Settlement Recalculation Threshold 2010

Document History

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1 INTRODUCTION

1.1 Purpose

This document proposes a value of the Settlement Recalculation Threshold for 2010 and provides supporting study data.

1.2 Audience

The target audience for this document are the Market Participants, the two TSOs (SONI and EirGrid), the Interconnector Administrator (IA), SEMO and the Regulatory Authorities (RAs).

1.3 Scope

This document sets out the value being proposed by SEMO with supporting justification for this proposal.

2 SEMO PROPOSAL

For 2007/2008, SEMO proposed the following -

The Market Operator proposes to use 3% as the Settlement Recalculation Threshold. The Settlement Recalculation Threshold is a figure which mandates the Market Operator to do a re-run if the schedule quantities or prices for a unit or on the system on a whole are proven to be in error by greater than this. The selection of 3% is trying to achieve a balance between the early resettlement of a material data error and the operational overhead. As the Settlement Recalculation Threshold covers both unit and system wide data issues it is unlikely that there is a universal value that will automatically achieve the correct balance. Notwithstanding that where a data error occurs which does not breach the Settlement Recalculation Threshold level the participant considered is capable of using the settlement query and dispute process to mandate a re-run.

The MO proposes that this Settlement Recalculation Threshold value is reviewed on a regular basis to see how well it is meeting the conflicting objectives of early settlement for data errors and efficient operation of the market.

SEMO proposes to continue to use 3% as the Settlement Recalculation Threshold for 2010 to assess whether a rerun of the MSP software is required as a result of an upheld Data Query.

3 SEMO PROCESS

The SEMO process for the use of the Settlement Recalculation Threshold was described in the paper [1]which proposed the Settlement Recalculation Threshold for 2009, issued in August 2008.

This process has been used successfully throughout 2009. To summarise the process, where a Data Query is received and the material issue of the Data Query relates to inputs to the MSP software, offline studies are completed and the results of the original published schedule are compared against the results of the offline study. A rerun of the MSP software is required if

- the MSQ of the Generator Unit whose input data has been queried has changed by a value greater than the Settlement Recalculation Threshold, or
- the approximate revenue to be paid to generators across the SEM has changed by a value greater than the Settlement Recalculation Threshold.

During the past year, Data Queries have been received in respect of units that have values of MSQ fixed at 0 under the Trading & Settlement Code such as Interconnector Error Units and Interconnector Residual Capacity Units. For these units, it has sufficed to judge the impact of the input error on the wide market in assessing whether a rerun of the MSP software is required. Where a rerun of the MSP software is not required, the input data for these units will be corrected in the Settlement system.

4 SUPPORTING DATA

In reviewing data for the Settlement Recalculation Threshold submission, we have approached the issue from two angles. Firstly, we have reviewed the practical application of the Settlement Recalculation Threshold in SEM operations during the past twelve months. This review is intended to assess if setting the Settlement Recalculation Threshold at 3% is impacting on the incidence of re-pricing in the SEM. Secondly, we have reviewed the study data from the MSP Demand studies

[1] http://www.allislandproject.org/GetAttachment.aspx?id=242727ed-890a-478a-902f-47bc4ac7dc5a

(report available here[2]) which reviewed the impact of changes to input data on the market outputs and assessed results using the Settlement Recalculation Threshold.

Application of Settlement Recalculation Threshold during Market Operations

During the past twelve months, SEMO has received 146 Data Queries under the process outlined in the Trading & Settlement Code. Of these Data Queries, a high number relate to issues that did not impact on the outputs of the MSP software. It can be observed that the bulk of Data Queries are lodged against the outputs of the Instruction Profiling software which, while this can impact on the formulation of market prices or generator schedules in certain circumstances, this did not apply in respect of any of the queries submitted.

