Harmonised Other System Charges Recommendations Paper

Tariff Year 1st October 2017 to 30th September 2018

11th August, 2017





EXECUTIVE SUMMARY

EirGrid and SONI (the TSOs) published a consultation paper on 4th April 2017 for the upcoming tariff period running from the 1st October 2017 to the 30th September 2018 outlining a number of proposals. Comments on the consultation paper were received from five (5) respondents, having reviewed the responses, we are now making a number of recommendations to the RAs:-

- 1. We acknowledge a review of the OSC is required in the context of I-SEM and the evolving DS3 System Services and therefore recommend that all OSC, including Trips, SNDs and GPIs are reviewed as part of next year's OSC tariff consultation paper for tariff year 18/19.
- 2. Following implementation of EPMS we recommend reviewing the data and establishing the need for changes to the Trip charge methodology. If required, we recommend consulting with industry prior to any methodology changes being introduced. This will be included in the overall OSC review.
- 3. We recommend that we continue to monitor the need for the refinement of the operating reserve GPI and develop, if required, this proposal in the consultation for tariff year 18/19. This will be included in the overall OSC review.
- 4. A blended inflation rate of 1.7125% is recommended to be implemented.

No other changes are recommended for this tariff period.

ABBREVIATIONS

AGU	Aggregated Generator Unit
DETI	Department of Enterprise, Trade and Investment
DMOL	Design Minimum Operating Level
DSU	Demand Side Unit
DS3	Delivering a Secure Sustainable System
EDIL	Electronic Dispatch Instruction Logger
GPI	Generator Performance Incentive
HAS	Harmonised Ancillary Services
HICP	Harmonised Index of Consumer Prices
I-SEM	Integrated Single Electricity Market
UK	United Kingdom
OSC	Other System Charges
NI	Northern Ireland
NIE	Northern Ireland Electricity
RA	Regulatory Authority
RoCoF	Rate of Change of Frequency
RPI	Retail Prices Index
SEM	Single Electricity Market
SND	Short Notice Declaration
SONI	System Operator Northern Ireland
TSO	Transmission System Operator
TUoS	Transmission Use of System
WFPS	Wind Farm Power Station

1. INTRODUCTION

We 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. They are based on a consideration of the responses received by the TSOs on this year's Harmonised Other System Charges Consultation paper¹ for the tariff year 1st October 2017 to 30th September 2018.

If the recommendations are approved by the RAs, we will publish revised Statements of Charges and Other System Charges Methodology Statement for the 2017-2018 tariff period.

We received responses from the following parties:

Party	Abbreviation
AES Kilroot Power Ltd and AES Ballylumford Ltd	AES
Bord Gáis Energy	BGE
ESB Generation and Wholesale Markets	ESB GWM
Power NI Energy Ltd Power Procurement Business	РРВ
SSE ²	SSE

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

¹ "Harmonised Other System Charges Consultation" 4th April, available at http://www.eirgridgroup.com/site-

files/library/EirGrid/OSC-17-18-consultation-paper-final.pdf and http://www.soni.ltd.uk/media/documents/Operations/Ancillary-

Services/OSC%2017%2018%20consultation%20paper%20final.pdf

² Response from SSE was received 6 days after the consultation had closed.

2. OTHER SYSTEM CHARGES CONSULTATION RESPONSES

2.1. The Delivery of I-SEM

In the consultation paper we stated that as the go live date for I-SEM has been delayed until 23rd May 2018, we proposed allowing the new market to settle for the last four months of the tariff year 17/18 and not make any changes before consulting in next year's OSC tariff consultation paper for tariff year 18/19.

2.1.1 Respondents' Comments

Two comments were received (ESB GWM and SSE) in relation to the delivery of I-SEM and its impact on OSC.

ESB GWM's primary concern in relation to the consultation is the proposal to allow the new I-SEM market to settle for the last four months of the tariff year 17/18 and not to make any changes before consulting on next year's OSC tariffs for tariff year 18/19. They would contend that there is no significant advantage to be gained by delaying the review of these tariffs for I-SEM until next year as, they believe the I-SEM Trading and Settlement Code is now complete and the Capacity Market Code is in the final stages of development. They stated that participants, RAs and the TSOs now have a good understanding of the exposures being faced by participants as balance responsible parties and they urged the system operator to review the existing OSC framework in this context.

ESB GWM contends that Trip Charges and Short Notice Declarations are not warranted or justified in ISEM and that participants will a have number of new exposures in the event of a unit tripping and will pay the costs incurred by the TSO to maintain system balance through the balancing market mechanism. Consequently, to maintain these charges in I-SEM they believe would amount to double charging by the TSO rather than recovery of costs incurred by the system due to these events. Also from a desk top review, they are not aware of existence of such charges in other balance responsible markets (e.g. GB).

ESB GWM gave further details on participant exposures in I-SEM, breaking their comments down into three sections, Balance Responsibility, Credit Cover Exposure and Difference Payments.

ESB GWM stated that the energy market is undergoing a fundamental change and at a very high level, the market is changing from an ex-post market to an ex-ante market where balance responsible participants will have strong incentives to deliver energy sold in the ex-ante timeframes. They believe that a participant that changes their availability or trips will face significant exposure in I-SEM that does not exist in SEM.

They further stated that participants in I-SEM will have to post credit cover across all the various market timeframes. One aspect of this will be credit cover required to cover the SEMOs exposure in the Balancing Market to purchase energy elsewhere when a unit sells a volume but fails to deliver it due to a trip or short notice declaration of availability. ESB GWM believe the credit cover calculation

will take account of the probability of a unit tripping and therefore participants will have an incentive to reduce trip incidents to minimise the amount of credit cover they need to post.

