# Harmonised Other System Charges Recommendations Paper

Tariff Year 1<sup>st</sup> October 2015 to 30<sup>th</sup> September 2016

29<sup>th</sup> May, 2015





# **EXECUTIVE SUMMARY**

EirGrid and SONI (the TSOs) published a consultation paper on 20<sup>th</sup> February 2015 for the upcoming tariff period running from the 1st October 2015 to the 30th September 2016 outlining a number of proposals. Comments on the consultation paper were received from four (4) respondents, having reviewed the responses, the TSOs are now making a number of recommendations to the RAs:-

- 1. The introduction of new GPI's be considered as part of DS3 implementation.
- 2. The introduction of a GPI relating to fuel switching is deferred until after fuel switching arrangements are finalised in Northern Ireland.
- 3. The blended inflation rate of 1% as proposed to be implemented.

No other changes are recommended for this tariff period.

# **ABBREVIATIONS**

AGU Aggregated Generator Unit ASP Ancillary Service Provider

AS Ancillary Service

CER Commission for Energy Regulation

DETI Department of Enterprise, Trade and Investment

DMOL Design Minimum Operating Level

DSU Demand Side Unit

DS3 Delivering a Secure Sustainable System
GPI Generator Performance Incentive
HAS Harmonised Ancillary Services
I-SEM Integrated Single Electricity Market

OSC Other System Charges

NI Northern Ireland

NIAUR Northern Ireland Authority for Utility Regulation

NIE Northern Ireland Electricity

RA Regulatory Authority

RoCoF Rate of Change of Frequency SEM Single Electricity Market

TSO Transmission System Operator

SND Short Notice Declaration

SONI System Operator Northern Ireland

ToUS Transmission Use of System WFPS Wind Farm Power Station

# 1. INTRODUCTION

The TSOs consult on an annual basis regarding proposed changes to Other System Charges and associated rates. The purpose of this paper is to make recommendations for approval to the RAs in Ireland and Northern Ireland, based on a consideration of the responses received by the TSOs on this year's Harmonised Other System Charges Consultation paper<sup>1</sup> for the tariff year 1<sup>st</sup> October 2015 to September 2016.

If the recommendations are approved by the RAs, the TSOs will publish revised Statements of Charges and Other System Charges Methodology Statement for the 2015-2016 tariff period.

The TSOs received responses from the following parties:

Party	Abbreviation
Bord Gáis Energy	BGE
ESB Generation and Wholesale Markets	ESB GWM
Power NI Energy Ltd Power Procurement Business	PPB
Irish Wind Energy Association	IWEA

No confidential responses were received. Copies of the responses received have been appended to this recommendations paper.

The TSOs welcome participant's comments, proposals and views in this consultation.

<sup>&</sup>lt;sup>1</sup> "Harmonised Other System Charges Consultation" 20<sup>th</sup> February, available at www.EirGrid.com and www.soni.ltd.uk.

# 2. OTHER SYSTEM CHARGES CONSULTATION RESPONSES

# 2.1 THE DELIVERY OF I-SEM

The delivery of I-SEM<sup>2</sup> is a fundamental change to the market design. While I-SEM is not due to golive until 2017, the TSOs consider that the current list of Other System Charges may require review based on the outcome of the detailed design phase of I-SEM. Therefore no implementation changes are proposed to the existing Other System Charges products for TY 2015-2016. However changes to Other System Charges will be considered once the I-SEM design details are clearer.

# 2.1.1 Respondents' Comments

IWEA acknowledges that changes will be required to OSC through the I-SEM design process and supports that this would be further considered in line with the decision on the detailed implementation of the market design.

# 2.1.2 TSOs' Response

It is the TSOs's expectation that the changes in Other System Charges will be implemented in line with the I-SEM market design.

#### 2.1.3 TSOs' Recommendation

No changes to Other System Charges should be introduced for TY 2015-2016.

# 2.2 EXISTING OSC DEVELOPMENTS

#### 2.2.1 Late Synchronisation Charges

The TSOs have reviewed the charges levied on generating units for the tariff year 2013-2014; units have maintained a similar level of compliance compared to the same period in tariff year 2012-2013. This trend can be viewed on the monthly reports published on the EirGrid and SONI websites.

Modifications to the joint sections of the Northern Ireland and Ireland Grid Codes in respect of late synchronisation windows are currently being considered by the RAs.

If the modification approval is granted then the TSOs will implement the changes accordingly.

#### 2.2.1.1 Respondents' Comments

PPB believes that a solution for late synchronisation charges would be the retention of the existing Grid Code with a review of the OSC and that such a review would deal with the TSOs only remaining concern that the level of charges are not sufficient to incentivise performance.

# 2.2.1.2 TSOs' Response

The TSOs note PPBs comments, however late synchronisation remains an issue for the TSOs and is being addressed through the Grid Code modification process as outlined.

#### 2.2.1.3 TSOs' Recommendations

No changes are proposed to late synchronisation charges pending a decision by the RAs on the proposed Grid Code modifications.

