Harmonised Other System Charges Recommendations Paper

Tariff Year
1st October 2016 to 30th September 2017

11th August, 2016

EXECUTIVE SUMMARY

EirGrid and SONI (the TSOs) published a consultation paper on 11th April 2016 for the upcoming tariff period running from the 1st October 2016 to the 30th September 2017 outlining a number of proposals. Comments on the consultation paper were received from six (6) respondents, having reviewed the responses, we are now making a number of recommendations to the RAs:-

1. A review of the Trip Charge methodology should be visited again once the DS3: Enhanced Performance Monitoring System is put in place as part of the DS3 project. Once in place we recommend consulting with industry prior to any methodology changes being introduced.

2. The Operating Reserve GPI proposal is consulted on further in next year's consultation.

3. The introduction of a secondary fuel GPI is deferred until after fuel switching arrangements in Northern Ireland are agreed.

4. The introduction of new GPI's for wind farms be consulted on in next year's annual tariff consultation.

5. A blended inflation rate of 1.6% to be implemented.

No other changes are recommended for this tariff period.

ABBREVIATIONS

AGU	Aggregated Generator Unit
ASP	Ancillary Service Provider
AS	Ancillary Service
CER	Commission for Energy Regulation
DETI	Department of Enterprise, Trade and Investment
DMOL	Design Minimum Operating Level
DSU	Demand Side Unit
DS3	Delivering a Secure Sustainable System
GPI	Generator Performance Incentive
HAS	Harmonised Ancillary Services
I-SEM	Integrated Single Electricity Market
OSC	Other System Charges
NI	Northern Ireland
NIAUR	Northern Ireland Authority for Utility Regulation
NIE	Northern Ireland Electricity
RA	Regulatory Authority
RoCoF	Rate of Change of Frequency
SEM	Single Electricity Market
TSO	Transmission System Operator
SND	Short Notice Declaration
SONI	System Operator Northern Ireland
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 paper[1] for the tariff year 1st October 2016 to 30th September 2017.

If the recommendations are approved by the RAs, we will publish revised Statements of Charges and Other System Charges Methodology Statement for the 2016-2017 tariff period.

We received responses from the following parties:

Party	**Abbreviation**
Bord Gáis Energy	BGE
Brookfield Renewable Energy Limited	BRE
Energia	ENE
ESB Generation and Wholesale Markets	ESB GWM
Power NI Energy Ltd Power Procurement Business	PPB
Irish Wind Energy Association	IWEA

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

[1] "Harmonised Other System Charges Consultation" 11th April, available at http://www.eirgridgroup.com/site-files/library/EirGrid/OSC-16-17-consultation-paper-final.pdf and http://www.soni.ltd.uk/media/documents/Consultations/OSC%2016%2017%20consultation%20paper%20final.pdf

2. OTHER SYSTEM CHARGES CONSULTATION RESPONSES

2.1 EXISTING OSC DEVELOPMENTS

2.1.1 Short Notice Re-declarations

In the consultation paper it was our intention to clarify the charging of SNDs as described in Section 2.5 of the published Harmonised Other System Charges Methodology Statement, located on our websites[2].

We believed ambiguity existed regarding if SND charges would apply when a unit Trips when it is Under Test in the SEM. At present,section 2.5 states "SND charges are not applied when a unit is Under Test in the SEM on condition that the generator has declared the change in availability in EDIL using the TSO agreed reason code."

We clarified in the consultation paper that all units Under Test in the SEM are liable for SND charges if they Trip as if the unit was in normal operation. This is not a change from the current working methodology. Therefore to improve clarity around what happens when a unit Trips when Under Test in the SEM we intend to revise and publish section 2.5 with the following change: '2.5 Short Notice Declarations (SNDs) SNDs relate to unscheduled variations in availability of committed plant or to the unscheduled outage of dispatched plant. The charges are intended to incentivise behaviour to enhance system security and reduce operating costs. Further details can be found in the SEM Committee decision paper, SEM-10-001, published in January 2010. SND charges will not be applied when a unit is Under Test in the SEM on condition that the Generator has followed their testing profile. It should be noted that all units Under Test in the SEM will be liable for SND charges should they Trip, as if the unit was in normal operation.'

2.1.1.1 Respondents' Comments

Four comments were received (BGE, ENE, ESB GWM and PPB) in relation to the clarification of the charging for SNDs.

