Harmonised Ancillary Services 2014/2015

# **Recommendations Paper**

9<sup>th</sup> July 2014





# EXECUTIVE SUMMARY

EirGrid and SONI (the TSOs) have consulted on the annual rates and charges for the Harmonised Ancillary Services (HAS) for the tariff year 1<sup>st</sup> October 2014 to 30<sup>th</sup> September 2015. The HAS consultation paper for 2014-2015 was published on 11<sup>th</sup> April 2014 and the TSOs have received comments from nine (9) respondents. This paper summarises the responses received and provides clarification where required. Having reviewed the responses and taking into account the participants views, the TSOs have the following recommendations:

- For the upcoming tariff period running from the 1<sup>st</sup> October 2014 to 30<sup>th</sup> September 2015, the TSOs propose to adjust the rates for an assumed level of inflation. The TSOs have assumed a forecast blended inflation rate of 1.5% across the two jurisdictions. No other changes to rates are proposed.
- **2.** The TSO will develop a transparent, technology independent System Services procurement policy to align with regulatory decisions and the European Network Codes.
- 3. Dynamic frequency response from interconnectors will be progressed subject to a separate consultation.
- 4. The exchange rate determination mechanism and timing will be reviewed to determine if changes are required and if so, changes will be consulted upon within next year's HAS consultation.

#### ABBREVIATIONS

AS	Ancillary Services	
CCGT	Combined Cycle Gas Turbine	
DBC	Dispatch Balancing Costs	
DS3	'Delivering a Secure Sustainable Electricity System' programme	
HAS	Harmonised Ancillary Services	
NCC	EirGrid's National Control Centre	
OCGT	Open Cycle Gas Turbine	
OSC	Other System Charges	
RAs	Regulatory Authorities (CER & NIAUR)	
SEM	Single Electricity Market	
SMP	System Marginal Price	
SONI	System Operator of Northern Ireland	
TSO	Transmission System Operator	

# 1. INTRODUCTION

The purpose of this paper is to recommend to the Regulatory Authorities (RAs) in Ireland and Northern Ireland the proposed rates and changes for the 2014/2015 tariff year, based on comments received by the Transmission System Operators (TSOs) on the Harmonised Ancillary Services Consultation paper<sup>1</sup>.

For the upcoming tariff period running from the 1<sup>st</sup> October 2014 to the 30<sup>th</sup> September 2015, the TSOs proposed to maintain the current approved schedule of services.

The current approved rates have been proposed to increase with an assumed forecast blended inflation rate of 1.5%. In the consultation paper, the TSOs provided clarification on ramping during and after an Under Frequency event and also an overview of their investigations into the Pre-Event assessment of a Unit ramping before an Under Frequency event.

As part of the consultation the TSOs provided an update on the refinement to the Operating Reserve calculation and the status of any contracts for the Flexibility Services as discussed in previous consultations.

Lastly, the TSOs proposed to refine the existing Interconnector Static Frequency Service to become a Dynamic Frequency Response service.

Following a review of comments on the HAS consultation paper the TSOs are now making these recommendations to the RAs. The TSOs will then publish a revised HAS Statement of Payment and Charges for the 2014/2015 tariff period.

Party	Abbreviation	
AES Kilroot Power Ltd and AES Ballylumford Ltd	AES	
BordGais Energy	BG Energy	
ESB Generation and Wholesale Markets	ESB GWM	
IWEA	IWEA	
Power NI Energy Ltd Power Procurement Business	РРВ	
SSE Renewables	SSE	
Grange Backup Power Ltd	Grange	
Energia	Energia	

The TSOs received responses from the following parties:

One confidential response was received to this consultation paper. The responses which were not marked confidential can be found attached to this recommendations paper.

<sup>&</sup>lt;sup>1</sup> Harmonised Ancillary Services Consultation 11<sup>th</sup> April 2014, available at <u>www.EirGrid.com</u> and <u>www.soni.ltd.uk</u>

# 2. ANCILLARY SERVICES CONSULTATION

#### 2.1. EXISTING AS SERVICES

#### 2.1.1. Introduction

The TSOs, taking into account their respective statutory obligations and licence conditions<sup>2</sup>, continuously review AS services to ensure that they deliver efficiency, reliability and value for money to electricity customers.

The TSOs are proposing to continue the AS services and rates for this upcoming tariff year 2014-2015 with the inclusion of the assumed inflation rate.

#### 2.1.2. Respondents' Comments

Three comments were received (ESB GWM, Grange Backup Power Ltd and 1 confidential) in relation to existing AS services.

Two respondents (Grange Backup Power Ltd and 1 confidential) commented that they were in support of the proposals in this section.

One respondent (ESB GWM) commented that in the experience of ESB GWM, the TSO does not always contract for capabilities in excess of minimum Grid Code requirements. It would be useful if the TSO stated what volume of services they are enabled to procure for the coming tariff year. ESB GWM are of the opinion that there are currently no clear and transparent criteria and processes for contracting above Grid Code requirements. Such criteria and processes are essential to enable service providers to plan efficiently.

#### 2.1.3. TSOs' Response

For conventional plant the TSOs contract for the minimum Grid Code/GUA required capability once this has been proven through testing. For capabilities in excess of the minimum Grid Code requirements the TSOs, in order to discharge their requirement of providing necessary system services at an efficient and economical manner, review these on a case by case basis to ensure they provide a system benefit. In order to improve and make the process more transparent and independent of technology type an AS procurement policy will be developed as part of the DS3 System Services programme of work which will also ensure compliance with the European Network Codes. A regulatory decision around DS3 System Services is expected by the end of 2014.

<sup>2</sup> On June 20th 2001, the Commission for Energy Regulation (CER) issued a Transmission System Operator (TSO) Licence to EirGrid plc. pursuant to Section 14 (1) (e) of the Electricity Regulation Act, 1999, as inserted by Regulation 32 of Statutory Instrument (SI) No. 445 of 2000 - European Communities (Internal Market in Electricity) Regulations 2001

On July 3rd 2007, The Department of Enterprise, Trade and Investment, in exercise of the powers conferred by Article 10(1) (b) of the Electricity (Northern Ireland) Order 1992 granted SONI Limited a TSO licence (the "Licence"). The Licence was amended on 28<sup>th</sup> March 2014.

# 2.1.4. TSOs' Recommendation

The TSOs welcome participants' comments on this section. The TSO will develop a transparent, technology independent System Services procurement policy to align with regulatory decisions and the European Network Codes.

# 2.2. STATIC FREQUENCY SERVICE

## 2.2.1. Introduction

Static frequency response is included in the overall reserve provision on the island and is provided in part by interconnectors. The service is designed to respond to high and low frequency events by altering the interconnector flow, initiated at present by frequency trigger values. The interconnectors are facilitating reserve exchange between power systems and the reserve provided is non-regulating. Consequently the TSOs consider the value to the system to be less than reserve provided by a dynamically regulating conventional source.

The rate for Provision of Static Frequency Service was set for 2012-2013 at 50% of the dynamic rates for service provision of the POR, SOR, TOR1 and TOR2. A charge for non-provision of this service is liable, in line with all other AS categories. The 2013-2014 rate for static reserve is unchanged for 2014-2015 except for an inflationary rate increase.

# 2.2.2. Respondents' Comments

No specific comments on the static frequency service were received.

# 2.2.3. TSOs' Recommendation

The TSOs' recommend that the 2013-2014 rate for static reserve is unchanged for 2014-2015 except for an inflationary rate increase.

# 2.3. RAMPING DURING AND AFTER AN UNDER FREQUENCY EVENT

#### 2.3.1. Introduction

It is the TSOs' expectation that during an under frequency event Generating Units will increase MW output to assist restoration of the system frequency shortfall and respond in line with the frequency governor droop set out in the technical parameters as agreed in the HAS agreement. The TSOs have observed in some cases Generating Units that were ramping pre-event continue to ramp (MW output increase or decrease) once the system frequency has been restored. After a generation shortfall event some elements of the pre-event generation will require to be dispatched, units that resume ramping to pre-event dispatch levels especially in a downward direction threaten restoration of system security in the already stressed immediate post event environment. The TSOs will continue to monitor and discuss with generators where necessary.