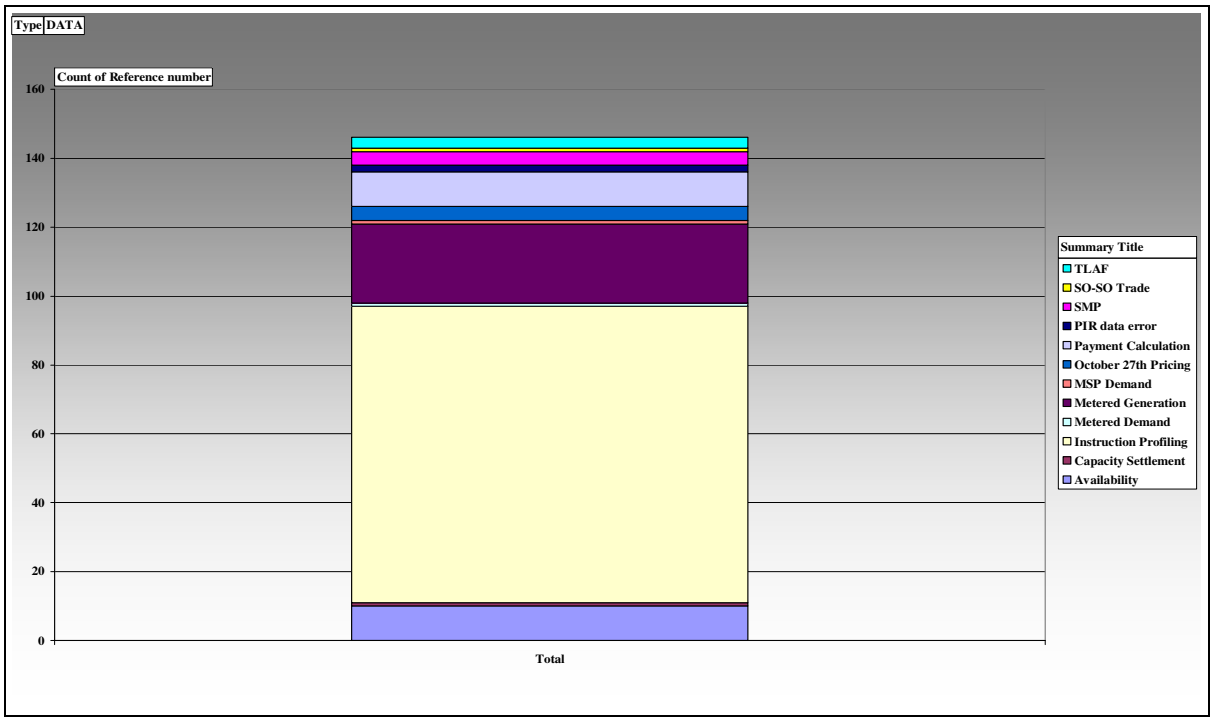

Figure 1 - Data Queries submitted over last 12 months

Of the Data Queries submitted over this time, only 43 related to inputs to the MSP software and therefore involved the process of testing offline studies against the Settlement Recalculation Threshold. This is demonstrated in figure 2 below.

[2] http://www.sem-o.com/market_publications/image.aspx?id=53d10e88-8178-4b74-8af9-3a6c62649230