BGE stated they disagreed with the condition that makes units Under Test liable for SNDs if they Trip as it is acting as a double payment to the TSOs in addition to Testing Tariffs. They requested further clarity around SNDs and Trip charges for units Under Test with reference to the published 'Selection Guideline for SEM Testing Tariffs Guidance Document'. BGE also stated they disagreed that Generators must pay SNDs as per their registered capacity as it is recovering costs of running the system at hypothetical levels rather than recovering the costs from fallen output.

One respondent (ENE) commented that they rejected the proposed reinterpretation of the application of SND charges. They believe it changes the fundamental application of SND charges to units Under Test and is contrary to the stated text of the current OSC Methodology Statement. ENE consider it necessary that such a change be supported by evidence and that it be consulted on separately as a material change in the OSC Methology Statement.

[2] www.eirgrid.com and www.soni.ltd.uk

ESB GWM quoted from the SEMC Recommendations Paper (SEM-12-014b) stating that 'GUUT are not charged for short notice declarations as it is assumed that DBC and the additional run hours are sufficient to cover any costs associated with a GUUT making a declaration at short notice (SND)'.
ESB GWM further stated that testing of a generating unit cannot be expected to follow its agreed load profile exactly and that SNDs should not be charged when a unit is under test as the methodology that is applied to calculate the Testing Tariffs already recovers this cost.

PPB stated that they did not agree that a generator should have to declare availability during a test. If a unit has declared to zero due to a Trip being likely the TSO should schedule additional plant to cover this, the cost of such being recovered through Testing Tariff A. This, according to PPB, encourages a generator to test, knowing it will not incur huge SND charges for being prudent.

2.1.1.2 TSOs' Response

We welcome all comments received to the SND clarification.

In the consultation paper it was our intention to clarify the charging of SNDs as described in Section 2.5 of the published Harmonised Other System Charges Methodology Statement, located on our websites[3] and it was not intended to be a consultation subject. 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. The charge will remain in place for tariff year 2016-2017.

With reference to the document published on 01 February 2016 'Selection Guideline for SEM Testing Tariffs Guidance Document'[4] we can confirm that Trip charges are not applied to units Under Test that Trip. The guidance document does not make reference to SNDs as these charges have never been included as part of Testing Tariff A or B and therefore will continue to be applied in the method described above. 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. 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. Generators are charged SNDs according to their declared availability not their registered capacity.

2.1.2 Trip Charges

We stated in the consultation paper that a review of the Trip Charge methodology should be visited again once the DS3: Enhanced Performance Monitoring System is put in place. This is part of the DS3 project which will log any trips or load drops over a certain threshold (including WFPS). The performance monitoring work is ongoing and due to go live in 2016. Once in place, we stated that we will review and consult with industry prior to any methodology changes being introduced.

2.1.2.1 Respondents' Comments

One respondent (ESB) stated that Trip Charges should be reviewed once the performance scalars for the interim arrangements are known and that there is no clear benefit to waiting until the Performance Monitoring System is in place. It is ESB's view that waiting will likely lead to an overly

[3] www.eirgrid.com and www.soni.ltd.uk
[4] http://www.eirgridgroup.com/site-files/library/EirGrid/16.02.01.TT-Selection-Guideline_Ext.pdf

penal regime for some time which in turn leads to the TSO over recovering monies from penalties and performance scalars.

2.1.2.2 TSOs' Response

We would like to clarify that the System Services performance scalars and Trip Charges are separate. The performance scalars relate to the performance of the unit for the provision of system services.

2.1.2.3 TSOs' Recommendations

We recommend that a review of the methodology should be visited again once the DS3: Enhanced Performance Monitoring System is put in place as part of the DS3 project. Once in place we recommend consulting with industry prior to any methodology changes being introduced.

2.1.3 Operating Reserve GPI

In the consultation paper we proposed to make a refinement to the GPI calculation for Reserve, whereby the required decrement rate is included as part of the calculation. This proposal is currently under development and will be consulted on in more detail in next year's 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.