# 2.3.2. Respondents' Comments

One respondent (ESB GWM) commented that clarity is required on what is meant by the TSOs in relation to this and if generators should be ignoring pre-event instructions. ESB GWM are of the

opinion that frequency related re-dispatch is a responsibility of the TSO and as such the TSO should instruct generators accordingly through the use of new EDIL instructions when the system frequency recovers. It should be done in a centralised fashion rather than in an ad hoc fashion by individual generators putting in new set points themselves. This more centralised approach by the NCC would avoid the potential for Uninstructed Imbalances which may otherwise materialise.

## 2.3.3. TSOs' Response

The TSOs welcome the participant's comments on this section and believe there is merit in further investigation and engagement with industry on this matter. The points raised will be clarified in due course.

#### 2.3.4. TSOs' Recommendation

No recommendation is being given as part of this consultation.

# 2.4. RAMPING BEFORE AN UNDER FREQUENCY EVENT - PRE-EVENT ASSESSMENT

# 2.4.1. Introduction

It has been raised with the TSOs that the existing reserve provision calculation has a limitation whereby if a unit is ramping up or down pre-event then the calculation may incorrectly calculate the expected output of the unit. The existing design analyses the pre-event output and frequency in the period 30 to 60 seconds before the event start time. The TSOs are currently investigating an alternative design whereby if the unit is ramping pre-event then the pre-event output and frequency is analysed closer to the event start time and is averaged over a shorter timeframe. The TSOs are proposing that if a unit is ramping pre-event or if the event was caused by the wind down of a unit then the pre-event output and frequency is the average from 3 to 5 seconds before the event start time. The TSOs are investigating this as part of the Enhanced Performance Monitoring work stream under the DS3 project. The output of this project will help determine the outcome of this design refinement.

# 2.4.2. Respondents' Comments

One respondent (ESB GWM) commented that ESB GWM see the proposal by the TSO to reduce the time period of the averaging as an improvement on the current situation. However, the proposed methodology will still have limitations and inaccuracies and the most appropriate solution would be to flag these rare events and exclude them from performance monitoring.

ESB GWM would also like to raise the issue of the monitoring of reserve provision during events whereby the frequency fully recovers within the time period associated with POR. In such instances generators are penalised as they are deemed not to have provided the reserve even though they act in the manner technically most appropriate.

These perverse signals and incentives/penalties are not efficient from the perspective of the technical operation of the system. The technical and financial systems and incentives need to be aligned.

# 2.4.3. TSOs' Response

Reserve charges will continue to be assessed for all frequency events below 49.5 Hz. In the event that a generating unit is ramping prior to the start of an under frequency event then the TSOs will consider sampling the pre-event values at different points in consultation with the service provider. It should be noted that the onus will be on the service provider to indicate to the TSO that there was such an event as these are processed automatically by the AS billing system and are not individually assessed.

In relation to the quick recovery of the frequency during transients the TSOs welcome feedback from service providers in the event they feel, in good faith, that they have been incorrectly charged. It should be noted that the onus will be on the service provider to indicate to the TSO that there was such an event as these are processed automatically by the AS billing system and are not individually assessed.

# 2.4.4. TSOs' Recommendation

The TSOs will engage with Service Providers to investigate and develop communication process changes that may be required.

# 2.5 REFINEMENT TO OPERATING RESERVE CALCULATION (MULTIPLE AS VALUES & DECREMENT RATES)

# 2.5.1 Introduction

As part of last year's Annual Tariff Consultation the TSOs sought to implement a design refinement to the settlement systems in Ireland to allow for more complex reserve curves, in line with the capabilities in the Reserve Constraint Unit Commitment (RCUC) applications used in the control rooms. The settlement systems in Northern Ireland already allow for this capability. The system change required to introduce these modifications to the HAS settlement system in Ireland is on schedule to be complete for the start of the tariff year 2014-2015. The TSOs request that the Service Providers who believe they would benefit from this change to their unit's existing contract values to reflect their true capabilities should contact the TSO in Ireland where their request will be assessed.

#### 2.5.2 Respondents' Comments

One respondent (Energia) commented that on the face of it this refinement has merit and should be explored with Service Providers.

#### 2.5.3 TSOs' Response

The TSOs welcome the participants support on the refinement of Operating Reserve calculation and will engage with the Service Providers.

#### 2.5.4 TSOs' Recommendation

No recommendation is being given as part of this consultation.

#### 2.6 FLEXIBILITY SERVICES

#### 2.6.1 Introduction

Significant Dispatch Balancing Costs during the Tariff Year 2010-2011 resulted in the TSOs' focusing on procuring additional services which would assist with mitigation of these costs. It was decided to explore a number of short term AS services which would offer improvements to the operational flexibility of the power system and mitigate high constraint costs. The services were as follows:

- 1. Reduced Time to Synchronisation from Instruction (also referred to as 'warming');
- 2. Flexible multimode operation;
- 3. Lower minimum generation with/without reserve; and
- 4. Synchronous Compensation.

Full details on each of these services can be found in last year's consultation, SEM-13-020<sup>3</sup>.

As set out in the Consultation Paper for 2011-2012, the services would be contracted on a unit specific basis. The services must provide an overall system benefit and must provide value for money for the consumer. In terms of payment, the services would be paid for based on their utilisation and would not be availability based payments. The SEM Committee decision for Tariff year 2011/2012 requested HAS rates to be proposed by the TSOs for the tariff year 2012/2013, however, in the HAS Consultation paper for that tariff year, the TSOs stated that they were they are not in a position to propose a standard service rate. Instead, the TSOs proposed that they would consider an annual tender process whereby a competitively priced service could be obtained. On the 20<sup>th</sup> of December 2012, the TSOs issued a tender proposal to all AS providers who would be connected as of October 2013. The tender invited proposals on two flexibility services, namely Reduced Time to Synchronise Service and Multi-Mode Operation (i.e. Open Cycle Mode).

The TSOs received five tender applications for the provision of Reduced Time to synchronise for the 2013-14 tariff year. Two tender applications were notified and omitted from further participation.

<sup>3</sup> www.allislandproject.org

The remaining three are currently under evaluation by the TSOs. These are expected to be finally accepted or rejected by October 2014.

The TSOs received three tender applications for the provision of flexible multi-mode operation for the 2013-14 tariff year. Two tender applications were notified and omitted from further participation. The remaining one is currently under evaluation by the TSOs. It is expected to be finally accepted or rejected by October 2014.

# 2.6.2 Respondents' Comments

Four comments were received (ESB GWM, Grange, PPB and 1 confidential) in relation to the existing flexibility services.

Two respondents (Grange and 1 confidential) support the proposals in this section.

One respondent (ESB GWM) commented that they would have some concerns regarding the tendering processes associated with the flexibility services. The tendering processes have proved extremely long and did not provide an appropriate level of transparency.

ESB GWM would be interested to know if the rate given for Synchronous Compensation has resulted in the level of provision required by the TSO.

One respondent (PPB) noted 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 counter-trading on the interconnector there must be a strong economic case for both Flexible Mode Operation and Lower Minimum Generation.

# 2.6.3 TSOs' Response

The TSOs welcome participants' views on the flexibility services and acknowledge the delay in closing out the tender process. It is the TSOs' intention to have any successful tenders in place as soon as possible. With regards to the comment on the rate given for Synchronous Compensation having resulted in the level of provision required by the TSOs, the TSOs would confirm that the required level of provision has been met at this time.