<sup>&</sup>lt;sup>2</sup> http://www.allislandproject.org/en/wholesale\_overview.aspx?article=d3cf03a9-b4ab-44af-8cc0-ee1b4e251d0f

#### 2.3 NEW OTHER SYSTEM CHARGES

#### 2.3.1 Secondary Fuel GPI

In the 2011-2012 tariff year, the TSOs proposed a new GPI relating to a generating unit's declared secondary fuel capability. A review has taken place on the methodology of the GPI proposed in the 2011-2012 tariff year consultation and the TSO's view is that the gap in the level of compliance remains valid. However, the fuel switching arrangements in Northern Ireland are still being developed.

# 2.3.1.1 Respondents' Comments

Two comments were received (PPB and ESB GWM) in relation to a Secondary Fuel GPI.

PPB felt that the proposed introduction of a charge for non availability on secondary fuel with no corresponding payment for the provision of this service is unfair. The respondent also commented on the formula that the charge penalises a unit which has a higher availability on its primary fuel rather than its secondary fuel and stated that the charge needs to be against the availability of the secondary fuel.

ESB GWM commented that this is a complicated technical issue for plant many of whom are currently exploring their technical capabilities with regard to Secondary Fuel while derogated from the grid code requirement. Any introduction of this GPI should respect these and any future derogations and derogated plant should be exempt from any GPIs. The respondent believes that this is a punitive and unwarranted GPI and that it is unnecessary as there is already incentive enough for generators to remain grid code compliant as Secondary Fuel switching performance is already assessed under the provisions of the Grid Code.

# 2.3.1.2 TSOs' Response

Whilst the TSOs believe there is merit in a secondary fuel declaration based GPI we would agree that it is more appropriate to consider it following the implementation of fuel switching arrangements in Northern Ireland. In the interim, the TSOs will continue to monitor and discuss unit performance with generators where necessary.

#### 2.3.1.3 TSOs' Recommendation

The introduction of a secondary fuel GPI should be considered after the fuel switching arrangements in Northern Ireland are agreed.

#### 2.4 INTRODUCTION OF NEW GPIs

As outlined in the consultation paper, it is the TSOs' opinion that it could be useful to introduce GPIs for Wind/non Conventional units, similar to those currently in place for conventional generation units, at the appropriate time in the future. It is likely that these GPIs would include incentives to maximise compliance with Design Minimum Operating Level (DMOL), Reactive Power and Operating Reserve.

# 2.4.1 Respondents' Comments

Two comments were received (ESB GWM and IWEA) in relation to Introduction to new GPIs and neither supported the proposal. Both respondents commented on the categorisation policy.

ESB GWM commented that the current use of the categorisation process is beyond its intended scope and is in breach of CER recommendations and they questioned if the proposed introduction of new GPIs would replace or be considered as an alternative to the use of the cateorgisation process.

IWEA supports the need for compliance of the generation fleet but believes the current controllability categorisation policy for Grid Code compliance is not appropriate as the penalty of being moved into category (i) for non-compliance, and the associated increase in levels of curtailment, is too severe relative to the level of non-compliance. Furthermore, they stated the commercial incentives are already in place to ensure generators prove compliance in a timely manner.

IWEA also suggested that an appropriate penalty system should be based on the impact of the non-compliance and should not be directly linked to curtailment. IWEA also request the TSO facilitate a detailed discussion and consultation on a potential system and say it is essential that a holistic view is taken in relation to the incentives/penalties being applied to generators to ensure that any penalty introduced is not too severe, and that it appropriately reflects the level of non-performance and believe it would not be appropriate to introduce GPIs while the existing policy is in place.

ESB GWM commented that they are of the opinion that all customers that are connected to the Transmission System should be treated as fairly and equally as possible. However, to maintain a commercial equilibrium if certain types of customer are prohibited from earning AS the same customers should be exempt from GPIs associated with these services. They stated that on the basis that renewable subsidies are based on metered generation and considering the doubt over future market compensation during curtailment, the operation of wind farms on the frequency response curve to enable reserve provision must be considered carefully. They questioned whether the utilisation of a wind farm in frequency response mode will be treated similarly to a generator being constrained off or if the remuneration for reserve would be structured in an appropriate way so as to compensate effectively. They commented that whatever the solution it is imperative that the wind farm is kept financially whole.

#### 2.4.2 TSOs' Response

As discussed in the consultation paper, a significant proportion of the connected windfarms are now achieving Grid Code compliance / Operational Readiness Confirmation from the Wind Farm Controllability Categorisation Policy. This policy was developed following a SEM Committee published decision on the "Principles of Dispatch and the Design of the Market Schedule in the Trading and Settlement Code" (SEM11-062)<sup>3</sup> on 26<sup>th</sup> August, 2011. The decision paper identified a three-level hierarchy classification for wind farm power stations in Ireland and Northern Ireland. The TSOs publish Controllability Status updates and a Compliance Testing Notification list of all controllable wind farm power stations, 5MW or more on the EirGrid and SONI system on a regular basis. Furthermore, the TSOs will continue to engage with the wind industry in relation to the processes supporting the categorisation policy.

<sup>&</sup>lt;sup>3</sup> http://www.allislandproject.org/GetAttachment.aspx?id=5d635a6f-f9b4-494c-bd3a-722af770354c

GPIs are designed to incentivise compliance with respect to the Grid Code and are not linked with Ancillary Service Agreements. Currently GPIs are only levied on conventional generating units and the TSO believes it is appropriate to apply GPIs for all generating units providing operating reserve, reactive power and DMOL. Based on the 2020 renewable policy targets in Ireland and Northern Ireland wind farms may at times be the major energy source on the all island power system. The TSOs therefore need to ensure that there is adequate performance from all plant including windfarms.