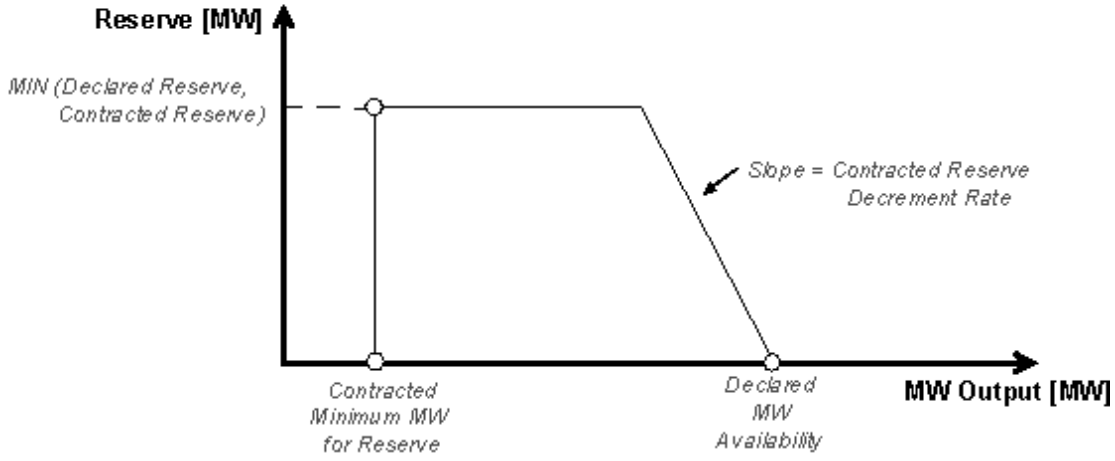

Figure 1 Reserve Curve

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:

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

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

We stated that the proposal would be consulted on further in next year's consultation.

2.1.3.1 Respondents' Comments

Three comments were received (BGE, ESB GWM and PPB) in relation to the Operating Reserve GPI proposal.

One respondent (BGE) commented that while Operating Reserve GPIs have been an appropriate signal in HAS contracts to encourage Generators to deliver high performance, they believe it should not be applied to Generators who have received a contract for DS3 System Services going forward.

ESB GWM's view on the GPI as currently proposed is that it does not serve its intended purpose (to recover the additional Dispatch Balancing Costs that are incurred by having a decrement rate of less than one). They stated that this refinement means that a multiplier 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 should only come into effect when the unit is operating in the range that the impact of the decrement rate is effective.

PPB found it impossible to comment on the proposal as they believed it was not clear what the 'Required Decrement Rate' is, whose requirement it is, or what improvement is sought. They stated that Reserve GPIs are currently used in the event where a unit declares a reduction in the provision of its contracted minimum reserve for a period and the decrement rate remains unchanged in this instance, so if this penalty is to allow re-declaration of the decrement rate in addition to the current GPI then that is reasonable. PPB requested further explanation for the requirement and evidence to support the GPI design refinement proposal.

2.1.3.2 TSOs' Response

We welcome the comments received from the three respondents.

GPIs were introduced to incentivise compliance to Grid Code and therefore are not linked to any underperformance of Ancillary Services contracts. With regard to the comment relating to where the unit is operating we would like to note that a unit with an inferior decrement rate would be dispatched to a lower level to provide the same amount of reserve. The additional comments from ESB GWM on the design of the GPI will be taken into consideration when we present it again in next year's consultation. We will also provide further explanation on why we believe the proposal to refine the design of the GPI is required and also evidence to support it.

2.1.3.3 TSOs' Recommendations

We recommend that the proposal is consulted on further in next year's consultation.

2.2 NEW OTHER SYSTEM CHARGES

2.2.1 Secondary Fuel GPI

In the consultation paper we stated that an updated NI Fuel Security Code was published on the DETI website[5] on 19 October 2015. Since the publication of the consultation paper the Utility Regulator has now approved the form of the Fuel Switching Agreements in Northern Ireland.

We believe there will now be merit in introducing a declaration based GPI for units that can operate on secondary fuel, in order to quantify secondary fuel availability. This has been developed as a gap has been observed in the level of compliance of some generating units. It is essential to ensure the continued security of supply on an all-island basis and that generating units are in compliance with the Grid Code in Ireland and Fuel Security Code in Northern Ireland.

In the consultation paper for the 2015-2016 tariff year we stated that a review had taken place on the methodology of the GPI proposed in the 2011-2012 tariff year consultation. The responses from service providers to last year's consultation have been noted however we believe the proposed GPI methodology meets the need to encourage compliance and therefore remains unchanged. A general summary of the design of the GPI can be found in the consultation paper[6].

