# Harmonised Other System Charges Consultation

## Tariff Year 1<sup>st</sup> October 2011 to 30<sup>th</sup> September 2012

18<sup>th</sup> April 2011





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## EXECUTIVE SUMMARY

Other System Charges (OSC) are levied on generators which fail to provide necessary services to the system leading to higher Dispatch Balancing Costs and Ancillary Service Costs. The OSC charges include charges for generators whose units Trip or make downward re-declarations of availability at short notice. Generator Performance Incentive (GPI) charges were harmonised between Ireland and Northern Ireland with the Harmonisation of Ancillary Service & Other System Charges "Go-live" on the 1st February 2010. These charges are specified in the Transmission Use of System Charging Statements approved by the Regulatory Authorities (RAs) in Ireland and Northern Ireland. The arrangements are defined in both jurisdictions through the Other System Charges policies, the Charging Statements and the Other System Charges Methodology Statement.

For the upcoming tariff period running from the 1<sup>st</sup> October 2011 to the 30<sup>th</sup> September 2012, the TSOs are proposing to introduce new GPI. This new GPI relates to declared Secondary Fuel capability. Some design refinements were raised in the previous OSC consultation paper with existing GPIs and these are also discussed in this paper.

Various options are presented on how the exchange rate can be calculated for the new tariff year in addition to the harmonised rates for the new tariff year for both the new and existing OSCs.

In the previous OSC consultation a number of service providers commented on how the TSOs should improve transparency around OSCs. The TSOs address this and include the OSCs levied during the 2009/2010 tariff year. The paper also addresses the RA decision that the TSOs should offset the OSC monies against the Imperfections Pot.

Following consultation and consideration of comments received the TSOs will submit their recommendations to the RAs for approval.

## ABBREVIATIONS

- ASP Ancillary Service Provider
- AS Ancillary Service
- HAS Harmonised Ancillary Services
- TSO Transmission System Operator
- SONI System Operator Northern Ireland
- RA Regulatory Authority
- SEM Single Electricity Market
- OSC Other System Charge
- GPI Generator Performance Incentive
- SND Short Notice Declaration

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## 1. INTRODUCTION

Other System Charges (OSC) are defined in the TUoS / SSS Statement of Charges and include trip charges, Short Notice Declaration charges and Generator Performance Incentive Charges. These Other System Charges are levied on underperforming generators who unexpectedly trip off the system and have to re-declare at short notice causing a re-dispatch of other plant at a cost. The Generator Performance Incentive Charges are levied on those generators which fail to comply with specific standards in the Grid Code or the contracted values in the relevant AS agreement where applicable.

The TSOs consult on an annual basis regarding changes to the OSC charges and the purpose of this consultation paper is to obtain views on the proposed OSC rates for the tariff year 1<sup>st</sup> October 2011 to 30<sup>th</sup> September 2012.

## 1.1 EXISTING OTHER SYSTEM CHARGES (OSC)

The OSC were introduced on a harmonised basis on 1<sup>st</sup> February 2010 and is divided into the following:

- Trip Charge
- Short Notice Declaration Charge
- Generator Performance Incentive Charge

In the event of a generator unit tripping a Trip Charge is levied on the service provider depending on how the unit tripped (i.e. slow wind down, fast wind down, direct trip). The charge is intended to incentivise behaviour that enhances system security and reduces operating costs. The proposed rates for the various categories of unit trip are set at a level which seeks to recover an amount of costs which is representative of the power system impact while recognising that a level of tripping is inevitable. The purpose of the trip charge is to minimise the number of trips and, when a trip is unavoidable, to incentivise a Generator to wind down a unit as slowly as possible.

In the event of a generator unit making a downward declaration of their availability at short notice a Short Notice Declaration (SND) Charge is levied on the service provider depending on the amount of notice given. The charge is intended to incentivise behaviour that enhances system security and reduces operating costs. The RAs January 2010 Decision Paper<sup>1</sup> stated that the charge rate for SNDs is to be phased in with the rate increasing from  $\in$ 20/MW to  $\in$ 40/MW for the 2010/2011 tariff period and to  $\in$ 70/MW from the 1<sup>st</sup> October 2011. The phased approach to the rates setting allowed all parties time to gain experience of the new harmonised arrangements.

It is important for the efficient and economic operation of the system to ensure that generators maintain the performance required in the Grid Codes and act in a manner that facilitates the operation of the system. The harmonised arrangements establish Generator

<sup>1 [</sup>SEM-10-001]; Harmonised All-Island Ancillary Services Rates and Other System Charges; Decision Paper; 4 Jan 2010

Performance Incentive (GPI) Charges monitoring and performance incentives on an allisland basis. The arrangements are intended to quantify and track generator performance, identify non-compliance with standards and help evaluate the performance gap between what is needed and what is being provided by services providers as the power system develops.