In response to specific questions raised:

- Ancillary Services Agreements for reactive power from some transmission connected windfarms have been in place for a number of years. There is currently no developed mechanism in place for payment of operating reserve to windfarms. This has not been identified as an issue over the previous number of years due to the priority dispatch nature of wind to date. Under the DS3 programme the TSOs are looking at system services required to operate the power system with increasing levels of non-synchronous sources of energy. In this a technology neutral services scheme is proposed. However, before new technologies can avail of these DS3 services when approved by the SEM Committee they will need to demonstrate that they can physically and reliably provide these reserves. In that sense the TSOs, through the DS3 Frequency Control and Performance Monitoring workstreams will, over the coming months, be tentatively monitoring windfarm performance. Through this process it is envisaged that windfarms will be able to prove their capability in this regard.
- The proposed GPIs would be mainly declaration based GPIs determined through Operational Readiness Confirmation testing. These technical capabilities will then be monitored through ongoing performance monitoring to ensure the wind farm can still achieve these over the required operational range;
- Any new GPIs need to be consulted with Industry on the actual design of the charge. The
  Regulatory Authorities would then have a final decision on whether the proposed GPI is
  implemented and the date from which the GPI should become effective. The GPI would be
  benchmarked against the Grid Code requirement or the derogated requirement if a
  derogation has been approved by the Regulatory Authorities.
- Performance Monitoring of windfarms against actual event based requirements is the subject of the DS3: Enhanced Performance Monitoring & Testing work stream and is outside the scope of these discussions on GPIs for windfarms. Furthermore the DS3: Proposed New System Services work stream is looking at agreements for a number of new products and these are proposed to be paid based on actual performance. This performance metric is also outside of the scope of these discussions on GPIs for windfarms.

# 2.4.3 TSOs' Recommendation

The TSOs recommend that the introduction of new GPI's be considered as part of the DS3 programme.

#### 2.5 RoCoF GPI

A decision on the implementation date for RoCoF is to be clarified by the Regulatory Authorities. It is the TSOs' expectation to introduce a RoCoF GPI in line with the publication of the RAs' RoCoF decision paper. The RAs' RoCoF modification to the Grid code decision papers<sup>4</sup> state that the RAs intend to phase the introduction of the RoCoF GPI according to the unit categorisation and will confirm the decision on this matter on 10<sup>th</sup> November 2015.

#### 2.5.1 Respondents' Comments

Two comments were received (PPB and IWEA) in relation to the RoCoF GPI.

IWEA note that the introduction of the RoCoF modification is an essential part of the DS3 programme to ensure that the System Non-Synchronous Penetration (SNSP) level can be increased. IWEA welcomes the introduction of GPIs to incentivise generators to be compliant with the RoCoF modification and comments that it must be ensured that this is introduced in a fair manner such that wind generators are not penalised ahead of other types of generation.

PPB commented that an interconnector has the capability of causing one of the largest RoCoF events on the system due a single point of failure and that tripping of an interconnector could also create significant harmonic disturbances on the system. Whilst the RAs are proposing a GPI for conventional generating units they are not proposing that all Grid Code Users are financially incentivised to minimise the number or magnitude of RoCoF events. This is despite the fact that the East West interconnector is the greatest risk. Further, whilst system separation is a major risk for the Northern Ireland system, there is no financial incentive being considered for either NIE or SONI to ensure that such an event does not happen.

PPB commented further that they would welcome the publication of the methodology which has been used to value the proposed GPI. They would also welcome an analysis to be completed, using the same methodology, to value a performance incentive for interconnector and tie-line owners in relation to:

- the mal-operation of an interconnector (up to 1000MW) which may cause a RoCoF event;
   and
- a system separation which may cause a RoCoF event.

This proposed GPI for non-compliance with the new RoCoF standard would be better designed to incentivise a reduction in the number and magnitude of RoCoF events. Consequently generators should receive remuneration reflecting their contribution to the minimization of RoCoF. The difference in the design criteria between the jurisdictions mean that a NI generator contributes more than twice the spinning reserve to the system, relative to generating unit capacity, than the ROI generators

#### 2.5.2 TSOs' Response

The RoCoF modification to the Grid Code is a separate process to this consultation. The TSOs will introduce a RoCoF GPI in line with the decision from the RAs due November 2015.

<sup>&</sup>lt;sup>4</sup> Rate of change of Frequency (RoCoF) Modification to the Grid Code Decision paper CER/14/081 published 4<sup>th</sup> April 2014 Decision Paper on the Rate of Change of Frequency Grid Code Modification published 7<sup>th</sup> May 2014

#### 2.5.3 TSOs' Recommendation

No GPI will be implemented at this stage, pending RAs decision due November 2015.

# 3. ADDITIONAL COMMENTS

PPB commented that the TSOs are suggesting paying for additional services (i.e. Dynamic Frequency Response) on the Interconnector and there is a lack of fairness in the management of HAS and OSC arrangements. The respondent also commented that the Interconnectors must also be liable for all Other System Charges.