In regards to the comment that none of the four short term ancillary services, which were initially consulted upon in the Consultation Paper for 2011-12, have been procured. The TSOs would like to state that since 2011 a small number of contracts have been put in place for these services. Further information will be provided on the number and type of contracts agreed following the closure of the Flexibility Services tender process and will be included in next year's HAS consultation paper.

#### 2.6.4 TSOs' Recommendation

No recommendation is being given as part of this consultation.

#### 2.7 DYNAMIC RESPONSE FROM AN INTERCONNECTOR

#### 2.7.1 Introduction

The TSOs have been investigating recent low frequency transients where the frequency has recovered rapidly and to a value above 50 Hz within the POR timeframes partly due to the influence of fixed amounts of static reserve. To provide an improvement in frequency control during transients the TSOs are therefore proposing to refine the existing provision of static reserve from the interconnectors to become a dynamic product that would only be delivered after a frequency threshold (high or low) has been breached. This frequency response would be provided in the same manner as a turbo-generator response having a settable governor droop (potentially 4%) and, similar to a machine, there would be a cap on the quantity of reserve that would be provided. This would enable the interconnector reserve and other reserve sources to be utilised in a much more intelligent manner and would therefore provide enhanced benefits to both the TSOs, service providers and the consumer. The TSOs consider the value to the system to be less than that provided by a dynamically regulating conventional source as a significant frequency threshold must be breached, either above or below the nominal 50 Hz, before any triggering of the reserve actually takes place.

The TSOs propose to determine the rate for provision of Dynamic Frequency Response service at a level yet to be decided but at a level in excess of the current 50% given for Static Frequency Response. A charge for non-provision of this service is liable, in line with all other AS categories.

The TSOs expect to replace the Static Frequency Response service with the Dynamic Frequency Response service over a period of time.

#### 2.7.2 Respondents' Comments

Eight comments were received (Energia, IWEA, ESB GWM, PPB, SSE, Grange, BG Energy and 1 confidential) on the Dynamic Response from an Interconnector proposal.

One respondent (Energia) commented that they see some merit in this service, providing it is valued correctly and that the performance of the interconnector providing the service is appropriately monitored and enforced.

One respondent (IWEA) welcomed Ancillary Services which provide extra flexibility to the system. They believe that the provision of services should be technology neutral, and that there should be a tender process which may identify if a dynamic frequency response as outlined in this section could be provided by other service providers.

One respondent (ESB GWM) commented that they were surprised to learn that interconnectors were currently only providing static reserve. They stated that under sections CC7.5.5 and OC4.3.4.2 of the Grid Code, interconnectors must act in accordance with a droop of 4% normally. ESB GWM questioned why the interconnectors do not currently do this and thus provide dynamic response already and also if such interconnectors had a derogation from the Grid Code. They also questioned how the treatment of the asset owner and its relationship with the TSO is regulated.

ESB GWM further commented that it seems that a new product is being introduced specifically for one, possibly two, customers and questioned if these customers approached the TSO with this service (which is already part of its Grid Code obligations) or did the TSO approach the customer.

One respondent (PPB) commented that the same criteria used to assess the merits of utilising the technical capability and rewarding the same with a new ancillary service should also be used to assess ancillary service products such as Synchronous Inertial Response and Fast Frequency Response. PPB stated they would expect a further consultation on the proposed Dynamic Frequency Reserve product rate if this product is going to be progressed.

One respondent (SSE) stated that they welcomed any Ancillary Services that would deliver additional flexibility to the system (and allow for more intelligent use of assets). They stated that it was their understanding that this is a service that will primarily be provided by EWIC and given that the TSO is both asset owner and service procurer, SSE believes a detailed analysis of the unstated increase in rate is required, especially given that the existing rate was set on the basis of a discount to dynamic reserve.

Two respondents (Grange & one confidential) expressed strong concern in relation to the continued development of the EirGrid Group owned asset Interconnector as a paid provider of Ancillary Services as it is a material competitor in dispatch for the provision of Ancillary Services. Whilst they accepted the possibility of any technology providing Ancillary Services if capable of doing so, they did not accept the distortion to the market competition in the provision of these services.

In this respect, both respondents stated that it was not appropriate for EirGrid to develop technology-specific products, to consult and make recommendation on rates (with insufficient justification), ignore the possibility that there could be other providers of the service (see SEM-12-068 where comments in relation to this were not responded to), and ultimately dispatching the system to receive payment for its own commercial activities operated by the Interconnector (including an expanded TSO counter-trading programme).

Grange further stated that since the introduction of the Static Reserve Service in October 2012, payments to the Static Reserve Services have been  $\leq 1.24$ m in the first twelve months of operation, with the payments from October 2013 to February 2014 already totalling  $\leq 0.79$ m, reflective of an upward step-change in revenues in May 2013 for unknown reasons. Grange requested an explanation and justification for these changes.

Grange remarked they were also at a loss to understand why such services are not included within the suite of DS3 services more generally (particularly response to upwards frequency events). They did not accept that the fact that the Interconnector is a regulated asset diminishes the impact on the wider market for Ancillary Services.

Grange stated they cannot and will not accept the continued foreclosure of the market for Ancillary Services to other potential providers of the service and they strongly requested that EirGrid do not place themselves in the position of further consulting on the sources of revenues for their own regulated assets in future. Grange believes this proposal contained in Section 2.3 should be withdrawn immediately.

One confidential respondent also strongly requested that EirGrid do not continue to compromise their own independence as transmission system operator by further consulting on the sources of revenues for their own regulated assets in future, and recommended that EirGrid request the SEM Committee and/or the CER as appropriate to consult on such matters where they impact the sources of revenues of EirGrid owned assets.

One respondent (BG energy) commented they accepted the TSOs' rationale for changing the existing Static Frequency Response service provided by EWIC to a more dynamic Frequency Response service. BG Energy believes that this principle should also be applied to generators who can meet the proposed higher RoCoF standard and their technical capabilities should be recognised commercially through an appropriate remuneration mechanism. They also stated that given, however, Eirgrid's position as Interconnector owner and sole provider of this new Dynamic Frequency Response service, they believe that a high level of transparency is needed to demonstrate to all market participants the basis behind the introduction of this new service and its commercial arrangements. To this end, BG Energy requested that clarification be provided regarding the potential low and high frequency thresholds of +/- 4% as the triggers to the provision of reserve from the Interconnector mentioned in the consultation and questioned what the frequency thresholds would be that will trigger a response and the rationale behind their introduction. They also guestioned if there was an upper threshold on the amount of reserve that will be required (will it be more or less than the 50MW of reserve delivered under the current Static Frequency Reserve service). BG Energy agreed with the TSOs assertion that the value of the new service should be less than that provided by a dynamically regulating conventional source of frequency response. The rationale (and analysis) behind proposing to set payment rates between the existing Static Frequency Response and the reserve payments synchronous generators receive must be presented (given that the payment rates for the Static Frequency Reserve appeared to be set at an arbitrary 50% of synchronous generators reserve payments).

# 2.7.3 TSOs' Response

The respondents raised a number of issues notably the product being technology specific and EirGrid group as an interconnector asset owner designing a product for their own interests. The TSOs were fully aware of these potential issues and is at the heart of why the question was posed in the original consultation. The TSOs consider that the change to the functionality is a refinement of the existing service, rather than the introduction of a new reserve service. There is no compelling security issue at this time that would require us to move rapidly to procure the service and the preliminary analysis conducted to date is not sufficiently robust enough to support a change at this time. Rather, the TSOs propose to conduct a more robust technical analysis to further determine the benefits from static and dynamic interconnector reserves and to consult further on this matter before making any firm recommendations to the SEMC. The consultation will be either be included in the DS3 system services 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 operation of the interconnectors, the change should be implemented.

The desire to change the existing interconnector static reserve functionality came about from increasing operational issues occurring on the power system. There is evidence that following loss of generation events there are overshoots beginning to be experienced resulting in excessive frequency recovery. Preliminary investigations have identified that providing a dynamic frequency response modification to the existing interconnector static reserve would help alleviate this issue.