The TSOs have found the introduction of GPIs have led to improved performance of certain generating units in relation to their Grid Code compliance figures. In some cases, GPIs have placed focus on the performance and highlighted the level of compliance of certain generator units. The TSOs are therefore proposing to retain the OSC approved for the 2011/2012 tariff year.

## 1.2 INSTRUCTIONS FOR RESPONSE

In order to focus the responses, views and comments are invited on the following sections:

Section #	Proposal
1.3.2	GPI Double Charging
1.3.3	Loading GPI
1.3.4	De-Loading GPI
1.4.1	Secondary Fuel GPI
2.1	Proposed Exchange Rate
2.2	Proposed OSC Rates
3.1	Proposed Reporting
3.2	Proposed Offsetting Mechanism

Responses should be sent to:

David.Carroll@EirGrid.com and Vivienne.Price@SONI.ltd.uk by Friday, 27<sup>th</sup> May 2011.

It would be helpful if comments were aligned with the sections and sub-sections of this consultation document. It would also be helpful if responses were not confidential. If confidentiality is required, this should be made clear in the response. Please note that, in any event, all responses will be shared with the RAs.

## 1.3 PROPOSED OSC DEVELOPMENTS

#### 1.3.1 MINIMUM GENERATION DESIGN REFINEMENT

In the OSC 2010/2011 Consultation Paper<sup>2</sup> the TSOs proposed to make a design refinement to the existing minimum generation design to allow for the minimum generation requirement to vary based on the impact of ambient temperature conditions on the technical capabilities of certain units. The TSOs stated that if, after a technical appraisal, it was found that changing ambient conditions affect minimum output, then an amended design would be investigated.

In the OSC 2010/2011 Explanatory Paper<sup>3</sup> the TSOs commented that three existing service providers were in favour of this proposed design refinement, however the TSOs noted that they were not in favour of implementing a design which will have the effect of increasing the minimum generation of all plant.

The TSOs have carried out analysis into this proposed issue for Combined Cycle Gas Turbines (CCGTs) by looking at output curves for certain CCGTs and from comparing the technical capabilities of these generating units on an all-island basis. This analysis shows that typically as the ambient temperature changes the maximum availability and minimum generation also change in line with the change in ambient temperature in a linear fashion. There is however an anomaly for one CCGT on an all-island basis whereby the minimum generation does not change in a linear fashion in line with the ambient temperature. Since this does not align with the analysis carried the TSOs propose that no design refinement is made to the minimum generation GPI for the 2011/2012 tariff year.

## 1.3.2 GPI DOUBLE CHARGING

Double charging of GPIs is found where a unit makes a non Grid Code compliant declaration for a GPI but does not give eight hours notice. The result is that the unit is levied with a double charge for 8 hours.

An issue was raised by a number of participants with the current design whereby if a unit is currently non compliant in relation to a GPI and makes an effort to improve the non compliance, then the generating unit still incur a double charge for eight hours. The TSOs propose to change the design of this charge to recognise that the generating unit has made an improved declaration, albeit that it is still not Grid Code compliant. In this case the generating unit will not incur an eight hour double charge, however will still incur the standard GPI.

<sup>2</sup> Other System Charges 2010/2011; Consultation Paper; 9th July 2010

<sup>3</sup> Other System Charges 2010/2011; Explanatory Paper; 22nd September 2010

## 1.3.3 LOADING GPI

The TSOs have identified a number of potential issues with the Loading event based GPI charge. The current design is defined in the OSC Methodology Statement<sup>4</sup>.

The TSOs propose that the following parameters in the Loading GPI should be refined:

- DpL should be replaced with the Declared Minimum Generation (DMG)
- DpLT should be replaced with the Minimum Generation Load Time (MGLT) which is the time as which the Declared Minimum Generation is reached (expressed in min).

Furthermore an issue could arise when a unit has synchronised, is loading to its declared minimum generation and the system frequency is over 50 Hz. Due to governor action on certain generating units the generating unit may not reach its declared minimum generation due to this high frequency preventing them from doing so. The TSOs therefore propose to implement a design refinement to the loading GPI to provide a 5% or 1 MW tolerance (whichever is greater) around the declared generation, meaning that once the generating unit has reached 95% of its declared minimum generation then it will be considered that it has reached its declared minimum generation for the purpose of the loading calculation.