PPB also commented that they discussed at the time of the introduction of the Harmonised Ancillary Services arrangements, and still believe, that the Transmission Use of System (TUoS) Agreement is not the correct agreement to contain GPIs. For example, disputes in relation to RoCoF GPIs could end up being referred to the Utility Regulator as a licence breach. Also the interconnector owners have also argued that GPIs should not be applicable to them as they do not sign up to a TUoS agreement.

# 3.1 TSOs' Response

In the 2014-2015 HAS recommendation paper<sup>5</sup> the TSOs proposed to conduct a more robust technical analysis to further determine the benefits from the static and dynamic interconnector. This technical analysis is on-going. A separate consultation will be conducted by the TSOs prior to making any firm recommendation to the SEM Committee. The consultation will either be included in the DS3 system service changes or in a separate consultation depending on the urgency required. It is the TSOs' view that ultimately where there are economic benefits available to customers through the operation of the interconnectors, the change should be implemented.

The RAs Decision Paper SEM-10-001<sup>6</sup> published on 4<sup>th</sup> January 2010 provided a policy framework for the all-island harmonisation of Ancillary Services (HAS) and Other System Charges (OSC) and it is not proposed to re-open this framework at this stage.

# 4. PROPOSED RATES

In the Harmonised Ancillary Services Rates and Other System Charges Decision paper for 2011-2012, the SEM Committee was satisfied that the exchange rate methodology be aligned to that utilised in the SEM. The TSOs will use the same methodology for 2014-2015 using the last five working days of July.

The OSC rates assume a forecast blended inflation rate<sup>7</sup> of 1% for the 2015-2016 period. The rates proposed are displayed with 2 decimal places in Euro. The TSOs would like to clarify that 4 decimal places are used in the calculation of the inflationary Increase.

<sup>&</sup>lt;sup>5</sup> Harmonised All-Island Ancillary Services Rates Recommendation Paper; 9 July 2014

 $<sup>^{6}\,\</sup>underline{\text{http://www.allislandproject.org/en/transmission}}\,\,\underline{\text{decision}}\,\,\underline{\text{documents.aspx?article=5d1d418e-ed91-4718-9f30-98d095ca6449}}$ 

<sup>&</sup>lt;sup>7</sup> Current inflation forecasts in the UK, as published by bodies such as the Office of Budgetary Responsibility (OBR) indicate UK inflation of the order of 2-2.5%. Forecasts of HICP inflation in Ireland are general around 0.5%. On this basis, and recognising the relative balance between Ireland and Northern Ireland, and indeed the somewhat lower than originally forecast expected outturn inflation for 2014/15 the TSOs' view is that a blended rate of 1% for the forthcoming 2015/16 period is appropriate.

# 4.1 Trip Charges

The following tables propose the Trip Charges and Constants for the 2015-2016 tariff year. As seen in Table 5.1.1 and Table 5.1.2 there are no changes to the proposed charges compared with the previous tariff year other than increasing in line with the agreed inflation rate.

	2014-2015	2015-2016
Direct Trip Rate of MW Loss	15 MW/s	15 MW/s
Fast Wind Down Rate of MW Loss	3 MW/s	3 MW/s
Slow Wind Down Rate of MW Loss	1 MW/s	1 MW/s
Direct Trip Constant	0.01	0.01
Fast Wind Down Constant	0.009	0.009
Slow Wind Down Constant	0.008	0.008
Trip MW Loss Threshold	100 MW	100 MW

**Table 5.1.1: Proposed Trip Constants** 

Charge	2014-2015	2015-2016
Direct Trip Charge Rate	€4,141	€4,183
Fast Wind Down Charge Rate	€3,106	€3,137
Slow Wind Down Charge Rate	€2,071	€2,091

**Table 5.1.2: Proposed Trip Rates** 

# 4.2 Short Notice Declaration (SND) Charges

The following tables propose the SND Charges and Constants for the 2015-2016 tariff year. As seen in Table 5.1.3 and 5.1.4 there is no change to the proposed constants and charges compared with the 2014-2015 tariff year other than increasing in line with the proposed inflation rate.

SND Constants	2014-2015	2015-2016
SND Time Minimum	5 min	5 min
SND Time Medium	20 min	20 min
SND Time Zero	480 min	480 min
SND Powering Factor (Notice time weighting curve)	-0.3	-0.3
SND Threshold	15 MW	15 MW
Time Window for Chargeable SNDs	60 min	60 min

**Table 5.1.3: Proposed SND Constants** 

SND Charge Rate	2014-2015	2015-2016
SND Charge Rate	€72 / MW	€73 / MW

**Table 5.1.4: Proposed SND Charge Rate** 

# 4.3 GPI Charges

The proposed GPI Constants, GPI Declaration Based Charges and GPI Event Based Charges for the 2014-2015 tariff year are outlined in Table 5.1.5, Table 5.1.6 and Table 5.1.7 respectively. The TSOs are proposing to make no change to the rates for 2015-2016 other than increasing in line with the proposed inflation rate.