In order to provide transparency to the industry and ultimately gain regulatory approval the change was included in the HAS consultation. The use of static reserve on the system is subject to on-going system studies which will take time to complete and feed into the frequency control work stream of DS3.

The TSOs would like to clarify that this service will be available for contract from both interconnectors connected to Ireland and Northern Ireland.

The TSOs note the respondent's comments regarding the payments to the Static Reserve Services. The availability of reserve on interconnectors relies on spare interconnector capacity being available for TSO use. Interconnector flows, and consequently spare capacity for reserve, are determined in the first place by the SEM, therefore payments will vary dependant on spare capacity being available. In addition payments to individual interconnectors for Static Reserve are effected by their individual reserve allocation, which varies from time to time to utilise spare capacity, from the total Static Reserve requirement.

In response to the respondent who questioned EWIC's compliance with the Grid Code; the modified dynamic service is an additional bespoke requirement. The TSOs may or may not utilise Grid Code required functionality depending on system requirements. In this case the Grid Code requires interconnectors to be able to provide a full frequency regulation ability in a similar manner to governor arrangements for generators. Use of this facility to provide frequency regulation on the Island of Ireland from the interconnectors is not available to the TSOs because it would require the GB system to be modulated by the resulting interconnector flow changes which would be inconsistent with the current mutual reserve arrangements as only one side of the interconnector could be frequency regulating at a time.

With respect to the provision of Ancillary Services by EWIC there is, in the view of the TSOs, no conflict of interest. Whilst the respondents are correct that EirGrid is the beneficial owner of the EWIC interconnector they are not correct in the assumption, under the regulatory regime pertaining which has been put in place by the CER, that it has the beneficial entitlement to the resulting revenues, which are to the benefit of the electricity customer. Thus any perception by respondents relating EirGrid receiving "payment for its own commercial activities" is both inaccurate and without foundation.

The TSOs note the comments by one respondent concerning the potential for market distortion. The TSOs would advise, as they have advised previously, that they are charged with procuring the necessary services from the most economic source available which ensure the system operates in a secure and efficient manner. This is a licence requirement. It is the responsibility of the TSO to require the refinement of the functionality of a service after the identification of an adverse effect on the operation of the system created by the previous functionality. It is not accepted by the TSOs to constitute 'market distortion'. Moreover, the arrangements for the procurement of Ancillary Services from interconnectors are part of the overall HAS arrangements utilising rates approved by the relevant regulatory authorities.

The TSOs note the comments by one respondent concerning Synchronous Inertial Response and Fast Frequency Response and would direct the respondent to the System Services work stream within DS3.

In response to the respondent's comment on the potential low and high frequency threshold percentage triggers the TSO would like to state that the consultation does not mention % thresholds.

These considerations will form part of a future consultation on the service.

#### 2.7.4 TSOs' Recommendation

TSOs recommend a separate consultation on the Interconnector Dynamic Frequency Service and rates.

#### 2.8 PROPOSED RATES AND CHARGES

#### 2.8.1 Introduction

The rates and charges for HAS are proposed in Tables 2.1 and Table 2.2. Table 2.3 provides the HAS rate for the associated costs for Synchronous Compensation service and Static Frequency Service.

In the Harmonised Ancillary Services Rates and Other System Charges Decision paper for 2011-12, the SEM Committee was satisfied that the exchange rate methodology is aligned to that utilised in the SEM. The TSOs will use the same methodology for 2014-15 but propose that the 5-day average rate is based on the last five working days of July in order that the Harmonised Ancillary Services & Other System Charges GBP rates are available sooner. All rates and charges increase with assumed forecast blended inflation rate of  $1.5\%^4$ .

Service	Categories	2013/2014	2014/2015
Reserve	Primary Operating Reserve	€ 2.31 / MWh	€ 2.34 / MWh
	Secondary Operating Reserve	€ 2.21 / MWh	€ 2.24 / MWh
	Tertiary Operating Reserve 1	€ 1.84 / MWh	€ 1.87 / MWh
	Tertiary Operating Reserve 2	€ 0.92 / MWh	€0.93 / MWh
	Replacement Reserve (Synchronised)	€ 0.20 / MWh	€0.20/MWh
	Replacement Reserve (De-Synchronised)	€ 0.53 / MWh	€0.54 / MWh
Reactive	Reactive Power Lagging	€ 0.13 / MVArh	€ 0.13 / MVArh
Power	Reactive Power Leading	€ 0.13 / MVArh	€ 0.13 / MVArh
Black Start	ESB Aghada	€64.71 / h	€64.71 / h
	ESB Ardnacrusha	€22.84 / h	€22.84 / h
	ESB Erne	€22.04 / h	€22.04 / h
	ESB Lee	€9.82 / h	€9.82 / h
	ESB Liffey	€8.02 / h	€8.02 / h
	ESB Turlough Hill	€81.63 / h	€81.63 / h
	EIL	€81.63 / h	€81.63 / h
	Black Start Charge Period (Partial Fail)	30 days	30 days
	Black Start Charge Period (Total Fail)	90 days	90 days

Table 2.1: Proposed Harmonised Ancillary Service Rates for 2014/2015 tariff year

<sup>&</sup>lt;sup>4</sup> Based on a number of sources (e.g. ESRI forecasts (Ireland) and Office for Budget Responsibility (UK) forecasts for 2014 and 2015) it is reasonable in the view of the TSOs, to assume a forecast blended inflation rate of 1.5% for the 2014-2015 period.

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Reserve Parameter	Rate 2013/2014	Rate 2014/2015
Primary Operating Reserve Charge Period	30 days	30 days
Secondary Operating Reserve Charge Period	30 days	30 days
Tertiary Operating Reserve 1 Charge Period	30 days	30 days
Static Frequency Charge Period	30 days	30 days
Event Frequency Threshold	49.5 Hz	49.5 Hz
Reserve MW Tolerance <sup>5</sup>	1 MW	1 MW
Reserve Percentage Tolerance	10 %	10 %

Table 2.2: Charges for non-provision of all reserve categories for 2014/2015 tariff year

Services	Categories	2013/2014	2014/2015
Flexibility Services	Synchronous Compensation	€2.94 / hr	€2.98 / hr
Reserve	Static Frequency Service	€3.64 / MWhr	€3.69 / MWhr

Table 2.3: Proposed HAS rates for Synchronous Compensation and Static Frequency service for 2014/2015 tariff year

#### 2.8.2 Respondents' Comments

Five comments were received (AES, BG Energy, Energia, PPB and SSE) in relation to proposed AS rates and charges.

AES would welcome further analysis of the implications of moving the Exchange Rate assessment period and requested the historical values between September and the proposed July periods.

BG Energy welcomed the proposal to increase the rates for existing HAS by 1.5% for the forthcoming tariff year 2014/15.

Energia commented that the consultation paper references ESRI and OBR forecasts for 2014 and 2015 but it does not specifically explain how the 1.5% figure has been arrived at. This should be explained in the interests of clarity.

PPB stated that Ancillary Service rates can be, unfairly, extremely volatile for Ancillary Service Providers in Northern Ireland because of the volatility of exchange rates. Given that the original rates were based on SSSA rates in Northern Ireland PPB would prefer that the only adjustment to rates, from year to year, is to reflect increases in inflation. PPB stated that this exchange rate volatility is not reflected in the CPM as the BNE cost is based on a distillate plant in Northern Ireland.

<sup>&</sup>lt;sup>5</sup> The Reserve tolerance will be greater of the Reserve Percentage Tolerance of the expected Reserve provision or the Reserve MW Tolerance when a charge is applicable.

SSE commented that they would appreciate some additional detail on the methodology and inputs used to reach the forecast blended inflation rate.

## 2.8.3 TSOs' Response

The TSOs welcome the participants' view on this proposal.