The proposed Loading GPI is now as follows (changes shaded):

LR\_ChargeY = ((LR – ALR) / LR) \* A \* LR\_RATE \* ((MGLT – ASyncT) / LR\_F1) \* LR\_F2

where:

- LR\_ChargeY is the charge for Loading Rate underperformance for loading event Y from synchronisation of the Generator Unit (expressed in € or £);
- LR is the Loading Rate (expressed in MW/h), in the case of a ROI Generating Unit, as specified in the Grid Code or the relevant Grid Code Derogation or, in the case of a NI Uncontracted Unit, Schedule 9 of the HASC or, in the case of a NI Contracted Unit, the relevant Schedule of the GUA, allowing for the heat state of the Generator Unit;

ALR is the Actual Loading Rate calculated as follows:

ALR = [DMG	/ (MGLT - ASyncT)] * ALR_Tol
Where	
DMG	is the Declared Minimum Generation at the time that the
	Synchronisation Instruction is issued (expressed in MW);
MGLT	is the Minimum Generation Load Time which is that time at which the
	Declared Minimum Generation is reached. Note that the tolerance
	MG_Tol is applied to the Declared Minimum Generation (expressed in
	min);
ASyncT	is the Actual Synchronisation Time (expressed in min);
ALR_Tol	is the Actual Loading Rate Tolerance (expressed as %);

A is the Availability of the Generating Unit (expressed in MW) prevailing at the Dispatched Load Time;

<sup>4</sup> Other System Charges Methodology Statement; Applicable from 1st October 2010. Available from www.EirGrid.com & www.soni.ltd.uk

- LR\_RATE is the Loading Rate charge rate (expressed in €/MW or £/MW) specified in the table headed "Generator Performance Incentive Charge Rates/Parameters" set out in the TUoS Statement of Charges;
- LR\_F1 is the Loading Rate Factor 1 (expressed in minutes) specified in the table headed "Generator Performance Incentive Charge Rates/Parameters" set out in the TUoS Statement of Charges; and
- LR\_F2 is the Loading Rate Factor 2 (dimensionless) specified in the table headed "Generator Performance Incentive Charge Rates/Parameters" set out in the TUoS Statement of Charges.
- MG\_Tol is the Minimum Generation Tolerance Factor which Generating Units are given and which will be set out in the TUoS Statement of Charges for the 2011/2012 tariff year.

## 1.3.4 DE-LOADING GPI

The TSOs have identified a number of potential issues with the De-Loading event based GPI charge. The current design is defined in the OSC Methodology Statement<sup>5</sup>

The TSOs propose that the following parameters in the De-Loading GPI should be refined:

- DLMW should be replaced with the Declared Minimum Generation (DMG)
- DLT should be replaced with the Minimum Generation Load Time (MGrLT) which is the time as which the generating unit dropped below its Declared Minimum Generation (expressed in min).

Furthermore an issue could arise when a unit is already at its minimum generation and is regulating. Due to this governor action on certain generating units the generating unit may have already reduced from its declared minimum generation due to the system frequency being high. The TSOs therefore propose to implement a design refinement to the De-Loading GPI to provide a 5% or 1 MW tolerance (whichever is greater) around the declared generation, meaning that once the generating unit has reached 95% of its declared minimum generation then it will be considered that it has reached its declared minimum generation for the purpose of the De-Loading calculation.

The proposed De-Loading GPI is now as follows (changes shaded):