SSE commented that whilst they recognised that the OSC rates will primarily apply within the October 2017 tariff year under the SEM arrangements, there is a portion of operation that will cover the I-SEM arrangements. They stated that this does not appear to have been considered or even acknowledged within the consultation paper, although the original intention behind a number of the OSC items was to incentivise generators to perform in the absence of a balancing mechanism. SSE believes that a number of charges become obsolete under the I-SEM arrangements as parties to the Trading & Settlement Code become fully balance responsible with a marginal imbalance pricing regime levying charges on generators that fail to deliver their notified and traded energy positions. They believe the obsolete charges include Trip charges and SNDs as generators who trip under the I-SEM arrangements will be forced to buy back their imbalance position at a penal charge. To apply an additional trip charge or SND is unnecessary and effectively double charging for the same event. They also stated that the GPIs for early and late synchronisation will become obsolete as a generator will be subject to a number of charges in place for these GPIs including energy imbalance and potentially information imbalance charges.

SSE believes that the final publication of the Other System Charges for 2017-18 should confirm the blended rates up until I-SEM go-live and propose a process for the adaptation or removal of the charges for the post I-SEM period go-live in which generators will have a balancing regime in place to incentivise performance. They further stated that the retention of the full suite of OSC arrangements is not appropriate in a balance responsible market and will distort generator behaviour and pricing in both ex-ante markets and the balancing market.

2.1.2 TSOs' Response

The TSOs welcome the comments received in relation to the delivery of I-SEM and its impact on OSC.

With reference to the comment from the two respondents on double charging the TSOs believe this not to be the case. We believe the main objectives of Other System Charges continue to have validity for the tariff year 17/18: SNDs incentivise timely notification of availability changes, Trip Charges incentivise slow wind-downs rather than trips and GPIs incentivise Grid Code compliance. Indeed, if a unit complies with its Grid Code requirements, no charges will be levied. The requirement to achieve Grid Code compliance will not change as a result of the introduction of I-SEM.

However, we do agree that I-SEM will bring additional incentives to some of the behaviours that are incentivised by OSC; however it may not cover all OSC incentives. In addition, there are other changes, for example the ongoing implementation of DS3 System Services, which may also be relevant to a wider review of the OSC.

Therefore, we acknowledge a review of the OSC is required in the context of I-SEM and the evolving DS3 System Services. This review will be carried out by the TSOs and proposals published in the OSC

tariff consultation paper for tariff year 18/19 and therefore in advance of the I-SEM go live date in May 2018.

2.1.3 TSOs' Recommendations

We recommend that all OSC, including Trips, SNDs and GPIs are reviewed as part of the OSC tariff consultation paper for tariff year 18/19.

2.2. Existing OSC Developments

2.2.1 Trip Charges

We stated in the consultation paper that a review of the Trip Charge methodology should be visited again when the Enhanced Performance Monitoring System (EPMS), to facilitate DS3 System Services is implemented. EPMS will log any trips or load drops over a certain threshold (including WFPS). As this performance monitoring work has been delayed from its original go live date and phase 1 is now set to be operational in late 2017 we will defer the review and consultation of any methodology changes until tariff year 18/19. It is believed that by then we will have sufficient data to establish any need for changes to the methodology.

2.2.1.1 Respondents' Comments

One comment was received (AES) in relation to the review of the Trip Charge methodogy.

AES stated that they agreed that the review of trip charges methodology should benefit from the knowledge derived from DS3 implementation, and its performance monitoring and welcomed the delay in this assessment to allow sufficient data to be established.

2.2.1.2 TSOs' Response & Recommendations

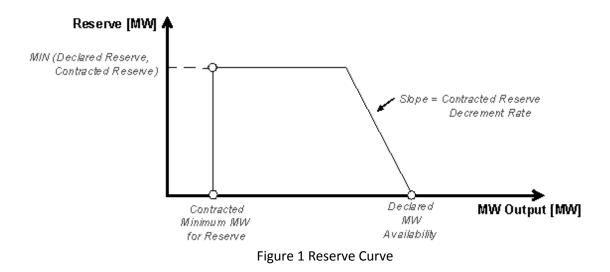
The TSOs welcome the comments received in relation to a review of the Trip Charge methodology.

Following implementation of EPMS we recommend reviewing the data and establishing the need for changes to the methodology. We recommend consulting with industry prior to any methodology changes being introduced. This will be included in the overall OSC review.

2.2.2 Operating Reserve GPI

In the consultation paper we presented a proposed refinement to the GPI calculation for Reserve, whereby the required decrement rate is included as part of the calculation. We stated that we would continue to monitor the need for this refinement and develop, if required, this proposal in the tariff year 18/19 consultation.

The principle of the decrement rate is shown in Figure 1 and is the slope of the Contracted Reserve Decrement Rate. It shows the relationship between available reserve and the active power output of the unit.



The objective of the proposed design refinement is to add a multiplication factor to the GPI charge. Generating units which are compliant with the required decrement rate are applied a multiplication factor of 1 (i.e. no increase). Generating units that have a non-compliant decrement rate would have a greater multiplication factor the greater their non-compliance. The proposed multiplication factor would therefore be:

$$Factor = \frac{Required Decrement Rate}{Contracted Decrement Rate}$$

Any additional charges levied through this design refinement will be passed through to offset Imperfection charges.

We stated that we had noted the views of those respondents who gave feedback to the refinement in the consultation for tariff year 16/17 and would welcome any additional opinions on the merits of the proposed refinement.

2.2.2.1 Respondents' Comments

Two comments were received (AES and ESB GWM) in relation to the Operating Reserve GPI proposal.

AES commented that they would welcome further examples on the mathematical application of this 'factor', and clarification on which GPI it would apply. They questioned if the generating unit can better the required 'decrement rate' then shall it have a factor less than 1.

ESB GWM commented that while they appreciated that this GPI will be consulted on further the consultation for tariff year 18/19, it is their view, that as currently proposed, this refinement of the operating reserve GPI does not serve its intended purpose (to recover the additional Dispatch Balancing Costs that are incurred by the TSO when units have a decrement rate of less than 1). They stated that as currently proposed, this refinement means that a multiplier (based on the contracted decrement rate) will be applied to any incurred operating reserve GPI, regardless of where on the reserve curve the unit is operating. It is their view that this refinement (application of the multiplier) should only come into effect when the unit is operating in the range that the commercial impact of the decrement rate is incurred.