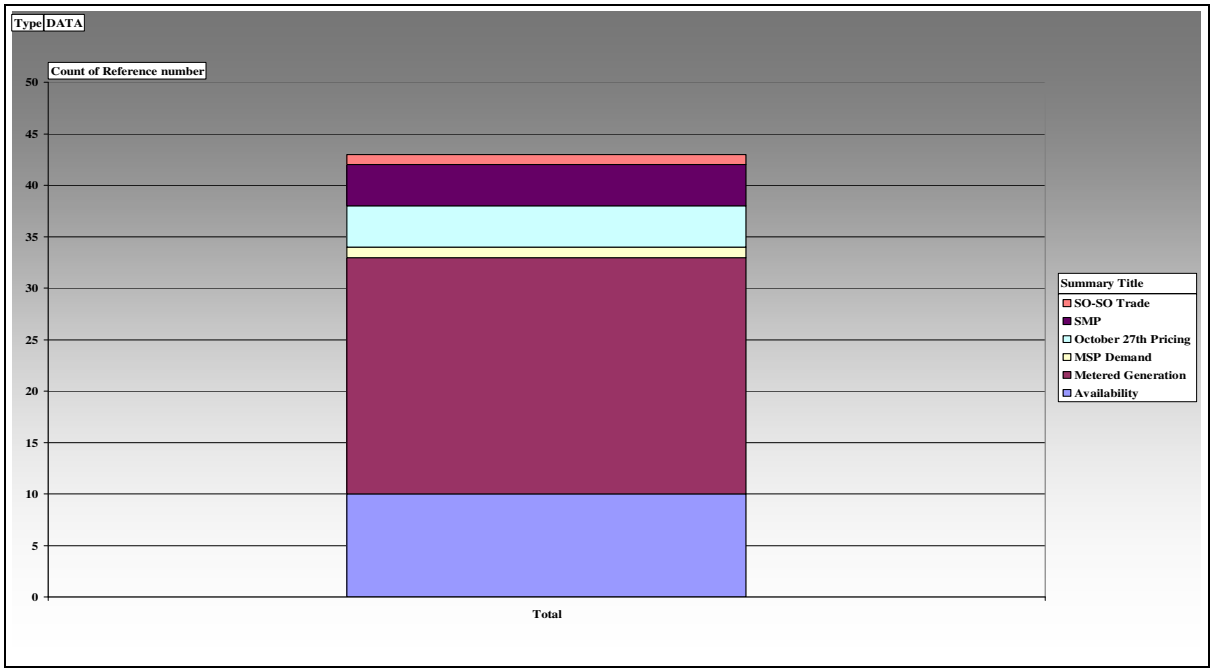

Figure 2 - Data Queries on inputs to MSP software

Of these 43, 23 were found to be above the Settlement Recalculation Threshold and therefore required a rerun of the MSP software.

