;

# Imperfections Charges

# For

# October 2011 – September 2012

**Decision Paper**

**SEM-11- 060**

**5 August 2011**

# 1 EXECUTIVE SUMMARY

On 1 July 2011 the SEM Committee published a consultation on the proposed imperfections charge for the period from 1 October 2011 to 30 September 2012. Five responses were received to this paper. The main theme of the responses collectively, was the rising charges.

The contributing factors to the rising charges are the rising cost in fuel prices, outages on a number of generators increasing reserve constraint costs and higher than forecast system demand over the winter months causing expensive generation to be constrained on.

Two responses proposed an incentivisation programme introduction to improve management of Dispatch balancing Costs (DBC) by the Transmission System Operators and a further response suggested that an early indication of rising costs should be given to the market. Interested parties will have had further opportunity to raise the suggestion of DBC incentivisation directly in response to SEM-11-048 consultation paper, *Incentivisation of All-island Dispatch Balancing Costs.*

The SEM committee have therefore decided that the imperfections charge to be applied for 1 October 2011 should be €5.44 per MWh. The composition of this is summarised in Table 1 below.

| | **2010/11** | **2011/12** | **Change** |
|---|---|---|---|
| Imperfections Allowance (€ million) | 110.83 | 142.7 | 28.8% |
| K factor (€ million) | -3.51 | 54.5 | |
| Offset for Other System Charges | | 12.00 | |
| **Total Allowance (€ million)** | **107.32** | **185.2** | **72.6%** |
| | | | |
| Forecast Demand (GWh) | 34,430 | 34,030 | -1.2% |
| **Tariff (€/MWh)** | **3.117** | **5.44** | **74.5%** |

**Table 1: The composition of the Imperfections Charge 2011/12 and 2010/11**

# 2 INTRODUCTION

## 2.1 IMPERFECTIONS CHARGE & DISPATCH BALANCING COSTS

In addition to SEMO's operational costs, the Market Operator (MO) tariffs have to recover Imperfections Charges which are made up of Make Whole Payments, Energy Imbalance Charges and Dispatch Balancing Costs. The TSOs submitted a paper to the Regulatory Authorities (RAs) on 29 April 2011 detailing the costs relating to Dispatch Balancing Costs. Dispatch Balancing Cost is a TSO-defined term and refers to the sum of Constraint Payments, Uninstructed Imbalance Payments and Generator Testing Charges. See section 3.1 below. The Imperfections Charges are made only on Suppliers while the MO Charges are made on Suppliers and on Generators.

## 2.2 OBJECTIVE OF PAPER

The objective of this decision paper is to summarise the comments received from interested parties on a range of proposals associated with Imperfections Charges and in particular Dispatch Balancing Costs, requested in the consultation paper published on 1 July 2011, and to establish the imperfections tariff for the 2011 /2012 tariff period after consideration of the responses.

# 3 IMPERFECTIONS CHARGE

## 3.1 OVERVIEW

The costs associated with Imperfection Charges are depicted in the diagram below. Three of the costs covering constraint costs, uninstructed imbalance costs and testing charges (collectively known as Dispatch Balancing Costs) are provided by the TSOs, Eirgrid and SONI. In addition to these, there are also Energy Imbalances and Make Whole payments. The estimate for these two costs is provided by SEMO.