GPI Constants	2014-2015	2015-2016
Late Declaration Notice Time	480 min	480 min
Loading Rate Factor 1	60 min	60 min
Loading Rate Factor 2	24	24
Loading Rate Tolerance	110%	110%
De-Loading Rate Factor 1	60 min	60 min
De-Loading Rate Factor 2	24	24
De-Loading Rate Tolerance	110%	110%
Early Synchronous Tolerance	15 min	15 min
Early Synchronous Factor	60 min	60 min
Late Synchronous Tolerance	5 min	5 min
Late Synchronous Factor	55 min	55 min

**Table 5.1.5: Proposed GPI Constants** 

	2014-2015	2015-2016
<b>GPI Declaration Based Rates</b>	€/MWh	€/MWh
Minimum Generation	1.22	1.23
Max Starts in 24 hour period	1.04	1.05
Minimum On time	1.04	1.05
Reactive Power Leading	0.30	0.30
Reactive Power Lagging	0.30	0.30
Governor Droop	0.30	0.30
Primary Operating Reserve	0.12	0.13
Secondary Operating Reserve	0.12	0.13
Tertiary Operating Reserve 1	0.12	0.13
Tertiary Operating Reserve 2	0.12	0.13

**Table 5.1.6: Proposed GPI Declaration Based Charge Rates** 

	2014-2015	2015-2016
<b>GPI Event Based Rates</b>	€/MWh	€/MWh
Loading Rate	0.61	0.62
De-Loading Rate	0.61	0.62
Early Synchronisation	2.74	2.77
Late Synchronisation	27.41	27.68

**Table 5.1.7: Proposed GPI Event Based Charge Rates** 

# 4.4 Respondents' Comments

Some comments were received in relation to proposed rates and charges as detailed in the HAS Recommendation Paper 2015-2016. In particular, BGE requested more detail on the sources of both the UK and Irish inflation rates as well as the methodology for blending the two rates.

# 4.5 TSOs' Response

In proposing OSC rates, the TSO's are following the same approach previously approved by the Regulatory Authorities; that is to uplift current rates (€) by a blended inflation rate and determine the £ equivalent as per the RA HAS 2011-12 decision paper which stated that the exchange rate methodology is to be aligned to that utilised in the SEM. The only amendment to this being a change to the 5 day timeframe (from August to July) in order to align to other Regulatory Authorities timeframes with regard to publication of charges.

With respect to the blended inflation rate, the TSO's are again aligning to the methodology approved by the RAs in applying a blended rate. In relation to the blended rate itself, the TSO's propose what it believes is an appropriate inflation rate based on its assessment of forecast inflation at the time of initial submission. In late 2014, the expectation was that there would be a reduction in the various published Harmonised Index of Consumer Prices (HICP) forecasts at that time and hence a rate of 0.5% was assumed appropriate. The Central Bank of Ireland forecast subsequently reduced from 1.2% to 0.2% while the UK Retail Price Index (RPI) forecast was c. 2.5%. The resulting blended rate was 1.0%. Given the range of published forecasts, and the frequency of their updates, the TSO's accept the respondents views around transparency and as such propose the following methodology be applied going forward.

- 75% \* Central Bank HICP forecast from the latest available quarterly report adjusted for the relevant tariff timeframe; plus
- 25% \* Office of Budgetary Responsibility RPI forecast from the latest available quarterly report adjusted for the relevant tariff timeframe

Source		2015	2016	2015/16
OBR March 2015	RPI	1	2.1	1.8
Central Bank April 15	HICP	0.7	1.7	1.5
				1.5%

This calculation (based on April 2015 and March 2015 Reports respectively) results in an increased blended inflation rate of 1.5%.

It should be noted that the 1.5% forecast inflation for 2014/15 rates actually out-turned at less than 1% and as such the RAs may want to give consideration to making that adjustment as part of its determination.

# 4.6 TSOs' Recommendation

A blended inflation rate of 1% as proposed to be implemented.

# 5. NEXT STEPS

Following a review of comments on the OSC consultation paper the TSOs are now making these recommendations to the RAs. Following RA approval, the TSOs will then publish revised TUoS Statements of Charges for the 2015-2016 tariff period.



Amanda Kelly EirGrid The Oval Shelbourne Road Dublin 4 Ireland

23rd March 2015

Dear Amanda

#### RE: Response to 2015/16 Harmonised Ancillary Services and Other Systems Charges Consultation

Given the other on-going changes that are occurring in the electricity market at this time and its draw on resources, Bord Gáis Energy (BGE) appreciates the earlier than usual consultation on this issue. BGE is however disappointed that proposals in relation to the RoCoF Incentive have not been included as part of this consultation.

The first tranche of priority generators are expected to conclude their RoCoF studies within the timeframe of the proposed 2015/16 rates. The exclusion of proposed RoCoF related rates in the consultation fails to recognise the costs that generators are incurring, particularly those in the priority listing, as a result of the compliance testing programme and the risks facing these generators as a result of the expected increase in RoCoF events. As suggested in the consultation paper, the introduction of a RoCoF ancillary service is to act both as an incentive to complete the RoCoF studies and to compensate for increased operation and maintenance cost associated with higher and more frequent RoCoF events. To this end, BGE urges the TSOs to work with generators to understand better the type and magnitude of costs expected as a result of the change in RoCoF standard and to develop a rate to reward compliance with a higher RoCoF standard as part of the decision paper for the 2015/16 HAS rates.