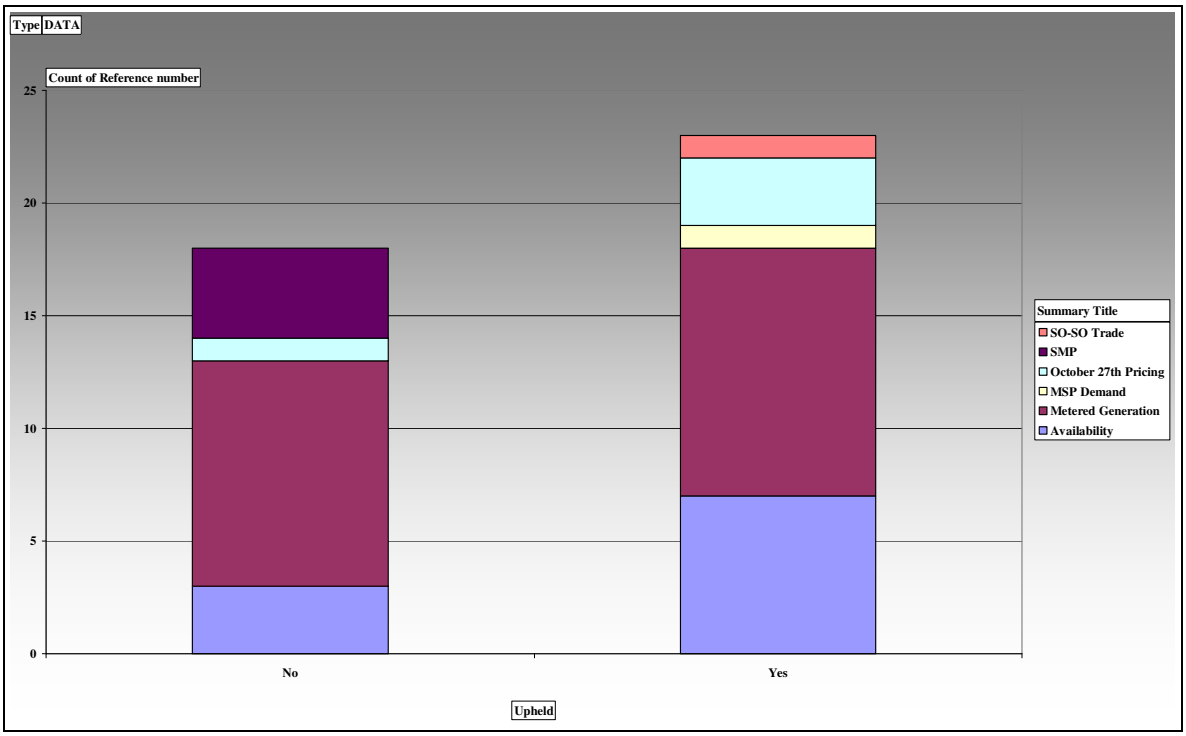

Figure 3 - Data Queries upheld by topic

This indicates that the setting of the Settlement Recalculation Threshold at a level of 3% allows for reruns of the MSP software and the associated re-pricing in a significant number of cases.

Review of Settlement Recalculation Threshold against study cases

An issue identified last year with how the Market Schedule Demand was determined. As part of the investigation into this issue, SEMO completed a series of offline studies in order to assess the impact on the market outcomes while the defect had been in place.

This studies covered 97 trading days based on real outcomes in the SEM. The intention of the study was to examine the impact of changes to input data on the outputs from the MSP software. The results were analysed using the Settlement Recalculation Threshold in place for 2008/2009. It was felt that the observed results of this study work will provide a demonstration of how the Settlement Recalculation Threshold would be applied in respect to certain market outcomes and the financial impact of this application.

The following graphs review the trend of market changes observed in the results of this study.

When reviewing the results of the studies, a total of 27 cases were found to be above the Settlement Recalculation Threshold. In the graph below, this is subdivided according to the percentage market change in the graph below. (The market change is calculated as being the change in the total MSQ * SMP * Trading Period Duration.)

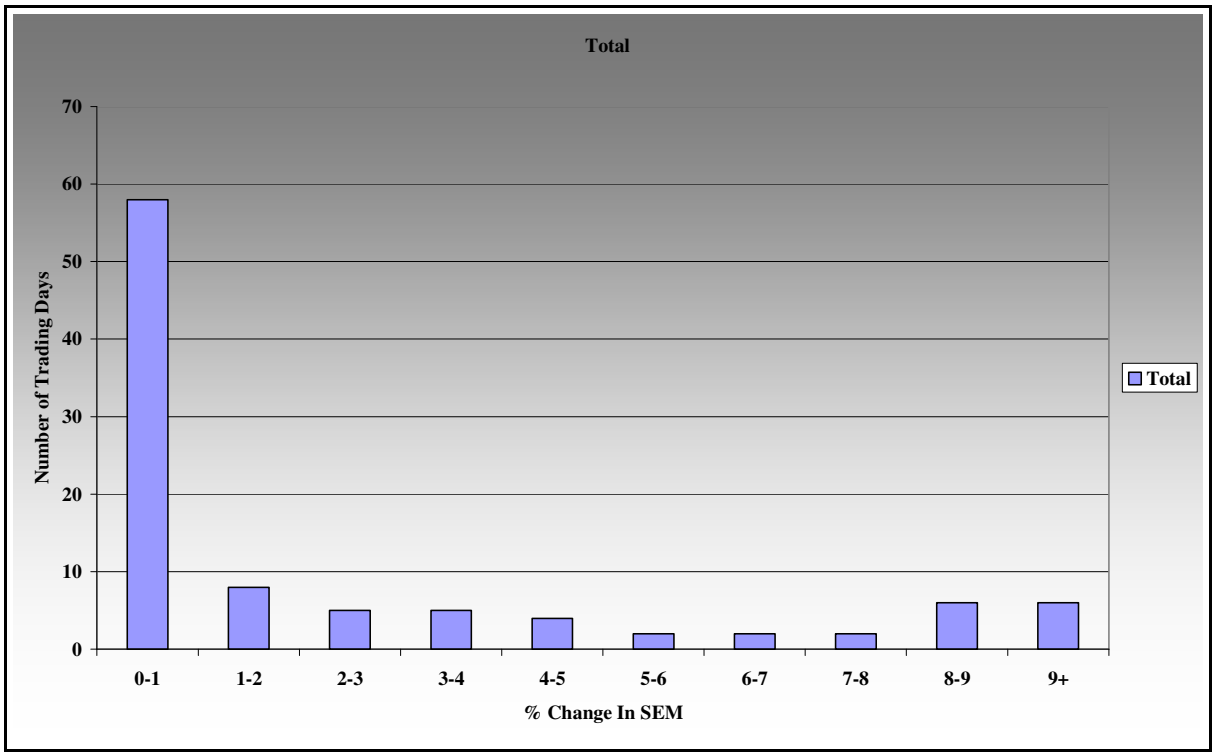

Figure 4 - Count of dates and % market change.