DLR_(	ChargeY	= ((DLR–ADLR)/DLR) * A * DLR_RATE * ((DSyncT – <mark>MGrLT</mark> ) / DLR_F1) * DLR_F2			
DLR_ChargeY		is the charge for De-Loading Rate underperformance for de-loading event Y following a De-Synchronisation Instruction of the Generator Unit (expressed in $\notin$ or $\pounds$ ):			
DLR		(expressed in € or £); is the De-Loading Rate (expressed in MW/min), in the case of a ROI Generating Unit, as specified in the Grid Code or the relevant Grid Code Derogation or, in the case of a NI Uncontracted Unit, Schedule 9 to the HASC or, in the case of a NI Contracted Unit, the relevant Schedule to the GUA:			
		is the Actual De-Loading Rate calculated as follows:			
	ADLR = [ DN where	//G / ( DSyncT - MGrLT ) ] * ADLR_Tol			
	ADLR = [ DN where DMG	<i>I</i> G / ( DSyncT - MGrLT ) ] * ADLR_Tol is the Declared Minimum Generation at the time that the			
, DER	ADLR = [ DN where DMG	<pre>//G / ( DSyncT - MGrLT ) ] * ADLR_Tol is the Declared Minimum Generation at the time that the Synchronisation Instruction is issued (expressed in MW);</pre>			
	ADLR = [ DN where DMG MGrLT	<ul> <li><i>I</i>G / ( DSyncT - MGrLT ) ] * ADLR_Tol</li> <li>is the Declared Minimum Generation at the time that the Synchronisation Instruction is issued (expressed in MW);</li> <li>is the De-Synchronisation Instruction Time which is that time at which</li> </ul>			
	ADLR = [ DN where DMG MGrLT	MG / ( DSyncT - MGrLT ) ] * ADLR_Tol is the Declared Minimum Generation at the time that the Synchronisation Instruction is issued (expressed in MW); is the De-Synchronisation Instruction Time which is that time at which the unit reduced its output below the Declared Minimum Generation.			
	ADLR = [ DN where DMG MGrLT	<i>I</i> G / ( DSyncT - MGrLT ) ] * ADLR_Tol is the Declared Minimum Generation at the time that the Synchronisation Instruction is issued (expressed in MW); is the De-Synchronisation Instruction Time which is that time at which the unit reduced its output below the Declared Minimum Generation. Note that the tolerance MG_Tol is applied to the Declared Minimum			
	ADLR = [ DN where DMG MGrLT	<i>I</i> G / (DSyncT - MGrLT)]* ADLR_Tol is the Declared Minimum Generation at the time that the Synchronisation Instruction is issued (expressed in MW); is the De-Synchronisation Instruction Time which is that time at which the unit reduced its output below the Declared Minimum Generation. Note that the tolerance MG_Tol is applied to the Declared Minimum Generation (expressed in min); is the De Synchronisation Time (expressed in min);			
	ADLR = [ DN where DMG MGrLT DSyncT	MG / ( DSyncT - MGrLT ) ] * ADLR_Tol is the Declared Minimum Generation at the time that the Synchronisation Instruction is issued (expressed in MW); is the De-Synchronisation Instruction Time which is that time at which the unit reduced its output below the Declared Minimum Generation. Note that the tolerance MG_Tol is applied to the Declared Minimum Generation (expressed in min); is the De-Synchronisation Time (expressed in min) which is the time at which the Generator Unit actually de-synchronised;			
	ADLR = [ DN where DMG MGrLT DSyncT ADLR_Tol	<ul> <li><i>MG</i> / (DSyncT - MGrLT)]* ADLR_Tol</li> <li>is the Declared Minimum Generation at the time that the Synchronisation Instruction is issued (expressed in MW);</li> <li>is the De-Synchronisation Instruction Time which is that time at which the unit reduced its output below the Declared Minimum Generation. Note that the tolerance MG_Tol is applied to the Declared Minimum Generation (expressed in min);</li> <li>is the De-Synchronisation Time (expressed in min) which is the time at which the Generator Unit actually de-synchronised;</li> <li>is the Actual Loading Rate Tolerance (expressed as a percentage);</li> </ul>			

<sup>5</sup> Other System Charges Methodology Statement; Applicable from 1st October 2010. Available from www.EirGrid.com & www.soni.ltd.uk

А	is the Availability of the Generating Unit (expressed in MW) prevailing at the De-Synchronisation Load Time:
DLR_RATE	is the De-Loading Rate charge rate (expressed in €/MW or £/MW) specified in the table headed "Generator Performance Incentive Charge
	Rates/Parameters" set out in the TUoS Statement of Charges;
DLR_F1	is the De-Loading Rate Factor 1 (expressed in minutes) specified in the table headed "Generator Performance Incentive Charge
	Rates/Parameters" set out in the TUoS Statement of Charges;
DLR_F2	is the De-Loading Rate Factor 2 (dimensionless) specified in the table headed "Generator Performance Incentive Charge Rates/Parameters" set out in the TUoS Statement of Charges; and
MG_Tol	is the Minimum Generation Tolerance Factor which Generating Units
	are given and which will be set out in the TUoS Statement of Charges for the 2011/2012 tariff year.

#### 1.4 NEW OTHER SYSTEM CHARGES (OSC)

The TSOs, taking into cognisance their respective statutory obligations and licence conditions, are constantly reviewing the performance of generating units in complying with the respective Grid Codes seeks to ensure that they deliver efficiency, reliability and value for money to the end user. In the 2010/2011 OSC consultation paper<sup>6</sup> the TSOs previously proposed that future potential GPIs may be introduced to address gaps in the performance of generating units. This year it is proposed to introduce one new GPI for the 2011/2012 tariff year. This new GPI relates to a generating unit's declared secondary fuel capability.

#### 1.4.1 SECONDARY FUEL GPI

The CER Decision Paper on Secondary Fuel Obligations on Licensed Generation Capacity in Ireland<sup>7</sup> sets out the requirements which certain generators should be capable of achieving. One of these requirements was that the generating unit must be capable of generating on its secondary fuel at no less than 90% of the unit's capacity on its primary fuel.