ESB GWM believe it is also worth noting the limitations to providing POR at the upper end of a units operating range which can vary depending on the technology type. They stated it is not simply unit decay in all cases and typically this can only be achieved by gas turbines when governing.

2.2.2.2 TSOs' Response

We welcome the comments received from the two respondents.

The comments from AES and ESB GWM on the design of the GPI will be taken into consideration when we have reviewed the need for the proposed refinement prior to the consultation for tariff year 18/19. If there is a requirement for the GPI it will be included in the consultation for tariff year 18/19.

2.2.2.3 TSOs' Recommendations

We recommend that we continue to monitor the need for this refinement and develop, if required, this proposal as part of the overall OSC review in the consultation for tariff year 18/19.

2.3 NEW OTHER SYSTEM CHARGES

2.3.1 Secondary Fuel GPI

In the consultation paper we stated that we had previously proposed a new GPI relating to a generating unit's declared secondary fuel capability. However, this was deferred to allow for the implementation of a revised NI Fuel Security Code by the Department of Enterprise, Trade and Investment (DETI) and the development of Fuel Switching Agreements in Northern Ireland.

Due to the scale of changes, such as DS3 System Services and I-SEM that are progressing in parallel, we believe a separate consultation on the implementation of a GPI for secondary fuel capability should be carried out in 2017 with any proposed GPI implemented in October 2018.

2.3.1.1 Respondents' Comments

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

AES stated that they recognised the deferral due to the development of fuel switching agreements, and the scale of changes in other areas. They accepted that a separate consultation may be required

to clarify this issue. AES noted that there are still outstanding issues, from last years' consultation, regarding this proposal.

AES further commented that they would still welcome clarification from the TSOs as to which part of Grid Code this Charge relates to, given that this is being referred to under Other System Charges and "GPI charges are levied on those generators which fail to comply with specific standards in the Grid Code". AES Kilroot stated they have a concern over the use and definition of Secondary Fuel and if it is appropriate.

ESB GWM commented that while this is to be consulted on separately, they do not believe that a secondary fuel GPI is appropriate as the secondary fuel requirement is an obligation on a specific group of generators as opposed to all participants and there is no remuneration to provide this service.

PPB commented that they welcomed the delay on the application of this charge and believe the introduction of this charge is not required at all. This introduction of a charge for non-availability on secondary fuel when there is not a corresponding payment for the provision of this service is unfair. If there is no payment for the provision there should be no subsequent penalty. They further commented that the proposal also represents a second penalty on the generator who is already exposed to costs under the NI Fuel Switching Agreement (FSA) for failure during fuel switching events, which includes fuel switching tests required by SONI. Such failure can also lead to termination of the FSA. In addition, there is no cost to the system if a unit is available on its primary fuel and there is no requirement to switch fuel.

2.3.1.2 TSOs' Response

We welcome the comments received from this consultation and will add them to those received following the separate consultation on the implementation of a GPI for secondary fuel capability. It is scheduled to be carried out in 2017 with any proposed GPI implemented in October 2018.

2.3.2 Wind Farm GPI

In the consultation paper we stated that there have been significant strides by windfarms over the last couple of years in terms of achieving Grid Code compliance through the issuing of compliance certificates. It has also been observed that the majority of new windfarms connected to the system are compliant with their Grid Code requirements. For those wind farms that are not compliant a number of temporary derogations have been granted.

We also stated that we would continue to monitor compliance and review the need to introduce a GPI at the appropriate time in the future to ensure compliance is maintained.

2.3.2.1 Respondents' Comments

One comment was received (PPB) in relation to the introduction of wind farm GPIs.

PPB believe all technologies should be treated the same and so GPI's should be equally applied to all technologies.

2.3.2.2 TSOs' Response

As discussed in the consultation paper, a significant proportion of the connected wind farms are now achieving Grid Code compliance/Operational Readiness Confirmation from the Wind Farm Controllability Categorisation Policy.

Currently GPIs are only levied on conventional generating units and we believe it is appropriate to apply GPIs for all generating units. 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. We therefore need to ensure that there is adequate performance from all plant including wind farms.

Any new GPIs will 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.

2.3.2.3 TSOs' Recommendation

As stated in section 2.1.3 we recommend that all OSC, including Trips, SNDs and GPIs are reviewed as part of next year's OSC tariff consultation. This consultation will also include proposals to introduce any new GPI's.

3. ADDITIONAL COMMENTS

One respondent (BGE) wished to re-highlight their concerns with double-payments in the existing OSCs, particularly units who are Under Test paying Testing Tariffs. These costs implicitly include Trip charges and Short Notice Declarations (SND) so to oblige units Under Test to also pay these costs would be penalised twice for tripping. BGE stated they have expressed these concerns on numerous occasions and while they are disappointed that they have not been addressed in the Consultation, they looked forward to engaging further with the TSOs in the anticipated Consultation on the revision of the Testing Tariff framework.

BGE further stated they had highlighted in their response to the OSC consultation for tariff year 16/17; it seems that the objective of OSCs is moving away from incentivising optimum performance and towards compliance to Grid Code requirements. While they agreed that Grid Code compliance is essential for all Generators, they believed that the new OSCs are being introduced as a way of forcing Generators to become compliant with new Grid Code requirements rather than incentivising them to efficiently perform to those requirements. BGE commented that instead of forcing this compliance through the OSC process, they believed it would be better managed through bi-lateral engagements between Generators and the TSOs. They provided an example, that if a Generator does not achieve compliance within an appropriate timeframe and/or who are not co-operating reasonably with the TSO, it may be appropriate to take additional actions. This may take the form of an obligation on parties to report to a Board of their peers, as is done in the UK. BGE urged the TSOs to consider alternatives such as this reporting obligation rather than putting more costs on generators.