This shows that the majority of changes to the market outcomes were less than 1%. To show the financial impact of this, the table below demonstrates the change in terms of the total financial impact of these changes.

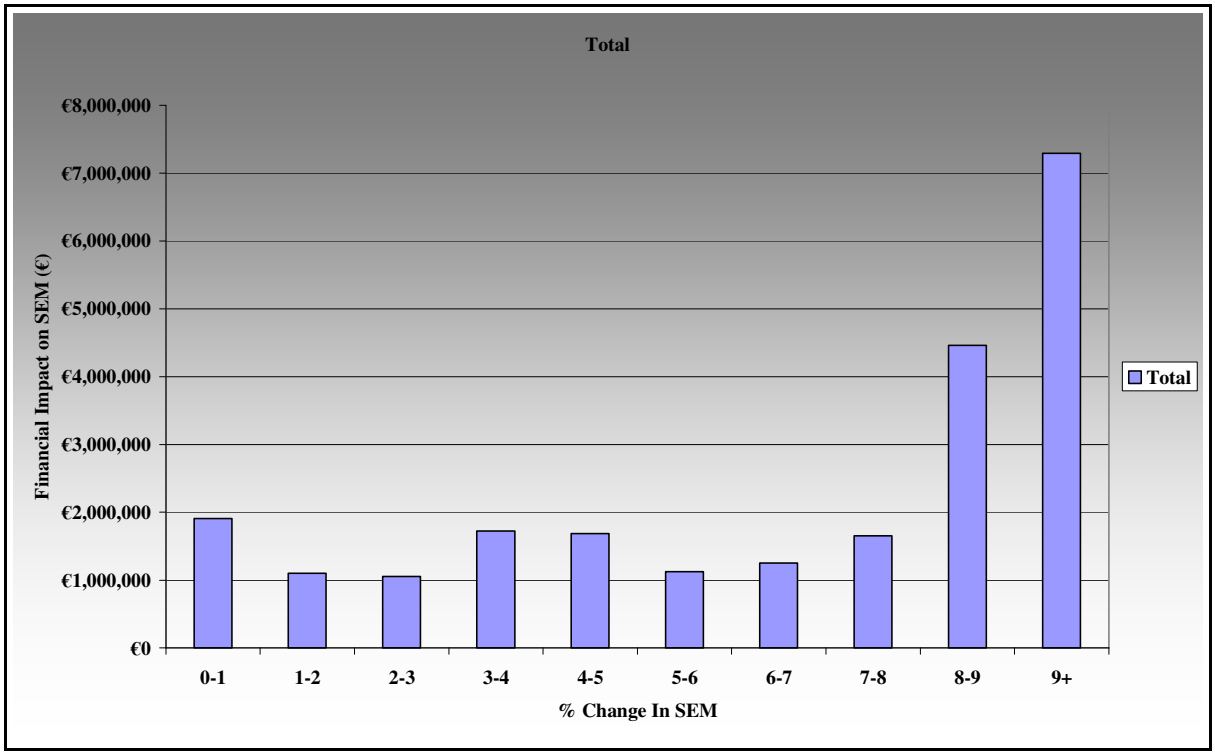

Figure 5 – Total of financial changes observed in studies

This demonstrates that despite the high number of incidences that fall below the 3% level, the major financial impact occurs when the changes are above 8%. Also, while considering the large financial change observed in the 0-1% range, it must be considered how many dates fell within this range as demonstrated in figure 4.

When we review this data in terms of the average financial change per incident, this further demonstrates the low financial impact of those dates that fall in the low percentage range.