In response to the comment from AES the TSO would like to clarify that the Exchange Rate assessment period was originally based on the last 5 working days in August and it was moved back to the last 5 working days in July to accommodate the NI Generators to allow the Statement of Charges to be published sooner.

With regard to the calculation of the blended inflation rate the TSOs would like to clarify that the forecast inflation for the 2014/15 period has been derived by the TSOs in a manner consistent with previous years. It recognises that the Harmonised Ancillary Services arrangements apply in both Ireland and Northern Ireland, and that the inflation environment is different in each. 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 3%. Forecasts of HICP inflation in Ireland are general currently less than 1%. On this basis, and recognising the relative balance between Ireland and Northern Ireland the TSOs' view is that a blended rate of 1.5% for the forthcoming period is appropriate.

With regards to PPB's comment on the exchange rate volatility the TSOs will carry out analysis to determine to degree of volatility and engage with the industry to explore possible alternatives for inclusion in next year's HAS consultation.

# 2.8.4 TSOs' Recommendation

The TSOs recommend no change to the current rates apart from an increase in line with the proposed forecast blended inflation rate of 1.5%.

The TSOs recommend investigating the exchange rate setting mechanism with a view to possibly including changes in next year's consultation.

#### 2.9 ADDITIONAL COMMENTS

Two respondents (Energia and IWEA) commented on the need for an ancillary service for incentivising minimum generation below grid code requirements.

Energia also questioned the omission of a new HAS rate for ROCOF which had been referred to in the RA ROCOF decision paper.

IWEA stated they believed that the provision of ancillary services should be technology neutral where possible and there may be a number of different technologies that can provide the same service and these different technologies should be able to avail of the revenues.

Two respondents (ESB GWM and AES) commented on Black Start services. ESB GWM stated there are currently two approaches to the provision of Black Start capability on the island. In Ireland Black Start capability is considered an Ancillary Service and paid for accordingly. In Northern Ireland Black Start capability is considered a licence obligation and no payments are made against the costs of retaining this capability. ESB GWM request that this situation is reviewed by the TSOs to ensure fair and equitable treatment of all generators in the SEM for the provision of Black Start capability.

AES stated there were no comments from the TSOs as to the suitability and amount of Black Start contracted services and if there is a requirement for further provision. They had a concern over the continued perception that the harmonisation of AS is not being fully implemented and that the NI generators are not treated on a consistent and non-discriminatory basis.

AES also requested a recap of the suitability, or otherwise, of Multiple AS values, Flexibility Services and Static Frequency Service.

#### 2.9.1 TSOs' Response

With regards to the request for an ancillary service for lowering minimum generation, in the 2011/2012 consultation paper, the TSOs asked for participants' opinions on the need to incentivise the lowering of Minimum Generation and described the number of units which had already reduced their minimum generation in the SEM for commercial reasons as the market schedule takes account of minimum generation in the optimisation algorithm. Given the majority of the respondents to previous consultations agreed that it should not be incentivised through HAS and the TSOs agree in principle with this view, the TSOs' preference is to only contract in specific circumstances. These circumstances would be where the TSOs consider it worthwhile to contract for a lower minimum generation or parking services where there is a benefit to the power system in doing so and the cost of providing a reduction in minimum load or minimum generation would not be recovered by the SEM. Based on this the TSOs have only had short term contracts for parking services from two providers with no other uptake.

The TSOs would like to clarify that a new HAS rate for ROCOF was not an omission as the HAS paper was published before the ROCOF decision paper was published.

In relation to the provision of Ancillary Services being technology neutral where possible and the utilisation of different technologies for the same AS the TSOs would like to refer the respondent to

the ongoing work within the DS3 programme<sup>6</sup>. 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 and within 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 regard to the Black Start service requirement, the TSOs would like to clarify there is no further requirement in the near future. In the TSOs Explanatory Paper for the 2010/2011 tariff year, the HAS recommendation paper 2011/2012 and the HAS recommendations paper 2013/2014 the TSO in Northern Ireland (SONI) invited any generators to approach them if they felt they were not fully remunerated for this service.

Regarding the comment from AES requesting a recap of Multiple AS values, Flexibility Services and Static Frequency Service the TSOs would like to refer them to the published 2014/2015 HAS consultation paper where updates to each of these sections were given.

<sup>&</sup>lt;sup>6</sup> The deployment of renewable energy sources (RES) in the electricity sector has been increasing steadily in recent years and Ireland and Northern Ireland are committed to increasing the level of renewable electricity consumption to 40% by 2020. The EirGrid Group is at the forefront of this change and is working with all industry stakeholders to facilitate these ambitious renewable electricity targets. To help manage the operation of the power system over the coming years a programme of work has been established entitled "Delivering a Secure Sustainable Electricity System (DS3)". Further information can be found at <a href="https://www.eirgrid.com/operations/ds3">www.eirgrid.com/operations/ds3</a>

# 3. NEXT STEPS

Following a review of comments on the HAS consultation paper the TSOs are now making these recommendations to the RAs. The TSOs will then publish a revised AS Statement of Payment and Charges for the 2014/2015 tariff period.



# Response to Harmonised Ancillary Services and Other System Charges Consultations

on behalf of

AES Kilroot Power Ltd and AES Ballylumford Ltd

9 May 2013

Prepared by Brian Mongan Front Office Manager, Commercial

# 1. Introduction

AES Kilroot Power Limited ("AES Kilroot") and AES Ballylumford Limited ("AES Ballylumford") (collectively "AES") welcome the opportunity to comment on the consultation papers relating to Harmonised Ancillary Services and also Harmonised Other System Charges.

AES has Harmonised Ancillary Service (HAS) Agreements in place for its nine merchant generating units registered within SEM.

We are providing a single response to the two consultations papers and our comments follow the structure set out in the TSO papers.

AES agree that the purpose of SND charge is to incentivise the generators to give maximum notice of changes to declarations. This shall assist the TSO to reduce constraint costs and enhance system security.

# 2. Existing OSC Developments

AES notes the lack of comment on specific system support services such as Black Start services. There are no comments from the TSOs as to the suitability and amount of these contracted services, and if there is a requirement for further provision.

The TSOs should comment on any charges, existing or proposed, for failure to provide such services. This would ensure that -

#### "The arrangements are intended to quantify and track generation performance, identify non-compliance with standards and help evaluate the performance gap between what is needed and what is being provided by service providers..."

There is concern over the continued perception that the Harmonisation of ancillary services is not being fully implemented, and that the NI Generators are not treated on a consistent and non-discriminatory basis.

AES invites comments from the TSOs regarding their willingness to contract for similar services on an equal basis in each of the power systems in Ireland.

#### Short Notice Declarations

The clarification regarding the methodology of multiple SNDs below the minimum threshold is very welcome, and AES approve of the proposed approach.

#### <u>Trip Charge</u>

The development of the DS3 project may provide additional input into the Trip Charge methodology and it is therefore applicable to that process to be completed and implemented.

#### Late Synchronisation Charge

The proposals by the TSOs have yet to achieve approval from neither the RAs nor the Grid Code Review Panels. AES would clarify that we do not believe that altering the late sync period from 55 minutes to 15 minutes is useful, and that it would not reflect the true nature of workload or effort by generators in assisting the System. It would also not provide a clear incentive to continue such effort.

The comment regarding implementing the modification would depend on any requirement to change the modification and as such it could not be implemented accordingly.

# 3. New Other System Charges

#### Secondary Fuel GPI

AES would suggest that the proposed GPI is premature and unnecessary, and that it should be withdrawn until after the full implementation of the Fuel Security Codes and Fuel Switching Arrangements.

Notwithstanding that, AES would welcome clarification from the TSOs as to which part of Grid Code this Charge relates to.

AES would also welcome clarification from the TSOs as to the differences between Dual Fuel / Backup Fuel / Secondary Fuel and how each fit into the proposed methodology.