One respondent (PPB) stated that changes were made last year in relation to generator declarations during a test that requires declarations in line with testing profiles. They believe that the generator by all means should submit a profile of intent and should endeavour to follow this. If the generator sees no risk in this test then it should declare its availability as per the test profile or at a higher level if it can be dispatched off the profile during the test for emergency purposes and receive charges associated with Testing Tariff B and SND's as per normal operation. However, PPB believe, if a generator knows a trip is likely, it should be allowed to declare zero for the duration of the test and so be exempt from any SND's and the TSO should schedule additional plant to cover this, the cost of such being recovered through Testing Tariff A. This, they state, encourages a generator to test, knowing it will not incur huge SND charges for being prudent. PPB believes penalties should be used to encourage the desired behaviour not to penalise compliance.

PPB also commented that as discussed at the time of the introduction of the Harmonised Ancillary Services arrangements they still believe 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. PPB further stated that as new technologies come on board, they must be treated in the same manner as other participants and so must receive GPI's and so there needs to be a mechanism for charging these even if there is no requirement for them to sign up to a TUOSA. AES commented that they would welcome further consultation on the understanding of the GPIs against so called 'Grid Code Data'. They believe that the GPIs are linked to the ancillary services agreements, via Grid Code and that Grid Code refers specifically to such ancillary services agreements and the values therein. AES stated that whilst any declaration away from contracted position attracts a reduction in revenue, the TSOs application of GPIs further penalise generators for such a declaration. This 'incentive' to provide the generators contract value is somewhat understandable, but should be limited to the contracted value of ancillary services. They believe this is the value the generators get paid for and any penalty should be against that value.

3.1 TSOs' Response

In the consultation paper for tariff year 16/17 we clarified the charging of SNDs as described in Section 2.5 of the published Harmonised Other System Charges Methodology Statement, located on our websites³ and this has not changed. In line with current RA policy⁴, we would like to state that all units Under Test in the SEM will be liable for SND charges if they Trip as if the unit was in normal operation, unless the trip was planned.

With regards to PPB's comment we confirm that SNDs are not applicable if the unit declares the availability in line with the submitted test profile, however any forced outage will result in an SND being levied. It should be noted that the unit is not double charged as Trips are not charged but covered in the Testing Tariff and SNDs are covered in the normal method.

In relation to BGE's comment on the anticpated consultation on the revision of the Testing Tariff framework, we can confirm that this consultation was published on the 2nd June 2017.

Regarding PPB's comment on the TUoS agreement not being the correct agreement to contain GPIs, the RAs Decision Paper SEM-10-001⁵ published on 4th January 2010 provided a policy framework for the all-island harmonisation of Ancillary Services (HAS) and Other System Charges (OSC). The TSOs could include this as part of the overall review of OSC. The TSOs understand that the RAs are not minded to reopen the framework at this stage.

We would also like to direct AES to the consulation paper SEM-08-128 and the subsequent decision paper SEM-10-001 prior to the introduction of OSC in 2010. These documents state that the charges for generator unit underperformance would be distinct from and additional to any charges made for the non-delivery of AS (now provided through DS3 System Services contracts). They further stated that charges for the non-delivery of AS arise from the failure to fulfil an AS contract; charges for generator unit underperformance would arise from a failure to meet the terms of the Connection Agreement and its requirement to meet the Grid Code requirements.

³ www.eirgrid.com and www.soni.ltd.uk

⁴ https://www.semcommittee.com/sites/semcommittee.com/files/media-files/SEM-16-87%20Testing%20Tariff%20Decision%20paper.pdf 5 https://www.semcommittee.com/publication/sem-10-001-harmonised-all-island-ancillary-services-rates-and-other-system-charges

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. We will use the same methodology for 2017-2018 using the last five working days of July.

In the consultation paper, we detailed the following methodology to 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

At the time of publication of the consultation paper according to the Office of Budgetary Responsibility report⁶ (Nov 2016) the current RPI inflation was forecast in the UK for the 2017/18 tariff year at 2.675% while the Central Bank report⁷ (Q1 2017) forecast HICP in Ireland for the same period at 1.675%.

Source		2017	2018	Tariff Year	2017/2018	Blended Rate	Blended
				Methodology	Tariff Year	Methodology	rate
OBR Nov	RPI	3.2%	3.5%	(.032*25% +	3.425%	3.425*25%	0.85625
2016				.035*75%)			
Central	HICP	0.8%	1.1%	(.008*25% +	1.025%	1.025*75%	0.76875
Bank Q1				.011*75%)			
2017							
Blended							1.625%
Rate							

Table 4.0: Proposed Inflation Rate Increase as published in the consultation paper

On this basis, and recognising the relative balance between Ireland and Northern Ireland, the forecast blended rate published in the consultation paper for the forthcoming 2017/18 period was 1.625% as shown in Table 4.0.

At the time of publishing this recommendations paper the latest available Office of Budgetary Responsibility report⁸ (Mar 2017) the current RPI inflation forecasts in the UK for the 2017/18 tariff year is 3.625% while the Central Bank report⁹ (Q2 2017) forecasts HICP in Ireland for the same period at c.1.075%.

⁶ <u>http://budgetresponsibility.org.uk/efo/economic-and-fiscal-outlook-november-2016/</u>

⁷ https://www.centralbank.ie/publication/quarterly-bulletins/quarterly-bulletin-no-1-2017

⁸ http://budgetresponsibility.org.uk/efo/economic-fiscal-outlook-march-2017/

⁹ https://www.centralbank.ie/publication/quarterly-bulletins/quarterly-bulletin-q2-2017

Source		2017	2018	Tariff Year	2017/2018	Blended Rate	Blended
				Methodology	Tariff Year	Methodology	rate
OBR Mar	RPI	3.7%	3.6%	(.037*25% +	3.625%	3.625*25%	0.90625
2017				.036*75%)			
Central	HICP	0.7%	1.2%	(.007*25% +	1.075%	1.075*75%	0.80625
Bank Q2				.012*75%)			
2017							
Blended	-			-	-		1.7125%
Rate							

Table 4.1: Proposed Inflation Rate Increase using the latest available forecast values

On this basis, and recognising the relative balance between Ireland and Northern Ireland, the forecast blended rate for the forthcoming 2017/18 period is 1.7125% as shown in Table 4.1.