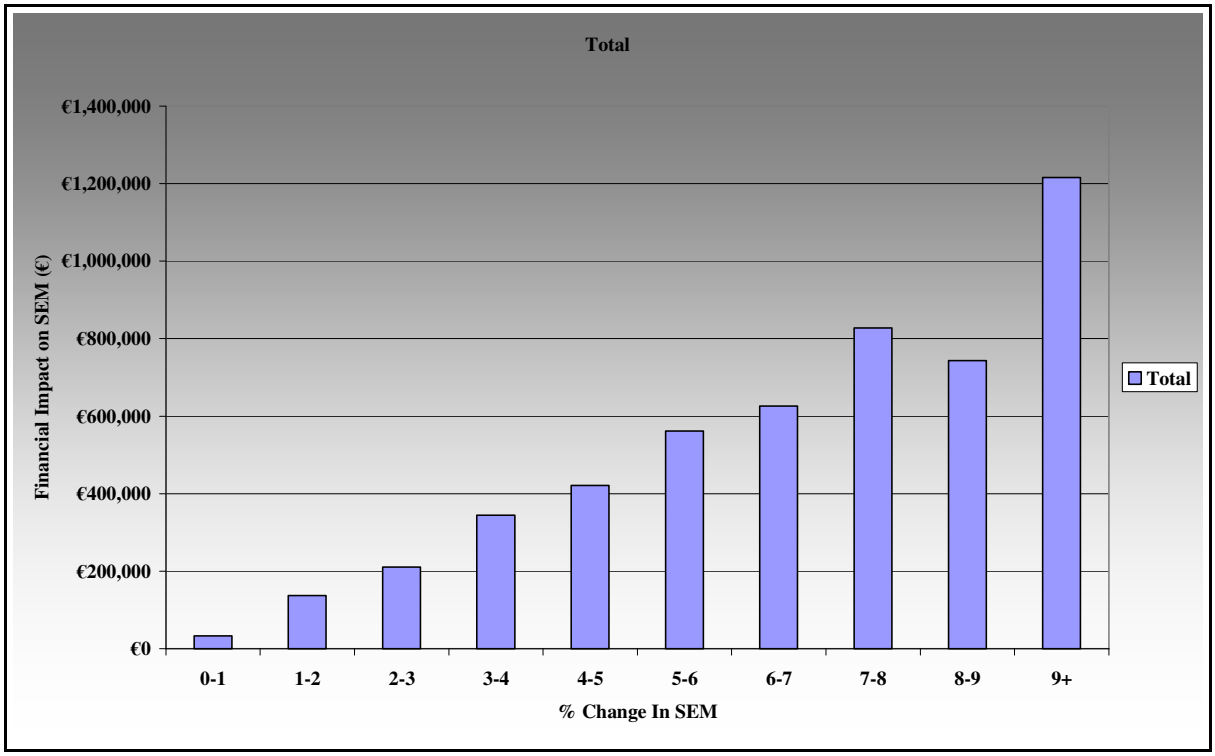

Figure 6 - Average financial changes observed

This demonstrates that the Settlement Recalculation Threshold at 3% would deliver the intended balance of allowing for correction of market outcomes where there is significant financial impact on Participants while avoiding re-pricing runs and the associated uncertainty and resource overhead where the value of change is low.

5 CONCLUSIONS

The practical application of the Settlement Recalculation Threshold has shown that re-pricing of the market is ensured when the issue is found to be significant as observed in 23 out of the 43 Data Queries that have been raised against inputs to the MSP software.

The review of the results of the MSP Demand studies demonstrate that the 3% value of Settlement Recalculation Threshold avoids re-pricing of the SEM where total market changes are of a low value, generally values of less than €250,000. Looking at the results, this would indicate that a higher value of 4% would not dramatically impact on payments to Participants. However, the benefits in terms of reducing certainty of market price and resource impact are not demonstrated when we observe the low number of extra incidents that fell within this range..

6 RECOMMENDATION

SEMO proposes to continue to use 3% as the Settlement Recalculation Threshold for 2010 to assess whether a rerun of the MSP software is required as a result of an upheld Data Query.