#### Introduction of new GPIs

Changes in available generation technology, within the All-Island Market require changes to the approach by these generators in supporting the System. This in turn does need a change in the expectation of the TSOs for these generators to provide system support, and thus a change in the methodology of GPI application.

AES believe it to be appropriate that new GPIs are being assessed by the TSO, regarding this change in generation.

# 4. Proposed Rates

AES would welcome further analysis of the implications of moving the Exchange Rate assessment period. What are the historical values between September and the proposed July periods.

# 5. Other Comments

There were suggested potential changes in previous consultations and it may have been useful to recap the suitability, or otherwise, of those changes.

- Multiple AS Values
- Flexibility Services
- <u>Static Frequency Service</u>



Amanda Kelly Eirgrid 160 Shelbourne Road Ballsbridge Dublin 4 Vivienne Price SONI Castlereagh House 12 Manse Road Belfast BT6 9RT

 $7^{\text{th}}$  May 2014

Dear Amanda, Vivienne

#### Re: Harmonised Ancillary Services Consultation for 2014/15

Thank you for the opportunity to respond to and input into the Transmission System Operator's (TSO's) consultation on Harmonised Ancillary Services for the tariff year 2014/15.

Bord Gáis Energy (BG Energy) welcomes the proposal to increase the rates for existing Harmonised Ancillary Services (HAS) by 1.5% for the forthcoming tariff year 2014/15. In light of the on-going DS3 Programme BG Energy believes that it is prudent to minimise changes to the existing HAS regime.

BG Energy recognises the increasingly important role of AS in incentivising flexibility among conventional generators, given the challenges that come with managing a system with rising levels of intermittent wind generation. To this end, BG Energy supports the DS<sub>3</sub> Programme, in particular the DS<sub>3</sub> System Services work-stream, and believes that its timely progression is essential to signal the necessary investment in flexibility and ensure the benefits of the SEM's renewable policy are realised.

The remainder of this response addresses the on-going tender for Flexibility Services and also the proposal to replace the Static Frequency Response service with a Dynamic Frequency Response service.

#### Flexibility Services (Reduced Time to Synchronise)

At the beginning of the last tariff year, the TSOs proposed to introduce a number of new short term Ancillary Services to improve operational flexibility in the short term, including a 'Reduced Time to Synchronise from Instruction' service. A tender was held for prospective suppliers. However, no update has been received since the tender closed in December 2012. BG Energy requests an update on the progress of the tender and would like to see it progressed as soon as is practicable, given the flexible advantages that the introduction of this service would deliver.

#### **Dynamic Frequency Reserve Service**

In principle, BG Energy accepts the TSOs' rationale for changing the existing Static Frequency Response service provided by EWIC to a more dynamic Frequency Response service, i.e. that the technical capabilities of EWIC should be utilised for the



benefit of the entire system. The introduction of the Dynamic Frequency Reserve service does this, delivering flexibility while commercially recognising the value of providing the service. BG Energy believes that this principle should also be applied to generators who can meet the proposed higher RoCoF standard and their technical capabilities should be recognised commercially through an appropriate remuneration mechanism.

However, given Eirgrid's position as Interconnector owner and sole provider of this new Dynamic Frequency Response service, we believe that a high level of transparency is needed to demonstrate to all market participants the basis behind the introduction of this new service and its commercial arrangements. To this end, BG Energy requests that the following queries be clarified and presented to the industry before a decision is made on the introduction of this service.

- The consultation mentions potential low and high frequency thresholds of +/-4% as the triggers to the provision of reserve from the Interconnector. What are the frequency thresholds that will trigger a response and the rationale behind their introduction?
- Is there an upper threshold on the amount of reserve that will be required (will it be more or less than the 50MW of reserve delivered under the current Static Frequency Reserve service)?
- BG Energy agrees with the TSOs assertion that the value of the new service should be less than that provided by a dynamically regulating conventional source of frequency response. The rationale (and analysis) behind proposing to set payment rates between the existing Static Frequency Response and the reserve payments synchronous generators receive must be presented (given that the payment rates for the Static Frequency Reserve appeared to be set at an arbitrary 50% of synchronous generators reserve payments)?

BG Energy requests that in the interests of clarity and non-discrimination these details be provided to the industry before a decision is made on the introduction of the Dynamic Frequency Response service and its payment terms.

Please do not hesitate in contacting me if you have any queries on the comments raised.

Yours sincerely,

Ciarán O'Brien Regulatory Affairs – Commercial Bord Gáis Energy

{By email}



# **Response to:**

"Harmonised Ancillary Services Consultation - Tariff Year 1st October 2014 to 30th September 2015"

#### Introduction

ESB Generation and Wholesale Markets (GWM) welcome the opportunity to provide feedback on the TSO's proposed Harmonised Ancillary Services for the 2014-15 tariff year. Part One of our response below details our comments on the existing Ancillary Services arrangements and Part Two refers to the Flexibility Services.

#### Part One – Harmonised Ancillary Services

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

#### Section 2.1 Existing AS Services

The TSO has stated that it has seen an increase in customers contracting in excess of their Grid Code operating Reserve requirements and it welcomes such a change. However, in the experience of ESB GWM the TSO does not always contract for capabilities in excess of minimum Grid Code requirements. It would be useful if the TSO stated what volume of services they are enabled to procure for the coming tariff year. ESB GWM are of the opinion that there are currently no clear and transparent criteria and processes for contracting above Grid Code requirements. Such criteria and processes are essential to enable service providers to plan efficiently.

#### Section 2.1.2 Ramping during and after an Under Frequency event

The consultation states that after an under frequency event, when the system frequency recovers, generators are expected to respond in line with frequency governor droop and "not to continue ramping". Clarity is required on what is meant by the TSOs in relation to this. Should generators ignore pre-event instructions? ESB GWM are of the opinion that frequency related re-dispatch is a responsibility of the TSO. As such the TSO should instruct generators accordingly through the use of new EDIL instructions when the system frequency recovers. It should be done in a centralised fashion rather than in an ad hoc fashion by individual generators putting in new set points themselves. This more centralised approach by NCC would avoid the potential for Uninstructed Imbalances which may otherwise materialise.

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

ESB GWM see the proposal by the TSO to reduce the time period of the averaging as an improvement on the current situation. However, the proposed methodology will still have limitations and inaccuracies and the most appropriate solution would be to flag these rare events and exclude them from performance monitoring.

ESB GWM would also like to raise the issue of the monitoring of reserve provision during events whereby the frequency fully recovers within the time period associated with POR. In such instances generators are penalised as they are deemed not to have provided the reserve even though they act in the manner technically most appropriate.

These perverse signals and incentives / penalties are not efficient from the perspective of the technical operation of the system. The technical and financial systems and incentives need to be aligned.

#### Provision of Black Start Capability

There are currently two approaches to the provision of Black Start capability on the island. In Ireland Black Start capability is considered an Ancillary Service and paid for accordingly. In Northern Ireland Black Start capability is considered a licence obligation and no payments are made against the costs of retaining this capability. ESB GWM request that this situation is reviewed by the TSOs to ensure fair and equitable treatment of all generators in the SEM for the provision of Black Start capability.

#### Part Two - Flexibility Services

#### Section 2.2 Flexibility Services

ESB GWM would have some concerns regarding the tendering processes associated with the flexibility services. The tendering processes have proved extremely long and did not provide an appropriate level of transparency.

ESB GWM would be interested to know if the rate given for Synchronous Compensation has resulted in the level of provision required by the TSO.

#### Section 2.3 Dynamic Frequency Response from an Interconnector

ESB GWM was surprised to learn that interconnectors were currently only providing static reserve. Under sections CC7.5.5 and OC4.3.4.2 of the Grid Code, interconnectors must act in accordance with a droop of 4% normally. This is no different to a CDGU. Why do the interconnectors not currently do this and thus provide dynamic response already? Do such interconnectors have a derogation from the Grid Code? And how is the treatment of the asset owner and its relationship with the TSO regulated?