The recommended rates are displayed with 2 decimal places in Euro and have been calculated using the latest available forecast values giving a forecasted blended rate of 1.7125%. The TSOs would like to clarify that 4 decimal places from the current tariff year rates are used in the calculation of the inflationary increase.

4.1 Trip Charges

The following tables propose the Trip Charges and Constants for the 2017-2018 tariff year. As seen in Table 4.2 and Table 4.3 there are no changes to the proposed charges compared with the previous tariff year other than increasing in line with the recommended inflation rate.

	2016-2017	2017-2018
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 4.2: Proposed Trip Constants

Charge	2016-2017	2017-2018		
Direct Trip Charge Rate	€4,250	€4,322		
Fast Wind Down Charge Rate	€3,187	€3,242		
Slow Wind Down Charge Rate	€2,125	€2,161		
Table 1.2: Dranged Trin Dates				

Table 4.3: Proposed Trip Rates

4.2 Short Notice Declaration (SND) Charges

The following tables propose the SND Charges and Constants for the 2017-2018 tariff year. As seen in Table 4.4 and 4.5 there is no change to the proposed constants and charges compared with the 2016-2017 tariff year other than increasing in line with the recommended inflation rate.

SND Constants	2016-2017	2017-2018
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 4.4: Proposed SND Constants

SND Charge Rate	2016-2017	2017-2018
SND Charge Rate	€74 / MW	€76 / MW
		D .

Table 4.5: Proposed SND Charge Rate

4.3 GPI Charges

The proposed GPI Constants, GPI Declaration Based Charges and GPI Event Based Charges for the 2017-2018 tariff year are outlined in Table 4.6, Table 4.7 and Table 4.8 respectively. We proposed to make no change to the rates for 2017-2018 other than increasing in line with the recommended inflation rate.

GPI Constants	2016-2017	2017-2018
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 4.6: GPI Constants

	2016-2017	2017-2018
GPI Declaration Based Rates	€/MWh	€ / MWh
Minimum Generation	1.25	1.28
Max Starts in 24 hour period	1.06	1.08
Minimum On time	1.06	1.08
Reactive Power Leading	0.31	0.31
Reactive Power Lagging	0.31	0.31
Governor Droop	0.31	0.31
Primary Operating Reserve	0.13	0.13
Secondary Operating Reserve	0.13	0.13
Tertiary Operating Reserve 1	0.13	0.13
Tertiary Operating Reserve 2	0.13	0.13

Table 4.7: Proposed GPI Declaration Based Charge Rates

	2016-2017	2017-2018
GPI Event Based Rates	€ / MWh	€/MWh
Loading Rate	0.63	0.64
De-Loading Rate	0.63	0.64
Early Synchronisation	2.82	2.86
Late Synchronisation	28.12	28.60

Table 4.8: Proposed GPI Event Based Charge Rates

4.4 Respondents' Comments

Three comments were received (AES, PPB and SSE) in relation to the proposed rates. AES and SSE stated they were in favour of the proposed rates.

One respondent (PPB) commented they do not believe these GPI's should be inflated for 2017/18 as more wind etc. continues to be added onto the system, more risk is passed on to conventional ancillary service providers through these higher GPI charges and yet the requirement for these services has even greater importance to the TSO. They further stated that conventional generators are being incentivised to provide less to reduce their risk.

4.5 TSOs' Response

The TSOs welcome the comments received. GPIs were introduced to incentivise compliance to Grid Code and therefore are not linked to any underperformance of System Services contracts and therefore also the payments for these services.

4.6 TSOs' Recommendation

A blended inflation rate of 1.7125% is recommended to be implemented.

5. NEXT STEPS

Once the RAs have considered these recommendations and made their final decision, the TSOs will then publish a revised TUoS Statement of Charges for the 2017-2018 tariff period.



Response to Harmonised Other System Charges Consultation

on behalf of

AES Kilroot Power Ltd and AES Ballylumford Ltd

04 April 2017

Prepared by Brian Mongan

Front Office Manager, Commercial

Summary

The following comments are based on the consultation paper layout.

1. Introduction

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

Kilroot and Ballylumford have Transmission Use of System (TUoS) Agreements covering AES' ten merchant generating units registered within SEM.

AES would welcome further consultation on the understanding of the GPIs against so called 'Grid Code Data'. We believe that the GPIs are linked to the ancillary services agreements, via Grid Code. Grid Code refers specifically to such ancillary services agreements and the values therein.

Whilst any declaration away from contracted position attracts a reduction in revenue, the TSOs application of GPIs further penalise generators for such a declaration. This 'incentive' to provide the generators contract value is somewhat understandable, but should be limited to the contracted value of ancillary services. This is the value the generators get paid for and any penalty should be against that value.

2. Existing OSC Developments

Trip Charge

We agree that the review of trip charges methodology should benefit from the knowledge derived from DS3 implementation, and its performance monitoring. We welcome the delay in this assessment to allow sufficient data to be established.

Operating Reserve GPI

AES would welcome further examples on the mathematical application of this 'factor', and clarification on which GPI it would apply. If the generating unit can better the required 'decrement rate' then shall it have a factor less than 1?

3. New Other System Charges

Secondary Fuel GPI

We recognise the deferral due to the development of fuel switching agreements, and the scale of changes in other areas. We accept that a separate consultation may be required to clarify this issue. AES note that there are still outstanding issues, from last years' consultation, regarding this proposal.

