 (from October 2018 to October 2019).

As per Option 3, this accounts for the need for price certainty by market participants but takes a longer-term view of any proposed change to the TSC to ensure that the risk of a similar issue arising in future is mitigated.

On an enduring basis, this change would still require the Market Operator to correct any manifest error associated with the requirement for repricing and publish the corrected Imbalance Settlement Price within 1 Working Day of making the correction as per Section E.3.8.2 of the TSC. However, it would provide a mechanism to account for any unanticipated market issues which may delay repricing for a longer time period, either due to a delay in correcting a manifest error or due to an issue which delays the publication of a corrected Imbalance Settlement Price past M+13.

As an alternative, this option could also be applied through an Urgent Modification to Section E.3.8 of the TSC to require any repricing to be completed before the latest scheduled Resettlement period. In effect, where M+13 has been run for a certain month, any outstanding repricing for the month in question would not be carried out, but it could still be carried out for any subsequent months where M+13 has not concluded.

**Consultation Question 3:** Interested stakeholder's views are invited in relation to the option to raise an urgent modification to the Trading and Settlement Code.

This would entail an amendment to Section E.3.8 of the Code to either remove the requirement for repricing for the period from 1 October 2018 to 11 June 2019 (Option 3) or to require any repricing to be completed by the 13<sup>th</sup> month of the Settlement Calendar at the latest (Option 4), which would have the effect of repricing not being carried out for the period from October 2018 to October 2019 based in a commencement date of M+13 resettlement in November 2019.

For both options, the detailed legal drafting of any change would be raised and discussed through the Trading and Settlement Code Modifications Committee.

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## 2. Next Steps

Interested stakeholders' views on each proposal are invited and can be submitted to [Karen.Shiels@uregni.gov.uk](mailto:Karen.Shiels@uregni.gov.uk) and [gkelly@cru.ie](mailto:gkelly@cru.ie) until 27 September 2019.