This would provide confidence to generators and investors that a mechanism exists which adequately compensates for the real risks and costs of operating in the Irish system. Recognising that the studies will not be complete, if the rates are to be truly an incentive for compliance, they should be available and applicable throughout the study period for those generators actively engaging. At this juncture, a rate related to the current expected costs of compliance may be appropriate. To the extent that further costs are identified as part of the study process, these can be discussed and consulted on as part of next years' annual review process.

Lastly, with respect to the inflation rates proposed in the consultation paper, more detail on the sources of both the UK and Irish inflation rates as well as the methodology blending the two rates would be helpful. Based on available data, from the relevant authorities in GB and Ireland it is difficult to reconcile the 1% rate proposed. Also, in footnote 11 of your consultation paper you refer to the 'general' forecasts for inflation in Ireland, could you please confirm the sources of your forecasts. Looking at forecasts from the Department of Finance it is again difficult to reconcile the 0.5% rate you propose in the consultation.

Yours sincerely,

Brian Larkin Regulatory Affairs – Commercial Bord Gáis Energy

(By email)

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# Response to:

"Harmonised Ancillary Services and Other System Charges Consultation - Tariff Year 1st October 2015 to 30th September 2016"

#### Introduction

ESB Generation and Wholesale Markets (GWM) welcome the opportunity to provide feedback on the TSO's proposed Harmonised Ancillary Services and Other System Charges for the 2015-16 tariff year. Part One of our response below details our comments on the Harmonised Ancillary Services arrangements and Part Two refers to the Other System Charges.

#### Part One - Harmonised Ancillary Services

ESB GWM's feedback on the TSO's proposals are summarised below.

#### Section 1.2 AS Policy

ESB GWM welcome the introduction of an AS Procurement Policy as this should provide more clarity to the TSO's contracting for system services. However, while the consultation document gives a very brief description, ESB would have expected a full policy document to have been produced by the TSO giving much more detail than has been provided. For example, ESB would be keen to know the relevant weighting of each of the factors outlined in the document as this would

- allow the service provider to better understand the TSO's requirements for procuring services
- facilitate proper budget planning and
- allow programs to be developed and executed commensurate with the services being sought..

# Section 2.1.2 Ramping during and after an Under Frequency event

ESB GWM are of the opinion that the TSO's proposal relating to ramping before the frequency event can be done but is difficult to implement in practice. It will most likely require the generator to change the set point of the machine i.e. re-dispatch itself. This has a number of implications such as Uninstructed Imbalances and changes to current dispatch procedures. Both of these would require changes to the T&S code so all of these require consideration before changing the rules relating to ramping before a frequency event. As stated in our response to the 2014 HAS consultation, a more centralised approach where NCC would re dispatch plant would avoid the potential for such Uninstructed Imbalances.

# Section 2.1.3 Ramping before an Under Frequency event - Pre-Event Assessment

ESB GWM see the proposal by the TSO relating to ramping before an under frequency event as an improvement on the current rules and would support its introduction albeit with a review period in the future to assess its suitability

# Section 2.3 Dynamic Frequency Response from an Interconnector

ESB GWM would have concerns in this regard relating to Eirgrid's role as TSO and service provider. ESB GWM see a clear conflict of interest in this regard. It would appear that the rules are being written to suit one particular service provider - EWIC. Are the TSO going to assess the potential capabilities of all other service providers and introduce particular products to suit their capabilities also? This issue was raised in numerous responses to last years HAS consultation but there has been no response as yet from either the TSO or the Regulatory Authorities.

ESB GWM would welcome further clarification on these matters.

# Section 2.4 RoCoF Incentive

ESB GWM fully support the cost recovery of RoCoF costs. However, it is difficult to see how the TSO can adequately incentivise compliance with the new standard when generators still do not know what they may have to pay to comply with it.

Also, it may be the case where the cost of compliance for a certain unit is a multiple of the cost of another unit. In this instance a mechanism of cost recovery for each generator would be more suitable and more economical overall compared to an incentive scheme which has to cover the most expensive costs but pays this to all.

# Power NI Energy Limited Power Procurement Business (PPB)

**HAS and OSC Consultations** 

February 2015

Response by Power NI Energy (PPB)



23 March 2015

#### Introduction

Power NI Power Procurement Business (PPB) welcomes the opportunity to respond to the consultation papers on Harmonised Ancillary Services (HAS) and Other System Charges (OSC).

PPB is the counter-party to Power Purchase Agreements, which were established in 1992 as part of the restricting and privatisation of the electricity supply industry in Northern Ireland. PPB purchases both the capacity of the contracted generating units and any electricity generated by those units on terms specified in the agreements. The generating units are extremely flexible and reliable and therefore with the changes in the generation mix and typology of the system these units are likely to play a significant role in helping the System Operator manage the system. Flexibility is required to securely operate a system, which is being re-designed to accommodate ambitious renewable targets.