DETI in Northern Ireland, set out in the Fuel Security Code<sup>8</sup>, an obligation in Northern Ireland to ensure that Generators and the Electricity Transmission System Operator dispatch power generation in as economical a way, as is practically possible, during a Fuel Security Event, while maintaining the security and integrity of the Northern Ireland electricity system.

Given these decisions in both jurisdictions, the TSOs believe there is merit in proposing that a declaration based GPI should be introduced to quantify the availability of a generating unit to operate on its secondary fuel as the TSOs have observed a gap in the level of compliance of some generating units. This is essential to ensure the continued security of supply on an all-island basis and that generating units are in compliance with the Grid Code in Ireland and Fuel Security Code in Northern Ireland.

The following is a general summary of the design:

- Generating units declare their MW availability on their secondary fuel; and
- If a generating unit is available on its primary fuel and not on its secondary fuel, cannot start up on its secondary fuel or cannot change fuel on load then a trading based charge is levied depending on its requirements.

SF\_Charge<sub>x</sub> = TP \* DSFC \* A \* SecFuel\_RATE

where:

SF\_Charge<sub>X</sub> is the charge for Secondary Fuel underperformance in the Trading Period X (expressed in  $\in$  or £);

<sup>6</sup> Harmonised Other System Charges 2010/2011; Consultation Paper; 9th July 2010

<sup>7 [</sup>CER/09/001] Secondary Fuel Obligations on Licenced Generation Capacity in the Republic of Ireland; 12th January 2009

<sup>8</sup> Northern Ireland Fuel Security Code; 31st March 1992

ТР	is a 0.5 hour Trading Period (expressed in h);
DSFC	is the Declared Secondary Fuel Capability of the generating unit to be available to generate on its secondary fuel, start on their secondary fuel or change fuel on load. If the generating unit cannot perform either of these capabilities then a charge is levied on the unit. This is a Yes or No condition in the calculation;
A	is the Availability of the Generating Unit (expressed in MW) on their primary fuel prevailing at the De-Synchronisation Load Time; and,
SecFuel_RATE	is the Secondary Fuel charge rate (expressed in €/MWh or £/MWh) specified in the TUoS Statement of Charges.

The TSOs propose that a rate of  $\in 0.12$  / MWh which aligns with the rate currently used for the declared reserve GPIs.

## 2 OSC RATES

The following sections describe proposals which affect the calculation or determination of the OSC rates.

#### 2.1 PROPOSED EXCHANGE RATE

The current exchange rate methodology used for the OSC rates is that the Euro (EUR) to Pound (GBP) exchange rate is fixed for the tariff year based on the forward FX rates. The EUR is used as the reference rate, as is consistent with the approach used in the Single Electricity Market (SEM), therefore the rates in GBP are changed in line with the fixed exchange rate at the beginning of each tariff year.

The TSOs noted in the 2010/2011 OSC Explanatory Paper<sup>9</sup> that a review of the exchange rate would be considered for the 2011/2012 tariff year. The TSOs have developed a number of options for the exchange rate methodology and invite comments from interested parties on these. These options are described as follows:

#### 2.1.1 Option 1 – Exchange Rate based on the Forward FX rate

The approach currently used for the Other System Charges rates is that the EUR to GBP exchange rate is fixed for the tariff year. The derivation of the currency exchange rate was the same methodology as that was used in the annual SEM Capacity Pot calculation when this methodology was adapted in 2009<sup>10</sup>. This methodology provided for an exchange rate based on the 12 monthly forward FX rates for the period in question.

The forward FX rate is simply the rate at which one currency can be exchanged for another currency, at any given date in the future, as at/agreed today. It is calculated using the current spot FX rate (current market price for delivery in 2 business days), and then adding or subtracting the 12 monthly forward points that may apply to that rate. Forward points are a measure of the difference in the underlying interest rates for both currencies, expressed as a proportion of the underlying exchange rate price. Forward points are used to account for any benefit/disadvantage from the difference in these underlying interest rates. Generally the spot rate is far more volatile than the forward points, and as such is the key driver/ determinant of the overall forward rate.

If this option is chosen then it is proposed that the exchange rate for the new tariff year based on the forward exchange rate at the time of the consultation.

This option is to continue to use the methodology currently used by the TSOs in determining the exchange rate for OSC. The TSOs believe that this option provides certainty of the rate to the AS Providers, however this methodology may be susceptible to volatility in the EUR to GBP exchange rate during the year.

<sup>9</sup> Other System Charges 2010/2011; Explanatory Paper; 22nd September 2010.