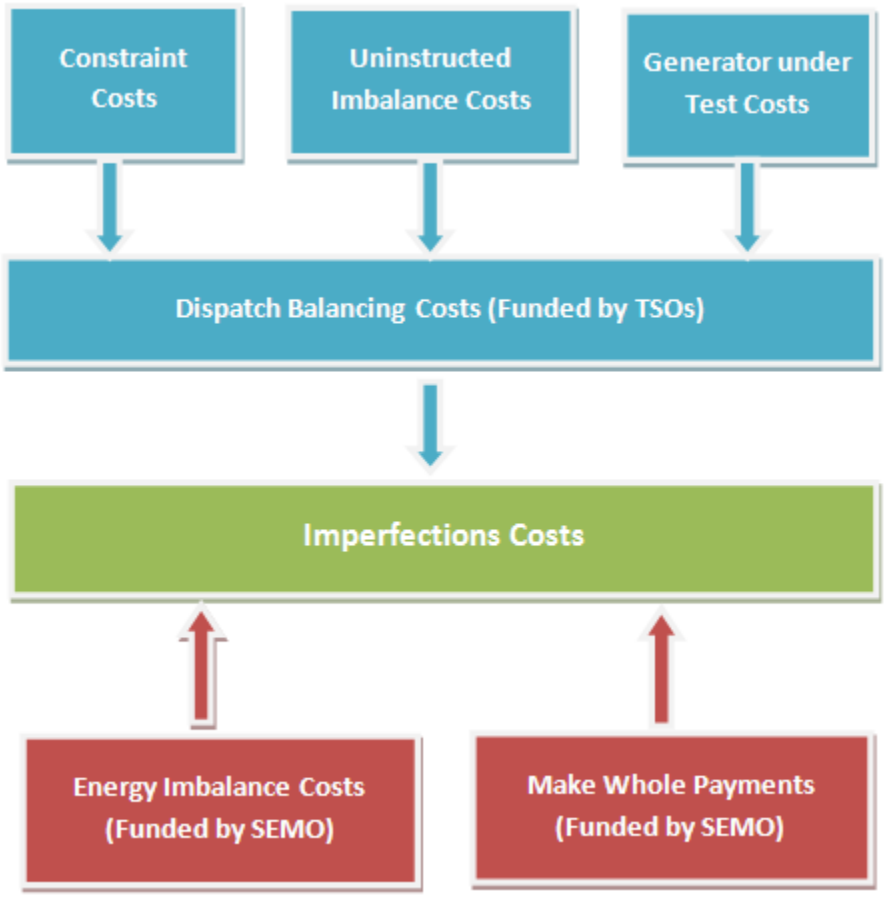


**Figure 3:** Make up of Imperfection Charges

The TSOs submission was prepared jointly by the Eirgrid and SONI, and captured an all-island estimate of Dispatch Balancing Costs. The forecast of Dispatch Balancing Costs is for the period from October 1 2011 to September 30 2012.

All these costs are estimated *ex-ante* and recovered from Suppliers on a MWh basis through the Imperfections Charge.

## 3.2 DISPATCH BALANCING COSTS

The budget proposed by the TSOs for the tariff year 2011 – 2012 is €142.6M compared to €110.5M for the tariff year 2010 – 2011. This has been due to the unforecast rise in fuel prices, the long term outages of a number of generators causing increased costs of reserve constraints and higher than forecast system demand over the winter with expensive generation being constrained on.

No comments were received in respect of this calculation, and the amount of €142.6M is approved by the SEM Committee to be collected by SEMO via the imperfections tariff to cover the Dispatch Balancing Costs. This is subject to an ex-post adjustment and any under or over-recovery will be reflected in the tariffs over the following year.

## 3.3 ENERGY IMBALANCES

It is assumed that the costs of uninstructed imbalances (for over and under generation) will, on average, be recovered by the uninstructed imbalance payments for the forecast period. Therefore, a zero net cost has been provided for this. No comments were received in relation to this and the provision of a zero net cost has been included within the tariff for 2011/12.

## 3.4 MAKE WHOLE PAYMENTS

For the previous 12 months Make Whole Payments amounted to €330,000 i.e. 12 months to 31st October 2010. Therefore the proposed provision for Make Whole payments is €100,000. This figure has been revised downwards from previous year to take account of reduced levels of Make Whole Payments arising in the Single Electricity market recently.

No comments were received in relation to this and the SEM Committee has decided to allow a provision of €100,000 in the imperfections tariffs for the 2011/12 tariff period.

## 3.5 RECOVERY OF IMPERFECTION COSTS

As stated previously, the amounts above are estimated *ex-ante* and this estimate is recovered during the relevant tariff period through the imperfections charge.

However, it is almost certain that differences between the costs being recovered and paid out will lead to instances where SEMO will:

- require working capital to fund constraints payments that exceed revenue collected through the imperfections charge, or,
- have collected revenue through the imperfections charge that exceeds the amount being paid out on constraints.

To allow for the first scenario the mechanism adopted for previous SEMO Revenues and Tariffs was that any under-recovery of revenue during the tariff period plus financing costs will be financed by SEMO. This reflects the cost of short-term financing required to provide SEMO's working capital needs.

See section 3.5.1 below for further detail.

Similarly, for situations where the revenue recovered by SEMO through the Imperfections Charge is greater than that paid out in constraints (second scenario above), the Imperfections Charge in the following tariff period(s) will be reduced by an appropriate amount to reflect the allowed over-recovery and the associated interest.