# **DS3 System Services**

PPB welcomes the work which has been undertaken by the TSO in relation to DS3. It is also important that the delay in the delivery of DS3, due to the important I-SEM considerations being made, does not stifle innovation in ancillary services as this will have detrimental impact on customers and the development of renewable projects. The TSO must therefore continue to explore opportunities to procure new ancillary services, where they provide material value for customers by minimizing constraint costs, in the period up to the implementation of the new DS3 arrangements. PPB notes that none of the four short term ancillary services, which were initially consulted upon in the Consultation Paper for 2011-12, have been procured. There must be a more expedient method for procuring ancillary services which can deliver operational flexibility and mitigate against high constraint costs. The delay in contracting for the new ancillary services has meant that both customers and ancillary service providers have been unable to realize the value associated with these services. Given the level of countertrading on the interconnector there must be a strong economic case for both Flexible Mode Operation and Lower Minimum Generation services.

PPB is also concerned that the new regulated tariff proposed for 2016-2017 will be based on the current HAS budget of €60m. This value was derived from the original System Services scheme running in NI and has never been reassessed and does not properly remunerate the existing System Service Provider. The rates should also be benchmarked against similar products in GB.

# AS Reporting

The current report is inadequate as it does not give sufficient transparency to providers. This is of particular concern in the lead in to the DS3 implementation date when there will be a requirement for bidding in of these ancillary services.

The TSO does not publish the adequacy, utilisation, or the efficient use of these services. Nor does the TSO publish the levels of Reserve or Voltage levels (MVAr) despatched against their License conditions or when there is a breach thereof.

# **Existing Ancillary Services**

As RoCoF increases and the occurrences of Frequency Transients increase due to the increase in wind and lower inertia, generators will be exposed to greater risks to their plant. Penalties are increasing and yet the TSO has not been provided with any incentive to keep the number and magnitude of these events to a minimum. PPB believe the TSOs should be transparent in the level of each category of reserve being carried and this should be reported on a half hour basis to give industry confidence that the TSOs' License obligations are being met and generators are not receiving penalties due to the TSOs' mismanagement of the system through, for example, consciously under-carrying reserve.

# Ramping before an Under Frequency Event - Pre-Event Assessment

The addition of the 3-5s average for pre-event criteria if a unit is ramping is a welcome change. However we believe there should also be flexibility to cover any other occasion where stability in output or frequency does not give a fair representation of the pre-transient conditions and that the pre-event assessment point should also be able to be adjusted if, in some unusual circumstance, the 3-5s or 30-60s timeframes do not provide an accurate point for analysis.

# Influence of RoCoF on POR Performance assessment for Synchronous Generation Units

PPB welcomes this new piece of analysis and agrees that a unit which has provided inertia and been a benefit to the system should not be penalised for doing so. However, we believe that this inertia performance should actually be rewarded and that the HAS arrangements for 2015/16 should be enhanced to derive a payment for such provision. This development would be a rational interim step towards DS3.

# Dynamic Frequency Response from an Interconnector

The Interconnectors provide the TSOs with sources of flexibility which help it to manage the technical challenges associated with a relatively small system. The interconnectors were both commissioned with the technical capability of providing very fast ramp rates which can be triggered by a binary input signal (which could be driven by frequency thresholds). The proposal to modify the Interconnector controls so that in a System event a low frequency relay triggers them to behave in a similar way to a generating unit with a 4% droop response may mean that other generating units fail to respond in the contracted manner and are penalized. This dynamic requires very careful analysis and consultation prior to introduction and payment for such a service. The TSOs, in this consultation paper, are recommending the introduction of a Dynamic Frequency Reserve product for interconnectors based on the hypothesis that this new product will "provide an improvement in frequency control during transients" which will "provide enhanced benefits to both the TSOs and the customer". If this is the criteria, which has been used to assess the merits of utilizing the technical capability and rewarding the same with a new ancillary service, ancillary service products such as Synchronous Inertial Response and Fast Frequency Response should also be assessed using this criteria.

# Proposed Rates and Charges (HAS and OSC)

PPB welcomes the increase in rates in line with inflation. However, many of the payment rates were derived from the original System Support Services arrangements that operated in NI and has never been reassessed and, we believe, do not properly remunerate the services provided by existing System Service Providers. The rates should also be benchmarked against similar products in GB.

In terms of setting the rates for existing Ancillary Services, PPB has a concern in relation to the application of volatile exchange rates for Ancillary Service Providers in Northern Ireland which, with the recent strengthening of Sterling relative to the Euro, will mean NI service providers will be receiving less payment for ancillary services in 2015/16 than in 2014/15. Given that the original rates were derived from NI SSSA rates (which were in Sterling), PPB proposes that the NI rates for 2015/16 should be the 2014/15 rates in Sterling uplifted by inflation.

# **Existing OSC Developments**

Again the TSO's are suggesting paying for additional services (i.e. Dynamic Frequency Response) on the Interconnector however there is a lack of fairness in the management of HAS and OSC arrangements. The Interconnectors must also be liable for all other System Charges too.

# Late Synchronisation Charge

We believe the solution is the retention of the existing Grid Code with a review of the Other System Charges. A review of Other System Charges would deal with the TSO's only remaining concern that the level of charges are not sufficient to incentivise performance.

# **New OSC Charges**

# Secondary Fuel GPI

This unfairness continues as there is now the proposal to introduce a charge for non-availability on secondary fuel however there is not a corresponding payment for the provision of this service. If there is no payment for the provision there should be no subsequent penalty. The formula for the charge also penalises a unit which has a higher availability on its primary fuel rather than its secondary fuel. The charge needs to be against the availably of the secondary fuel.