<sup>10</sup> Harmonised Ancillary Services & Other System Charges; Rates Consultation; 8 June 2009

#### 2.1.2 Option 2 - Exchange Rate based on the 5 day Average

The Single Electricity Market Operator (SEMO) consults annually on the Annual Capacity Exchange Rate. Based on comments received from the 2011 consultation<sup>11</sup>, the SEM Committee revised their original proposal for how this rate is calculated due to the large volatility in the EUR to GBP rate in recent years. The revisions to how the rate was calculated are as follows:

- The rate is determined closer to the beginning of the period to which it applies while also giving certainty to the market of what exchange rate will apply for this period. The SEM use a calendar year for settlement purposes and a rate up to the end of November was deemed appropriate i.e. one month before the start of the period; and,
- Based on the volatility of the EUR to GBP exchange rate the rate is calculated as an average of the rate over a 5-day period.

This option is a variant of Option 1 by continuing to use the forward FX rate, however the Annual Capacity Exchange Rate revisions will be adapted in determining the rate. The TSOs believe that this option provides certainty of the rate to the service providers, however this methodology may be susceptible to volatility in the EUR to GBP exchange rate during the year. By using the 5-day average to calculate the forward FX rate this option would be less vulnerable to exchange rate fluctuations within the timeframe at which the rate is set when compared to option 1.

If this option is the chosen then the final exchange rate used for the Other System Charges will be based on the 5- day average rate for the period 25 August 2011 to 31 August 2011 i.e. one month before the start of the 2011/2012 tariff year.

#### 2.1.3 Option 3 - Exchange rate based on daily, weekly or monthly rates

Due to the volatility in the EUR to GBP exchange rate during recent years it may be more appropriate to use an exchange rate to reflect the actual exchange rate during a defined period such as a daily, weekly or monthly rate. This rate would be set ex-post based on the actual exchange rate during the defined period. The relevant exchange rate would be obtained from the European Central Bank.

<sup>11</sup> Harmonised Ancillary Service 2010/2011; Consultation Paper; 9th July 2010 and Harmonised Ancillary Service 2010/2011; Explanatory Paper; 22nd September 2010

## 2.2 PROPOSED RATES

The following sections define the rates used for the Other System Charges (OSC). The SEM Committee decision of 2010, the following was stated:

The SEM Committee's January 2010 decision, as relates to the incremental phasing-in of these particular rates, is summarised in Table 2.1.

Item	Tariff Period Feb-Oct 2010	Tariff Period 2010-11	Tariff Period 2011-12
SNDs	€20/MW	€40/MW	€70/MW
GPI: Min on Time GPI: Max Starts	€0.29/MWh	€0.60/MWh	€1.00/MWh

Table 2. 1: SEM Committee Decision on OSC Rates

The proposed rate for the Secondary Fuel GPI is  $\in 0.12$  / MWh which is consistent with the declared reserve GPIs.

#### 2.2.1 TRIP CHARGES

The following tables propose the Trip Charges and Constants for the 2011/2012 tariff year. As seen in Table 2.2 and Table 2.3 there is no change to the proposed charges compared with the 2010/2011 tariff year.

	2009/2010	2010/2011	2011/2012
Direct Trip Rate of MW Loss	15 MW/s	15 MW/s	15 MW/s
Fast Wind Down Rate of MW Loss	3 MW/s	3 MW/s	3 MW/s
Slow Wind Down Rate of MW Loss	1 MW/s	1 MW/s	1 MW/s
Direct Trip Constant	0.01	0.01	0.01
Fast Wind Down Constant	0.009	0.009	0.009
Slow Wind Down Constant	0.008	0.008	0.008
Trip MW Loss Threshold	100 MW	100 MW	100 MW

 Table 2. 2: Proposed Trip Constants 2011/2012

2009/2010	2010/2011	2011/2012
€4,000	€4,000	€4,000
€3,000	€3,000	€3,000
€2,000	€2,000	€2,000
	<b>2009/2010</b> €4,000 €3,000 €2,000	2009/2010         2010/2011           €4,000         €4,000           €3,000         €3,000           €2,000         €2,000

Table 2. 3: Proposed Trip Rates 2011/2012

## 2.2.2 PROPOSED SHORT NOTICE DECLARATION (SND) CHARGES

The following tables propose the SND Charges and Constants for the 2011/2012 tariff year. As seen in Table 2.4 there is no change to the proposed charges compared with the 2010/2011 tariff year. Table 2.5 restates the SND charges.