ESB GWM would also have some concerns regarding the process for the introduction of this product. It seems that a new product is being introduced specifically for one, possibly two, customers. Did these customers approach the TSO with this service (which is already part of its Grid Code obligations) or did the TSO approach the customer? Any previous introduction of new products would have gone through an appropriate tendering process.



#### IWEA response to the Harmonised Ancillary Services and Other Systems Charges Consultations

#### 09 May 2014

The Irish Wind Energy Association (IWEA) welcomes the opportunity to comment on the SEM consultations on the Harmonised Ancillary Services and Other Systems Charges.

The consultation outlines some changes to be made to ancillary payments and other system charges. IWEA welcomes the review of these items and believes that any changes introduced should be designed to increase system flexibility and to ensure an appropriate generation mix. The flexibility of thermal generation is an essential component of an electricity system which aims to have high levels of renewable generation, in particular wind.

IWEA believes that ancillary services could be used to incentivize minimum generation levels below grid code requirements. This is particularly relevant for units which are constrained on due to transmission constraints. The minimum generation levels required on the system have been seen to cause curtailment of wind generation and it is appropriate that lower levels of minimum generation be incentivized.

IWEA notes that work is being done by EirGrid on the wider system needs and identifying what system services will be required with increasing levels of variable generation on the electricity system. IWEA welcomes this work and believes that Ancillary Service payments have an important role to play in incentivizing the appropriate plant going forward. It is important that the wider system needs are taken into consideration and that a market value is placed on the services being provided. Following on from the Facilitation of Renewables and the DS3 studies, the importance of technical parameters such as system inertia have been highlighted and this should also be reflected in ancillary service payments. It is essential that the ongoing work on System Services is carried out in a timely manner so that the new services can be introduced as soon as possible.

IWEA believes that the provision of ancillary services should be technology neutral where possible. There may be a number of different technologies that can provide the same service and these different technologies should be able to avail of the revenues. With the introduction of the EWIC, services provided by the interconnector should be appropriately priced and regulated.

#### 2.3 Dynamic Frequency Response from an Interconnector

While IWEA welcomes Ancillary Services which provide extra flexibility to the system, we believe that the provision of services should be technology neutral, and there should be a tender process which may

identify if dynamic frequency response as outlined in this section can be provided by other service providers.

#### Harmonized Other System Charges

#### 3.2 Introduction of new GPIs

IWEA believes that the introduction of Generator Performance Incentives (GPIs) for wind farm needs to be carefully considered. GPIs need to be aligned with the real needs of the grid. The incentive should take into account the capability of the wind farm and should not be overly penal. If there is no significant impact on the system then there is no need for a penal incentive and consideration should be given to tolerance limits where no penalty will be applied. Further industry engagement is required to ascertain exactly how the GPIs will work for wind energy.

- Clarity is required as to whether the GPIs will apply to both transmission and distribution connected projects, and the role of the DSO in this.
- The GPIs should not be introduced unless there are Ancillary Service contracts in place. Is work ongoing to progress AS contracts for both transmission and distribution connected projects?
- The TSO expectation of wind farm performance needs to be realistic, for example changes to wind conditions when a dispatch signal is sent may impact the response. This needs to be taken into consideration.
- Clarity is required that a wind generator would not be dispatched down for the provision of
  reserve (unless there was a contract in place for doing so) and that reserve would only be
  available from wind farms in the case where it is dispatched down for other reasons. A penalty
  should only be applied in the case where there is a reward for providing the reserve through an
  ancillary service payment.
- Further information is required on how the performance of plant will be monitored. This should not impose additional cost on generators.
- Performance over time should be looked at rather than focussing on discreet points. It is very time consuming generating reports for each single event.
- Consideration should be given to a MW threshold below which reporting is not required.
- Some of the problems seem to arise out of loss of signals an additional relay could be included in the RTU to confirm the signal has gone through.
- The provision of information to generators is important so they can monitor their own performance and prevent issues before they arise. All events should be logged.
- Monitoring should be aligned with the real needs of the grid.
- Clarity is required as to whether GPIs are to be introduced going forward or if they will apply retrospectively and, if so, the derogation procedures that will be in place.

IWEA welcomes the opportunity to respond to this consultation. Any changes introduced should be designed to increase system flexibility and to ensure an appropriate generation mix. Further industry engagement is required to ascertain exactly how the GPIs will work for wind energy.

Power NI Energy Limited Power Procurement Business (PPB)

**HAS and OSC Consultation** 

**April 2014** 

# **Response by Power NI Energy (PPB)**

9 May 2014

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.

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 services. Given the level of counter-trading on the interconnector there must be a strong economic case for both Flexible Mode Operation and Lower Minimum Generation.

The commissioning of the East West interconnector provides the system operator 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 TSOs, in the 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. PPB would expect a

further consultation on the proposed Dynamic Frequency Reserve product rate if this product is going to be progressed.

In terms of setting the rates for existing Ancillary Services, PPB has a concern in relation to the application of exchange rates for Ancillary Service Providers in Northern Ireland. Ancillary Service rates can be, unfairly, extremely volatile for Ancillary Service Providers in this jurisdiction because of the volatility of exchange rates. Given that the original rates were based on SSSA rates in Northern Ireland PPB would prefer that the only adjustment to rates, from year to year, is to reflect increases in inflation. This exchange rate volatility is not reflected in the CPM as the BNE cost is based on a distillate plant in Northern Ireland.

PPB also believes that any proposal in relation to ROCOF related charges should be carried out at the same time as the consultation on the final DS3 commercial proposals (including the ROCOF ancillary service), in order that Grid Code Users and Ancillary Service providers can assess the full impact of the proposals.



Amanda Kelly Eirgrid Plc The Oval 160 Shelbourne Rd Ballsbridge Dublin 4 Vivienne Price SONI Ltd Castlereagh House 12 Manse Road Belfast BT6 9RT

7<sup>th</sup> May 2014

#### Harmonised Ancillary Services and Other System Charges Consultation (SEM-14-024 and SEM-14-025)

Dear Amanda and Vivienne

Thank you for giving SSE the opportunity to comment on the TSOs consultation papers on Harmonised Ancillary Services and Other System Charges for the 2014/15 Tariff Year.

SSE is a utility with both generation and supply interests in Ireland. As SSE Airtricity we supply around 600,000 electricity customers. To secure energy for those retail customers, SSE is involved in electricity generation and energy portfolio management. Our wholesale business priorities are competitiveness, sustainability and flexibility. Our response covers both TSO consultation papers.

The consultation paper notes that, separate to the Annual Harmonised Ancillary Services consultation process, the TSOs have made proposals to the regulatory authorities regarding enhanced System Services and commercial arrangements. We are supportive of the work done by the TSO through the DS3 System Services workstream, and look forward to the consultation paper that will be published by the SEM Committee in early July. Getting the correct commercial incentives for flexibility will underpin the investment decisions needed to make the power system fit for 2020.

#### **Harmonised Ancillary Services**

#### **Blended Inflation Rates**

The TSOs propose to retain the AS and OSC rates approved for the 2013/2014 tariff year adjusting for inflation at a forecast blended inflation rate of 1.5%. SSE would appreciate some additional detail on the methodology and inputs used to reach the forecast blended inflation rate.

#### **Dynamic Frequency Response from an Interconnector**

The paper includes a proposal to refine the existing provision of static reserve from the interconnectors. The interconnectors would provide a dynamic product that would only be

delivered after a frequency threshold has been breached. While we would welcome any Ancillary Services that would deliver additional flexibility to the system (and allow for more intelligent use of assets), we understand that this is a service that will primarily be provided by EWIC. Given that the TSO is both asset owner and service procurer, we believe a detailed analysis of the unstated increase in rate is required, especially given that the existing rate was set on the basis of a discount to dynamic reserve.