We would still welcome clarification from the TSOs as to which part of Grid Code this Charge relates to, given that this is being referred to under Other System Charges and "GPI charges are levied on those generators which fail to comply with specific standards in the Grid Code".

AES Kilroot has a concern over the use and definition of Secondary Fuel and if it is appropriate.

4. Proposed Rates

AES welcomes the fact that the approved 2016-2017 rates shall be retained and does not query the financial approach to the adjustment of the inflationary rate.



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

2nd May 2017

Dear Vivienne, Amanda

Re: Harmonised Other System Charges 2017/18 Consultation

Bord Gáis Energy (BGE) welcomes this opportunity to respond to the TSOs' (EirGrid and SONI) consultation on Harmonised Other System Charges (OSC).

BGE wishes to re-highlight our concerns with double-payments in the existing OSCs, particularly units who are Under Test paying Testing Tariffs. These costs implicitly include Trip charges and Short Notice Declarations (SND) so to oblige units Under Test to also pay these costs would be penalised twice for tripping. We have expressed these concerns on numerous occasions and while we are disappointed that they have not been addressed in this Consultation, we look forward to engaging further with the TSOs in the anticipated Consultation on the revision of the Testing Tariff framework.

As we have highlighted in our response to last year's OSC Consultation, it seems that the objective of OSCs is moving away from incentivising optimum performance and towards compliance to Grid Code requirements. While we agree that Grid Code compliance is essential from all Generators, we believe that the new OSCs are being introduced as a way of forcing Generators to become compliant with new Grid Code requirements rather than incentivising them to efficiently perform to those requirements. Instead of forcing this compliance through the OSC process, we believe it would be better managed through bi-lateral engagements between Generators and the TSOs. For example, if a Generator does not achieve compliance within an appropriate timeframe and/or who are not co-operating reasonably with the TSO, it may be appropriate to take additional actions. This may take the form of an obligation on parties to report to a Board of their peers, as is done in the UK. We urge the TSOs to consider alternatives such as this reporting obligation rather than putting more costs on generators.

I hope you find the above comments useful and if you have any queries, please do not hesitate to contact me at any time.

Sincere regards,

Brian Larkin Regulatory Affairs – Commercial Bord Gáis Energy

{By e-mail}



ESB GWM Response:

Harmonised Other System Charges Consultation (SEM-17-019) – Tariff Year 01 Oct 2017 to 30 Sept 2018

2nd May 2017



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1. INTRODUCTION

ESB Generation and Wholesale Markets (GWM) welcomes the opportunity to respond to the TSO Consultation on the Harmonised Other System Charges Consultation for the tariff year 01 October 2017 to 30 September 2018.

ESB GWM's primary concern in relation to this consultation is the proposal to allow the new I-SEM market to settle for the last four months of the tariff year 17/18 and not to make any changes before consulting on next year's OSC tariffs for tariff year 18/19. We would contend that there is no significant advantage to be gained by delaying the review of these tariffs for I-SEM until next year. The I-SEM Trading and Settlement Code is now complete and the Capacity Market Code is in the final stages of development. Participants, RAs and the TSOs now have a good understanding of the exposures being faced by participants as balance responsible parties and we would urge the system operator to review the existing OSC framework in this context.

2. OTHER SYSTEM CHARGES IN I-SEM

ESB GWM contends that Trip Charges and Short Notice Declarations are not warranted or justified in I-SEM. Participants will a have number of new exposures in I-SEM in the event of a unit tripping and will pay the costs incurred by the TSO to maintain system balance through the balancing market mechanism. Consequently, to maintain these charges in I-SEM we believe would amount to double charging by the TSO rather than recovery of costs incurred by the system due to these events. Also from a desk top review, we are not aware of existence of such charges in other balance responsible markets (e.g. GB).

2.1 Participant Exposures in I-SEM

The energy market is undergoing a fundamental change. At a very high level, the market is changing from an ex-post market to an ex-ante market where balance responsible participants will have strong incentives to deliver energy sold in the ex-ante timeframes. This is a significant change from today where the market is centrally dispatched by the system operator and the market price is determined ex-post based on perfect hindsight of events that occurred in real time.

In SEM, notwithstanding the foregone revenue to a generator in the event of a short notice change to availability or a trip, the costs borne by the TSO in re-dispatching the system due to these events is not shared by that generator. Instead it is picked up by suppliers in the Imperfections Charge and ultimately borne by the consumer. Hence, the introduction of Trip Charges and Short Notice Declarations Charges could be justified as it created an incentive on generators to minimise these events where possible or give as much notice as possible where unavoidable. Furthermore, the MSQ run is carried out ex-post on D+4 in perfect hindsight and therefore the SMP will likely not reflect the short term actions taken by the TSO.

In I-SEM this is no longer this case and a participant that changes their availability or trips will face significant exposure that did not exist in SEM.

2.1.1 Balance Responsibility

In I-SEM, the single largest incentive for a generator to minimise short notice declarations or trips will be through their exposure to the imbalance price in such an event (which does not exist today). Participants in I-SEM will have a strong incentive to submit physical notifications (PNs) of their intended running that are



backed by ex-ante trades as any Bid Offer Acceptances (BOAs) from the TSO on PN volumes not sold exante will be cashed out at the imbalance price rather than the incremental or decremental price submitted.

This means that when a unit trips or makes downward re-declaration to its availability on short notice it will have to pay the imbalance price for the volumes it did not deliver. The imbalance price for this volume will be set by the most expensive unit that the system operator had to call on short notice to meet the shortfall that was caused by the trip or downward availability declaration. This means that a) the TSO should not incur the costs of balancing in this simplistic example as its paid for by the participants that are short and b) participants have a strong incentive not to trip as they face this exposure of the difference between the imbalance price and the price at which that volume of energy had been sold for in the ex-ante market.