SND Constants	2009/2010	2010/2011	2011/2012
SND Time Minimum	5 min	5 min	5 min
SND Time Medium	20 min	20 min	20 min
SND Time Zero	480 min	480 min	480 min
SND Powering Factor (Notice time weighting curve)	-0.3	-0.3	-0.3
SND Threshold	15 MW	15 MW	15 MW
Time Window for Chargeable SNDs	60 min	60 min	60 min

 Table 2. 4: Proposed SND Constants

SND Charge Rate	2009/2010	2010/2011	2011/2012
OND Obarna Data		C 40 / N/M	
SND Charge Rate	€20710100	€40/IVIVV	€/U/IVIVV

 Table 2. 5: Proposed SND Charge Rate

## 2.2.3 PROPOSED GPI CHARGES

The SEM Committee January 2010 Decision Paper<sup>12</sup> stated that the charge rate for Minimum on Time and Max Starts in 24 hours is to be phased in with the rate increasing from  $\leq 0.29$ /MWh to  $\leq 0.60$ /MWh for the 2010/2011 tariff period and to  $\leq 1.00$ /MWh from the 1<sup>st</sup> October 2011. The phased approach to the rates setting allowed all parties time to gain experience of the new harmonised arrangements. The proposed GPI Constants, GPI Declaration Based Charges and GPI Event Based Charges for the 2011/2012 tariff year are outlined in Table2.6, Table 2.7 and Table 2.8 respectively.

GPI Constants	2009/2010	2010/2011	2011/2012
Late Declaration Notice Time	480 min	480 min	480 min
Loading Rate Factor 1	60 min	60 min	60 min
Loading Rate Factor 2	24	24	24
Loading Rate Tolerance	110%	110%	110%
De-Loading Rate Factor 1	60 min	60 min	60 min
De-Loading Rate Factor 2	24	24	24
De-Loading Rate Tolerance	110%	110%	110%
Early Synchronous Tolerance	15 min	15 min	15 min
Early Synchronous Factor	60 min	60 min	60 min
Late Synchronous Tolerance	5 min	5 min	5 min
Late Synchronous Factor	55 min	55 min	55 min

Table 2. 6: Proposed GPI Constants

	2009/2010	2010/2011	2011/2012
<b>GPI Declaration Based Rates</b>	€/MWh	€/MWh	€/MWh
Minimum Generation	1.18	1.18	1.18
Max Starts in 24 hour period	0.29	0.6	1.00
Minimum On time	0.29	0.6	1.00
Reactive Power Leading	0.29	0.29	0.29
Reactive Power Lagging	0.29	0.29	0.29
Governor Droop	0.29	0.29	0.29
Primary Operating Reserve	0.12	0.12	0.12
Secondary Operating Reserve	0.12	0.12	0.12
Tertiary Operating Reserve 1	0.12	0.12	0.12
Tertiary Operating Reserve 2	0.12	0.12	0.12
Secondary Fuel	NA	NA	0.12

 Table 2. 7: Proposed GPI Declaration Based Charge Rates

<sup>12 [</sup>SEM-10-001]; Harmonised All-Island Ancillary Services Rates and Other System Charges; Decision Paper; 4 Jan 2010

	2009/2010	2010/2011	2011/2012
GPI Event Based Rates	€/MWh	€/MWh	€/MWh
Loading Rate	0.59	0.59	0.59
De-Loading Rate	0.59	0.59	0.59
Early Synchronisation	2.65	2.65	2.65
Late Synchronisation	26.47	26.47	26.47

 Table 2. 8: Proposed GPI Event Based Charge Rates

## **3 OSC REPORTING AND OFFSETTING**

In previous consultations the TSOs have been requested to publish information such as Other System Charges (OSCs) revenue for each category of the Generator Performance Incentives (GPIs), the number and type of trips and the number of Short Notice Declarations (SNDs). The TSOs made a commitment in the 2010/2011 Explanatory Paper<sup>13</sup> to consider how to report on these parameters.

#### 3.1 PROPOSED REPORTING

In order to improve reporting on OSC revenue the TSOs have decided to publish this information each month in line with the OSC settlement process<sup>14</sup>. This monthly reporting will cover the following aspects:

- 1. The total trip charges levied and the type of trip. This is reported on an all-island basis and the total OSCs for the 2009/2010 tariff year can be seen in Table 3.1;
- 2. The total SND charges levied. This is reported on an all-island basis and the total OSCs for the 2009/2010 tariff year can be seen in Table 3.2; and,
- 3. The revenue levied for each category of Generator Performance Incentives (GPIs). This is reported on an all-island basis and the total GPIs for the 2009/2010 tariff year can be seen in Table 3.3.

These monthly reports will also be made available on the TSOs website which can be accessed at <u>www.EirGrid.com</u> or <u>www.soni.ltd.uk</u>.