#### **Other System Charges**

#### **Blended Inflation Rates**

As stated under Harmonised Ancillary Services, we would appreciate some additional detail on the methodology and inputs used to reach the forecast blended inflation rate.

#### **Short Notice Re-declarations**

The proposed clarification is drafted as:

"To discourage multiple SNDs below the minimum threshold in quick succession, redeclarations below the SND Minimum Threshold within the Time Window for Chargeable SNDs are subject to an SND charge, provided the sum of the SND reductions <u>are equal to or</u> <u>above the SND Minimum Threshold.</u> In such circumstances, the SND reduction is the summation of the smaller SND reductions and set to no notice."

SSE believes that the redrafting provides adequate clarity on the minimum threshold on SNDs.

#### **Trip Charges**

SSE welcomes the RAs and TSOs recommendation not to proceed with any review of the Trip Charge methodology.

#### Late Synchronisation Charge

The consultation paper notes that:

"The TSOs have since then carried out an analysis of the impact of costs of modifications and presented results at the Joint Grid Code Review Panel meeting on 12<sup>th</sup> February 2014. **The results presented were inconclusive.** The TSOs intend to produce a further report to send to the RAs in the near future."

Our understanding was that the analysis provided to the RAs also included a recommendation that there would be no benefit to further studies being carried out. It is not clear why the modification is still being progressed, given that there is already a significant incentive to synchronise at the appointed time.

I hope our comments on the consultation paper are useful. If you have any questions with regard to our response, please don't hesitate to contact me.

Yours sincerely,

Connor Powell Market Development, SSE (Ireland)

# **Grange Backup Power Ltd**

c/o Synergy Global 3015 Lake Drive, Citywest, Dublin 24 emails: artltd1@gmail.com; enercomm@iol.ie

EirGrid Group The Oval, 160 Shelbourne Road, Ballsbridge, Dublin 4

Amanda.Kelly@eirgrid.com

Vivienne.Price@soni.ltd.uk

7 May 2014

# **<u>Re:</u>** Response to HAS Consultation Paper (dated 2<sup>nd</sup> April 2014)

Dear Amanda and Vivienne,

With reference to the annual consultation paper on the Harmonised Ancillary Services (HAS) for the Tariff Year 2014-2015 we wish to object to the proposal on the redirection of certain revenue streams to EWIC/EirGrid. Grange Backup Power is developing a Gate 3 generation project with a strong focus on providing ancillary services to support renewable integration, particularly with a view to supporting the DS3 Programme. We support the proposals in Section 2.1 and 2.2 of the HAS consultation paper.

We must express strong concern, however, on the continued development of the EirGrid Group owned asset Interconnector as a paid provider of Ancillary Services, as set out in Section 2.3. This is because the Interconnector is a material competitor in dispatch for the provision of Ancillary Services. While we accept the possibility of any technology providing Ancillary Services if capable of doing so, we do not accept the distortion to the market competition in the provision of these services.

In this respect, it is not appropriate for EirGrid to develop technology-specific products, to consult and make recommendation on rates (with insufficient justification), ignore the possibility that there could be other providers of the service (see SEM-12-068 where comments in relation to this were not responded to), and ultimately dispatching the system to receive payment for its own commercial activities operated by the Interconnector (including an expanded TSO counter-trading programme).

Moreover, since the introduction of the Static Reserve Service in October 2012, payments to the Static Reserve Services have been  $\notin 1.24$ m in the first twelve months of operation, with the payments from October 2013 to February 2014 already totalling  $\notin 0.79$ m, reflective of an upward step-change in revenues in May 2013 for unknown reasons. We request an explanation and justification for these changes. Such conduct gives rise to an intolerable conflict of interest which jeopardises competition in the market for Ancillary Services.

We are also at a loss to understand why such services are not included within the suite of DS3 services more generally (particularly response to upwards frequency events). We do not accept that the fact that the Interconnector is a regulated asset diminishes the impact on the wider market for Ancillary Services. Grange would be a materially affected generator in this regard and our concern is for Grange's business case, as the parameters of each business case are unique to the project itself. To view the conflict of interest as a concern of profit motive for EirGrid completely misses the point of the distortionary outcomes of EirGrid Group's actions on the market for Ancillary Services, is an inappropriate argument and contrary to promotion of competition objectives within a national and EU context.

We also note that this has become a wider issue, with EirGrid suggesting in their I-SEM response a desire for Interconnector owners to directly receive capacity payments, distorting yet another competitive market, which would provide further ongoing base revenues to an asset (Interconnectors) irrelevant to their nominal purpose of providing transport opportunities between markets.

Grange cannot - and will not - accept the continued foreclosure of the market for Ancillary Services to other potential providers of the service. We strongly request that EirGrid do not place themselves in the position of further consulting on the sources of revenues for their own regulated assets in future. Grange believes this proposal contained in Section 2.3 should be withdrawn immediately.

Sincerely yours,

Richard Walshe Peter Duffy

Grange Backup Power Ltd

# energia

# Response by Energia to EirGrid and SONI Annual Tariff Consultation Papers

Harmonised Ancillary Services and Other System Charges for Tariff Year 2014/15

9 May 2014

# 1. Introduction

Energia welcomes this opportunity to respond to the consultation on the Harmonised Ancillary Services (HAS) and Other System Charges (OSC) for tariff year 1<sup>st</sup> October 2014 to 30<sup>th</sup> September 2015. Energia is an active member of IWEA and we fully endorse its response to this consultation. The key points we wish to highlight supplementary to the IWEA response are as follows:

# 2. Key points

- The HAS consultation proposes to replace the interconnector static frequency product with a dynamic frequency product. We see some merit in this providing it is valued correctly and that the performance of the interconnector providing the service is appropriately monitored and enforced. Other services that would provide value to the system should equally be considered, notably the incentivisation of reduced Min Gen through HAS as further discussed below.
- The benefits of reducing Min Gen are well recognised. Currently there is a penal incentive to meet Min Gen Grid Code requirements (or Minimum Functional Specification requirements in NI) through a GPI (and this has been deemed successful). However there is little or no incentive to bring Min Gen down below this level. This is perplexing given the one-for-one relationship between Min Gen and the curtailment of wind. The TSOs last raised the idea of incentivising Min Gen through HAS in April 2012 but this was not progressed. We do not understand why and would strongly encourage the TSOs and the RAs to introduce a Min Gen HAS product at the earliest opportunity.
- In the HAS consultation the TSOs propose refining the Operating Reserve calculation and request feedback on the merits of doing so. On the face of it this has merit and should be explored with Service Providers.
- The OSC consultation signals the TSO's expectation to introduce a ROCOF GPI in line with publication of the RA's ROCOF decision paper. The same RA decision paper also refers to the introduction of a new HAS rate for ROCOF but this is not mentioned in the HAS consultation paper. Is this an intentional omission?
- The OSC consultation states that the TSOs are investigating the introduction of a number of new GPIs for wind farms, DSUs and AGUs. With reference to wind farms it states that the TSOs are investigating the merit of introducing GPIs for DMOL, Reactive Power and Reserve and is requesting feedback on the merits of these investigations. In response to this question we would refer to the IWEA response and would stress the importance of structured industry engagement to fully understand the issues that would have to be carefully considered. We agree with IWEA that GPIs for wind should not be contemplated without this necessary engagement and without first introducing ancillary service contracts for wind. In addition:



- Clarity is required on whether the intention is to consider GPIs for transmission or distribution connected wind farms?
- What are the intentions in relation to retrospective application will the TSOs (or DSO if applicable) be supportive of derogation applications?
- For the 2014/15 period the TSOs have assumed a forecast blended inflation rate of 1.5% for both HAS and OSC. The consultation paper references ESRI and OBR forecasts for 2014 and 2015 but it does not specifically explain how the 1.5% figure has been arrived at. This should be explained in the interests of clarity.