We proposed to defer the GPI until tariff year 2017/2018 to allow adequate time for the Fuel Switching Agreements in Northern Ireland to be signed by the relevant service providers.

2.2.1.1 Respondents' Comments

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

BGE believe that the compliance obligations for secondary fuel should not be a part of the OSC process. They stated that it seemed that the objective of OSCs was moving away from incentivising optimum performance and towards compliance to the Grid Code. Instead of applying GPIs for compliance they believe it would be more appropriate for the TSOs to work collaboratively with Generators to ensure Secondary Fuel compliance and, once this is achieved, then a GPI may be applied.

ESB GWM commented that instead of an obligation on certain units to provide fuel stocks, this requirement should be paid for through a mechanism such as the Ancillary Services in a similar way to Black Start. This mechanism could also have incentives associated with it such that revenues could be recouped in the event of non-compliance.

PPB had a similar comment stating that the 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. 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 for failure during fuel switching events, which includes fuel switching tests required by SONI.

[5] https://www.detini.gov.uk/publications/modification-northern-ireland-fuel-security-code
[6] http://www.soni.ltd.uk/media/documents/Consultations/OSC%2016%2017%20consultation%20paper%20final.pdf

PPB commented that parts of the GPI calculation were unclear and that the charge penalises a unit which has a higher availability on its primary fuel rather than its secondary fuel. They stated that the charge needs to be against the availability of the secondary fuel and only at a time where this inability to be available is actually a cost to consumers. PPB said it is difficult to comment further on the GPI as there is no indication of the rate expected to be levied on participants.

2.2.1.2 TSOs' Response

It should be noted that GPIs were introduced to incentivise compliance to Grid Code and this has been stated in every annual OSC consultation since their introduction in 2010.

The specific comments received regarding the GPI formula will be taken into account in next year's OSC consultation prior to any implementation. Whilst we believe there is merit in a secondary fuel declaration based GPI we would agree that it is more appropriate to consider it following the implementation of fuel switching arrangements in Northern Ireland. In the interim, we will continue to monitor and discuss unit performance with generators where necessary.

2.2.1.3 TSOs' Recommendation

The introduction of a secondary fuel GPI should be considered after the fuel switching arrangements in Northern Ireland are agreed and not implemented until after the 2017-2018 OSC consultation has taken place.

2.2.2 Wind Farm GPI

As outlined in the consultation paper, it is our opinion that it could be useful to introduce GPIs for wind farms, similar to those currently in place for other generation units, at the appropriate time in the future to ensure compliance is maintained. It is likely that these GPIs would include incentives to maximise compliance with Design Minimum Operating Level (DMOL), Reactive Power and Operating Reserve.

2.2.2.1 Respondents' Comments

Five comments were received (BGE, BRE, ENE, ESB GWM and IWEA) in relation to the introduction of wind farm GPIs with two of the five supporting the proposal (BGE and ENE). Two respondents (BRE and IWEA) commented that the use of GPIs can only be considered as an alternative to the current categorisation policy. Both the respondents commented that the current controllability categorisation approach is too severe where minor non-compliance can result in wind generators being placed into Category 1. IWEA also noted that the GPIs should only be introduced in cases where wind farms can rely on revenue associated with the services.

ENE, who are in principle supportive of the introduction of wind farm GPIs, highlighted that the appropriate risk/reward balance must be struck in light of the commercial realities likely to face these generators in the coming years with potentially greatly reduced access to available revenue streams.

ESB GWM had the view that the introduction of GPIs for wind farms cannot be introduced until the Grid Code testing and the derogation process for wind farms is complete. BRE and IWEA both stated that no GPIs should be introduced without further industry consultation.

2.2.2.2 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.

Based on the comments received concerning the Controllability Categorisation Policy the TSOs will continue to engage with the wind industry in relation to the processes supporting this policy.

GPIs are designed to incentivise compliance with respect to the Grid Code and are not linked with Ancillary Service Agreements. Currently GPIs are only levied on conventional generating units and we believe it is appropriate to apply GPIs for all generating units providing operating reserve, reactive power and DMOL. Based on the 2020 renewable policy targets in Ireland and Northern Ireland wind farms may at times be the major energy source on the all island power system. 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.

2.2.2.3 TSOs' Recommendation

We recommend that the introduction of new GPI's be consulted on in next year's annual tariff consultation.