Furthermore, the shorter the change in availability and the greater the change will likely result in a higher imbalance price as a fast acting expensive unit will be required by the TSO to maintain the generation required to meet demand. This mitigates the needs for the notice time aspect of SNDs that currently exists where the SND penalty is proportional to the notice time given.

If the existing SND framework is allowed to operate under ISEM a situation could arise where a generator, due to a change in availability, trades out of a D-1 market position in the intra-day market timeframe and both the generator and its intra-day counterparty submit PNs in advance of gate closure to the TSO in line with their revised expected running profile. In these circumstances the TSO may or may not have to take actions and yet a SND charge would be levied regardless. In these circumstances the SND framework will have become penal rather than an incentive mechanism.

2.1.2 Credit Cover Exposure

Participants in I-SEM will have to post credit cover across all the various market timeframes. One aspect of this will be credit cover required to cover the SEMOs exposure in the Balancing Market to purchase energy elsewhere when a unit sells a volume but fails to deliver it due to a trip or short notice declaration of availability. The credit cover calculation will take account of the probability of a unit tripping and therefore participants will have an incentive to reduce trip incidents to minimise the amount of credit cover they need to post.

2.1.3 Difference Payments

Today, participants receive a capacity payment without any risk. In I-SEM, participants that clear in the Capacity Remuneration Mechanism (CRM) auction will be faced with an exposure to the Administered Scarcity Price in I-SEM if triggered. Specifically, when the CRM reference price (blend of DAM, IDM and BM price) exceeds the strike price, participants with CRM contracts will be obligated to pay back the difference between the reference price and the strike price for volumes not sold in the ex-ante markets up to their derated capacity. This means that participants with CRM contracts will have an incentive to maintain full availability and any reductions in availability will therefore run a risk of incurring a difference payment should a scarcity event occur. Additionally through the CRM capacity derating mechanism the TSO has recognised that all generators have an associated forced outage rate. By continuing to levy trip charges the TSO will increase the operational costs for generators.

2.2 Operating Reserve GPI

While we appreciate that this GPI will be consulted on further next year, it is our view that as currently proposed, this refinement of the operating reserve GPI does not serve its intended purpose (to recover the additional Dispatch Balancing Costs that are incurred by the TSO when units have a decrement rate of less than 1). As currently proposed, this refinement means that a multiplier (based on the contracted decrement



rate) will be applied to any incurred operating reserve GPI, regardless of where on the reserve curve the unit is operating. It is our view that this refinement (application of the multiplier) should only come into effect when the unit is operating in the range that the commercial impact of the decrement rate is incurred.

It is also worth noting the limitations to providing POR at the upper end of a units operating range which can vary depending on the technology type. It is not simply unit decay in all cases and typically this can only be achieved by gas turbines when governing. Take the example of a gas fired combined cycle generating unit's capability to provide POR when operating close to registered capacity where the steam turbine is close to its full output when in the upper range of the CCGT output. Specifically, at lower output ranges, the majority of the POR provided is given by the gas turbine as it is governing and has sufficient head room to meet the 5% registered capacity requirement. In higher ranges though, the gas turbine is closer to its max output and cannot meet the full POR requirement. The steam turbine can provide some reserve but it is slower than the gas turbine when governing, and the volume available from the steam turbine depends on the amount of steam energy available in the boiler. Consequently it is not possible for a CCGT to provide unity decay of reserve as the unit reaches registered capacity due to the technical limitations of the steam turbine. We believe therefore it is not appropriate to implement a unity decrement rate for this technology type given the limitation of a steam turbine to provide the same response as the gas turbine (compared to open cycle unit which only has a gas turbine and therefore can provide unity decay).

2.3 Secondary Fuel GPI

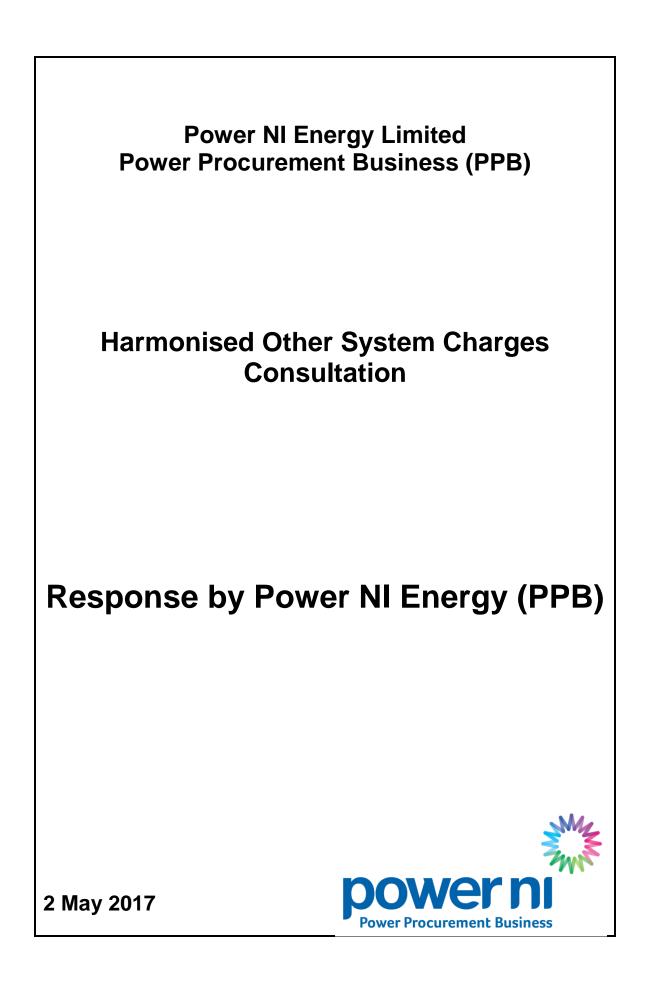
While this is to be consulted on separately, we do not believe that a secondary fuel GPI is appropriate as the secondary fuel requirement is an obligation on a specific group of generators as opposed to all participants and there no remuneration to provide this service.