#### RoCoF GPI

An interconnector has the capability of causing one of the largest RoCoF events on the system due a single point of failure. The tripping of an interconnector could also create significant harmonic disturbances on the system. Whilst the RA's are proposing a

Generator Performance Incentive for conventional generating units it is not proposing that all Grid Code Users are financially incentivised to minimise the number or magnitude of RoCoF events. This is despite the fact that the East West interconnector is the greatest risk. Further, whilst system separation is a major risk for the Northern Ireland system, there is no financial incentive being considered for either NIE or SONI to ensure that such an event does not happen.

PPB would welcome the publication of the methodology which has been used to value the proposed Generator Performance Incentive (GPI). PPB would also welcome an analysis to be completed, using the same methodology, to value a performance incentive for interconnector and tie-line owners in relation to:

- the mal-operation of an interconnector (up to 1000MW) which may cause a RoCoF event; and
- a system separation which may cause a RoCoF event.

This proposed GPI for non-compliance with the new RoCoF standard would be better designed to incentivise a reduction in the number and magnitude of RoCoF events. Consequently generators should receive remuneration reflecting their contribution to the minimization of RoCoF. The difference in the design criteria between the jurisdictions mean that a NI generator contributes more than twice the spinning reserve to the system, relative to generating unit capacity, than the ROI generators.

#### Other Comments

As discussed at the time of the introduction of the Harmonised Ancillary Services arrangements PPB still believes that the TUoS Agreement is not the correct agreement to contain Generator Performance Incentives. For example, disputes in relation to RoCoF GPIs could end up being referred to the Utility Regulator as a Licence breach. Interconnector owners have also argued that GPIs should not be applicable to them as they do not sign up to a TUoSA.



#### IWEA response to the HAS and OSC Consultation Paper for the Tariff Year 2015/2016.

IWEA welcomes the opportunity to respond to the consultation on HAS and OSC Consultation Paper for the Tariff Year 2015/2016.

# Proposals on Tariffs and Charges

The consultation paper outlines the following proposals:

- In this year's Annual Tariff Consultation on the harmonised All-Island Ancillary Services the
  TSOs are proposing to adjust the rates for an assumed level of inflation. The TSOs' view is
  that a blended rate of 1% for the forthcoming 2015/16 period is appropriate. No other
  changes to rates are proposed.
- In this year's Annual Tariff Consultation the TSOs are proposing to retain the OSC rates approved for the 2014-2015 tariff year adjusting for inflation at forecast rate of 1% for the Tariff year 2015-2016. No other changes to rates are proposed.

IWEA supports these proposals at this time.

# The Delivery of I-SEM

IWEA acknowledges that changes will be required to the Other System Charges through the I-SEM design and supports that this should be further considered in line with the decisions on the detailed implementation of the market design.

# Introduction of new GPIs

IWEA believes that the current use of the controllability categorisation policy for grid code compliance is not appropriate as the penalty of being moved into category (i) for non-compliance, and the associated increased levels of curtailment, is too severe relative to the level of non-compliance. It should be noted that an appropriate incentive/penalty system is already in place to ensure generators prove compliance in a timely manner.

- All wind farms are incentivised commercially to prove controllability in order to lift the MEC
  capacity caps during turbine commissioning and then to achieve operational readiness
  certification. Without passing this point a generator cannot become a VPT in the market.
- The MEC bond process then provides an incentive through severe penalty to achieve full grid
  code compliance as quickly as possible. In bonding regime 2 wind farms are given one year
  to achieve compliance or risk having the bond drawn down in manner which escalates
  month by month. This timeline needs to be reviewed in light of length of time required to
  connect larger wind farms and to carry out testing.

- For older sites on bonding regime 1 the MEC bond is not returned until compliance is achieved. There is no benefit in taking any more time than is necessary to navigate this process.
- Generators cannot receive ancillary service revenue until an ops cert is issued which is another financial incentive in place. This incentive is greater the larger the wind generator.
- Market participants cannot access market payments for constraint/curtailment compensation without the Wind Farm having achieved its operational certificate.

The wind industry supports the need for compliance of the generation fleet. The introduction of GPIs for wind energy could be considered as an alternative to the use of the categorisation policy. An appropriate penalty system should be based on the impact of the non-compliance and not directly linked to curtailment as is the case now. If there is very low curtailment a compliance penalty is actually not applied.

IWEA requests that a detailed discussion and consultation on a potential system be facilitated. It would not be appropriate to introduce GPIs while the existing policy is in place. It is essential that a holistic view is taken in relation to the incentives/penalties being applied to generators to ensure that any penalty introduced is not too severe, and that it appropriately reflects the level of non-performance. Therefore no GPIs should be introduced without adequate consultation on the proposal.

#### RoCoF GPI

The RA's RoCoF modification to the Grid code decision paper states that the RAs intend to phase the introduction of GPI according to the unit categorisation and will confirm the decision on this matter on 10 November 2015.

IWEA notes that the introduction of the RoCoF modification is an essential part of the DS3 programme to ensure that the SNSP level can be increased. We welcome the introduction of GPIs to incentivise generators to be compliant with the RoCoF modification, however it must be ensured that this is introduced in a fair manner such that wind generators are not penalised ahead of other types of generation.