A comment was received in relation to the data freeze for the PLEXOS modelling occurring in February 2011 suggesting the data freeze should occur as close to the tariff year as possible. In any given year the TSOs DBC project for the upcoming tariff year is a six months project, beginning in November of the current tariff year to deliver the DBC forecast to the RA's by the end of April. This Data freeze is necessary so that the model can be run and the outputs subject to analysis. A number of sensitivity studies are also carried out on the base case. Subsequently, the supplementary modelling phase which requires outputs from the final PLEXOS model, is completed. The TSOs then make their submission to the RA's at the end of April each year. Recent discussions have taken place with the system Operators with a view to moving the submission date closer to the start of the tariff year and the TSOs are currently investigating the feasibility of this change.

Another respondent noted that Other Systems Charges were calculated using a mixture of actuals and estimates from February 2010 until September 2011 and that it was not clear why an estimate of Other System Charges for the 2011/12 year was not included as this would further reduce the Imperfections charge. Other System Charges are levied

on generators who whose failure to provide necessary services to the system lead to higher Dispatch Balancing Costs. As Other Systems Charges are driven by specific events it is not easy to forecast them for the coming tariff year and so the practice of applying the actual/estimate mix from the previous year to the k-factor will be continued.

In relation to the k-factor one response stated that the final approved tariff should include the latest k-factor estimate. The TSOs will provide this to the RAs before the decision publication and this will be included. A further response queried if the application of the k-factor mechanism was still in the best interests of consumers. The k-factor is the mechanism which provides for the recovery of the difference between the forecast and the outturn. The mechanism is necessary to provide a fixed annual tariff to consumers, avoiding a real time price signal of which the volatility would be undesirable.

A comment was received on what plants are benefiting from Imperfection charges. Generators receive constraint payments to keep them financially neutral for the difference between market schedule and actual dispatch and as such there is no benefit to any generator in receiving constraint payments as they are being compensated at their short run marginal cost bid price for having been dispatched.

One comment proposed hedging the fuel price and suggested the TSOs should carry this out. The bidding code of practice requires generators to bid into the market at their short run marginal cost and the TSOs dispatch takes these costs into account in determining an economic dispatch for the system. The TSOs are not involved with fuel procurement which is a matter for the generation companies operating in the market. It is not felt to be appropriate for the TSOs to enter into hedging contracts and the cost is likely to exceed the benefit.

A comment with regard to what issue wind generation was creating by being curtailed was raised in a response. The impact of wind on Dispatch Balancing Costs varies with system conditions, for example when considering transmission constraints wind generation may contribute to alleviating certain transmission constraints at times and exacerbate them at other times. This issue has been addressed in the Dispatch and Scheduling workstream, decisions on which will be published shortly.

### 3.5.1 PROVISION OF WORKING CAPITAL FOR IMPERFECTION CHARGES

The RAs proposed that, as is currently the case, the funding of working capital requirements be provided by EirGrid and SONI.

In addition, the RAs proposed that funding required to cover fluctuations during the tariff period, and any allowed under-recovery of revenue during the tariff period be paid back in the subsequent tariff period(s) with the appropriate amount of interest. This reflects the cost of short-term financing required to provide SEMO's working capital needs.

Similarly, for situations where the revenue recovered by SEMO through the Imperfections Charge is greater than that paid out, it is proposed that the Imperfections Charge in the following tariff period(s) will be reduced by an appropriate amount to reflect the allowed over-recovery and the associated interest.

No comments were received in respect of this proposal and the SEM Committee have decided that this mechanism will continue for the 2011/12 tariff period.

## 3.6 OTHER SYSTEM CHARGES

Other System Charges (OSC) are levied on generators whose failure to provide necessary services to the system lead to higher Dispatch Balancing Costs and Ancillary Services Costs.

Following a proposed modification recommended for approval by the Modifications Committee on 5th April 2011 for Inclusion of OSC in the Imperfections charge, this is the first year where OSC will be netted off DBC. The TSO's have estimated that OSC up to the end of September 2011 will total €12 million. This estimate includes a projection for the rest of the 2010/11 tariff year.

## 3.7 K FACTOR

The K factor for the Imperfections calculation for the 2011/12 tariff year is €54.5 million of an under recovery which will increase the 2011/12 Imperfections charge.

## 3.8 IMPERFECTIONS CHARGE

Based on the above decisions, the imperfections charge will be €5.44 per MW for the period from 1 October 2011 to 30 September 2012. This is an increase of 74.5% from 2010/11.

| | **2010/11** | **2011/12** | **Change** |
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