A number of service providers queried historical SND charges with EirGrid during the 2009/2010 tariff year. EirGrid subsequently issued an Advisory Note to service providers clarifying that the responsibility of ensuring correct declarations and reason codes are used is the responsibility of the generator station. The TSOs have also published and keep up to date Frequently Asked Questions (FAQs)<sup>15</sup> on OSCs. These FAQs include the reason codes which should be used by generating units to prevent incorrect SNDs being incurred.

<sup>13</sup> Harmonised Other System Charges 2010/2011; Explanatory Paper; 22nd September 2010

<sup>14</sup> EirGrid settlement timelines are typically 25 working days after the end of each month

<sup>15</sup> Available from <u>www.eirgrid.com</u>

	Feb 10	Mar 10	Apr 10	May 10	Jun 10	Jul 10	Aug 10	Sep 10	Total
Direct Trips [Number]	3	3	3	4	1	4	3	3	24
Fast Wind downs [Number]	0	2	0	1	0	0	2	5	10
Slow Wind downs [Number]	0	0	0	0	0	0	0	0	0
Trip Charges [€]	80,125	102,774	118,380	140,972	20,227	49,950	46,509	166,772	725,707

Table 3. 1: Trip Type and Charges for 2009/2010 tariff year

	Feb 10	Mar 10	Apr 10	May 10	Jun 10	Jul 10	Aug 10	Sep 10	Total
	[€]	[€]	[€]	[€]	[€]	[€]	[€]	[€]	[€]
SNDs	123,822	116,026	112,664	123,768	62,527	172,398	130,353	220,280	1,061,839

Table 3. 2: SND Charges for 2009/2010 tariff year

	Feb 10 [€]	Mar 10 [€]	Apr 10 [€]	May 10 [€]	Jun 10 [€]	Jul 10 [€]	Aug 10 [€]	Sep 10 [€]	Total [€]
GPI Reserve	14,130	17,200	14,455	17,519	17,229	13,800	12,154	13,413	119,899
GPI Reactive Power	169,869	181,760	157,579	193,212	193,311	193,482	150,013	133,880	1,373,107
GPI Min On Time	31,908	81	0	0	193	0	0	0	32,182
GPI Max Starts in 24 hours	58,526	19,919	31,279	223	193	64	0	12,449	122,652
<b>GPI Minimum Generation</b>	148,760	91,243	101,175	27,286	25,233	28,348	31,160	63,035	516,238
GPI Governor Droop	0	0	0	0	0	0	0	0	0
GPI Loading	23,226	34,752	5,396	6,390	773	9,935	8,887	10,699	100,057
GPI De-Loading	0	0	0	860	3,609	4,449	4,169	3,238	16,325
GPI Early Synchronisation	0	0	87	0	0	766	0	0	852
GPI Late Synchronisation	105	675	10,999	7,663	17,490	17,095	7,487	23,823	85,337

Table 3. 3: GPI Charges for 2009/2010 tariff year

Note: These outturn figures are settlement figures and may vary based on final figures used. The TSOs are awaiting a number of derogation assessments from the RAs which may affect these value. The outturn in GBP was converted to EUR using the 2009/2010 exchange rate of €1/£0.85.

#### 3.2 PROPOSED OFFSETTING MECHANISM

As part of the Harmonised Arrangements the RAs approved the offsetting of OSC with the Imperfections Pot which is administered by the Market Operator, SEMO. Since the introduction of OSC in February 2010, the monies collected by the TSOs have been held in a ring-fenced account by each TSO. This arrangement was pending the resolution of number of implementation issues that need to be resolved before the charges can be used to offset the Imperfections pot. The TSOs have outlined this process in the OSC 2010/2011 Explanatory Paper<sup>16</sup>.

The TSOs and SEMO have now agreed an offsetting mechanism whereby the OSC revenue will be transferred to the Imperfections account. SEMO submitted a Modification to the Trading and Settlement Code (TSC) during March 2011 and this modification is expected to be discussed at the Modification Meeting No 34 in early April. Subject to the approval of this Modification, the TSOs will then begin the transfer of the OSC monies to the Imperfections pot.

<sup>16</sup> Other System Charges 2010/2011; Explanatory Paper; 22nd September 2010.

## 4 SUMMARY AND NEXT STEPS

The TSOs have provided the proposals for the OSC rates and design changes for Tariff Year 2011-2012. Comments are invited from interested parties on this consultation paper and should be aligned with the sections and sub-sections of this document. If confidentiality is required, this should be made explicit in the response as the comments will be published on the TSOs' websites<sup>17</sup>. Please note that, in any event, all responses will be provide to the RAs. The closing date for comments is Friday, 27<sup>th</sup> May 2011 and should be addressed to David.Carroll@EirGrid.com and Vivienne.Price@soni.ltd.uk.

<sup>17</sup> www.eirgrid.com and www.soni.ltd.uk