Should you have any queries please do not hesitate to contact me.

Yours sincerely,

Warren Deacon

Regulation, ESB G&WM



Introduction

Power NI Power Procurement Business (PPB) welcomes the opportunity to respond to the consultation paper on Harmonised 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.

Existing OSC Developments

Short Notice Re-declarations

Changes were made last year in relation to generator declarations during a test. This requires declarations in line with testing profiles. The generator by all means should submit a profile of intent and should endeavour to follow this. If the generator sees no risk in this test then it should declare its availability as per the test profile or at a higher level if it can be dispatched off the profile during the test for emergency purposes and receive charges associated with Testing Tariff B and SND's as per normal operation. However if a generator knows a trip is likely, it should be allowed to declare zero for the duration of the test and so be exempt from any SND's and the TSO should schedule additional plant to cover this, the cost of such being recovered through Testing Tariff A. This encourages a generator to test, knowing it will not incur huge SND charges for being prudent. Penalties should be used to encourage the desired behaviour not to penalise compliance.

New Other System Charges

Secondary Fuel GPI

PPB welcome the delay on the application of this charge and believe the introduction of this charge is not required at all. This introduction of a charge for non-availability on secondary fuel when there is not a corresponding payment for the provision of this service is unfair. If there is no payment for the provision there should be no subsequent penalty. The proposal also represents a second penalty on the generator who is already exposed to costs under the NI Fuel Switching Agreement (FSA) for failure during fuel switching events, which includes fuel switching tests required by SONI. Such failure can also lead to termination of the FSA. In addition, there is no cost to the system if a unit is available on its primary fuel and there is no requirement to switch fuel.

Wind farm GPI

PPB believe all technologies should be treated the same and so GPI's should be equally applied to all technologies.

Other Comments

We do not believe these GPI's should be inflated for 2017/18 as more wind etc. continues to be added onto the system, more risk is passed on to conventional ancillary service providers through these higher GPI charges and yet the requirement for these services has even greater importance to the TSO. Conventional generators are being incentivised to provide less to reduce their risk.

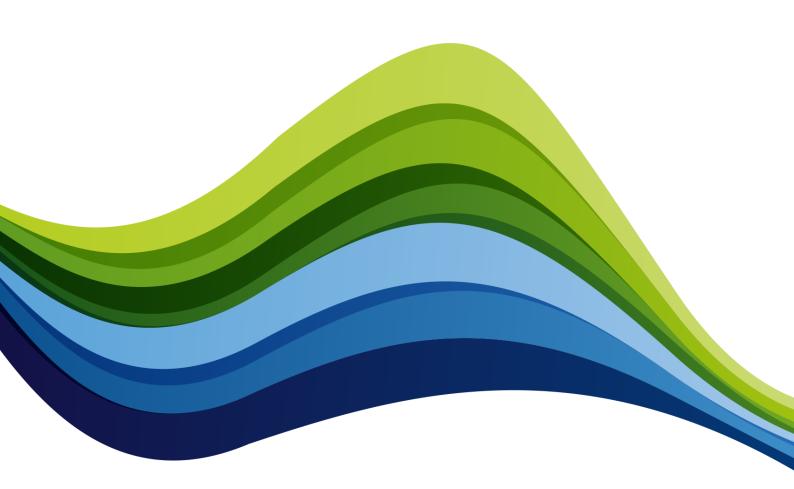
As discussed at the time of the introduction of the Harmonised Ancillary Services arrangements PPB still believes that the TUoS Agreement is not the correct agreement to contain Generator Performance Incentives. For example, disputes in relation to RoCoF GPIs could end up being referred to the Utility 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. As new technologies come on board, they must be treated in the same manner as other participants and so must receive GPI's and so there needs to be a mechanism for charging these even if there is no requirement for them to sign up to a TUoSA.



Markets

Harmonised Other System Charges Consultation

If you have any questions in relation to our response, please don't hesitate to contact Connor Powell (<u>connor.powell@sse.com</u>)





Thank you for giving SSE the opportunity to comment on the Harmonised Other System Charges Consultation. We have provided general comments on the proposals outlined in the consultation paper. We agree with the retention of the OSC rates approved and adjusted for inflation using a blended Core Inflation rate.

Appropriateness of some Other System Charges under I-SEM

While we recognise that these rates will primarily apply within the October 2017 tariff year under the SEM arrangements, there is a portion of operation that will cover the I-SEM arrangements. This does not appear to have been considered or even acknowledged within the consultation paper, although the original intention behind a number of the OSC items was to incentivise generators to perform in the absence of a balancing mechanism.

SSE believes that a number of charges become obsolete under the I-SEM arrangements as parties to the Trading & Settlement Code become fully balance responsible with a marginal imbalance pricing regime levying charges on generators that fail to deliver their notified and traded energy positions. The obsolete charges include:

- **Trip Charges** generators who trip under the I-SEM arrangements will be forced to buy back their imbalance position at a penal charge. To apply an additional trip charge is unnecessary and effectively double charging for the same event.
- Short Notice Declaration as with trip charges, these are already provided for under the I-SEM imbalance charging arrangements.
- Late Synchronisation a generator who fails to synchronise at the declared time will be subject to a number of charges including energy imbalance and potentially information imbalance charges.
- **Early Synchronisation** a generator who fails to synchronise at the PN will be subject to a number of charges including energy imbalance and potentially information imbalance charges.

SSE believes that the final publication of the Other System Charges for 2017-18 should:

- Confirm the blended rates up until I-SEM go-live;
- Propose a process for the adaptation or removal of the charges for the post I-SEM period go-live in which generators will have a balancing regime in place to incentivise performance.

The retention of the full suite of OSC arrangements is not appropriate in a balance responsible market and will distort generator behaviour and pricing in both ex-ante markets and the balancing market.