2.3 RoCoF GPI

In the consultation paper we stated that it is our expectation to introduce a RoCoF GPI in line with the publication of the RA's RoCoF decision paper[7]. The GPI has now been implemented from the 1st June 2016. We have welcomed the engagement that has taken place with the industry and the RAs regarding the implementation of the GPI.

2.3.1 Respondents' Comments

Four comments were received (BGE, BRE, IWEA and PPB) in relation to the RoCoF GPI.

BRE are in favour of the proposed RoCoF GPI as referred to in the RAs' decision paper provided the GPI is set out in a fair and transparent manner for all generators. BRE requested that clarity is

[7] http://www.uregni.gov.uk/uploads/publications/Decision_Paper_on_the_Rate_of_Change_of_Frequency_Grid_Code_Modification.pdf and http://www.cer.ie/docs/000260/CER14081%20ROCOF%20Decision%20Paper%20-%20FINAL%20FOR%20PUBLICATION.pdf

provided on whether an increase to the SNSP limit can be made on successful implementation of the RoCoF Grid Code Modification and introduction of the RoCoF GPI.

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

BGE commented that while they are expecting RoCoF GPIs to be applied to Generators who have not submitted a declaration for compliance before their respective deadline they are concerned about the unexpected change in GPI timelines which changed in recent weeks (prior to the publication of the OSC consultation) without the opportunity for industry engagement. They believe there has been a fundamental shift whereby Generators must now make any necessary upgrades within an arbitrary deadline of six months which is the same timeline for all Generators, irrespective of whether a unit requires upgrades or not. They have requested that the TSOs remove this six month requirement and instead, continue working with Generators on a bi-lateral basis to determine an appropriate timeline for completing any upgrades.

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

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

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

2.3.2 TSOs' Response

The RoCoF modification to the Grid Code is a separate process to this consultation. We have introduced a RoCoF GPI in line with the decision from the RAs. The relevant RoCoF GPI rate will be published in the TUoS Statement of Charges applicable from 1st October 2016 published on the our websites[8].

In response to the BRE comment on the SNSP limit, as communicated in the latest DS3 Programme Operation Capability Outlook document[9], the SNSP is planned to increase over the coming years on the basis of changing operational policies and capabilities. This includes the enhanced system capability that is due to be introduced through the introduction of DS3 System Services and through increased RoCoF capability. The delivery of the RoCoF project requires generators to withstand a 1 Hz/s event and the DSOs must also be in a position to modify protection settings on their respective networks. The increase in SNSP will therefore occur when a combination of generator RoCoF capability, DSO network protection changes and generation portfolio capability resulting from DS3 System Services is achieved.

Regarding the comment from PPB, EirGrid and SONI currently operate the system such that the potential RoCoF on the system would not exceed +/-0.5 Hz/s. Such an event is dependent on system conditions, including inertia and the loss of the largest single infeed or outfeed at the time.
The TSOs have no control over frequency events on the system as they are driven by some item of plant or equipment on the system having a technical issue which results in a frequency disturbance. The occurrence of these events is completely outside the control of the TSO.

3. ADDITIONAL COMMENTS

BGE commented that overall it appears that the TSOs are moving away from the OSC's objective which is to incentivise optimum performance in Generators and instead are using them as a means of enforcing compliance to the Grid Code. While we agree that Grid Code compliance is absolutely essential from all Generators, we believe that best practice in Ireland has been working through bilateral meetings with Generators rather than enforcing penalties. Their final comment was given the closeness of I-SEM and the additional signals for performance that it will deliver, it is necessary that the TSOs conduct a holistic assessment of system performance signals and ensure the costs to Generators are not unfairly disproportionate to the costs being incurred to the system. They believe this would allow Generators to realise the actual market costs, which would therefore provide an appropriate level of analysis during consultation periods on system charges.

ESB GWM believes that a holistic review should be taken of Other System Charges in light of the new penalties and incentives that will come into effect in the transition to I-SEM this year (i.e. DS3 interim tariff arrangements). The introduction of new GPIs in the OSC consultation process cannot be taken unilaterally without consideration of the expected incentives that I-SEM will create.

[8] www.soni.ltd.uk and www.eirgird.com
[9] http://www.eirgridgroup.com/site-files/library/EirGrid/DS3-Operational-Capability-Outlook-2016.pdf

PPB stated that the current report is inadequate as it does not give sufficient transparency to providers to bid for Ancillary Services and to enable bidding, providers need to know the volume requirements and current provision of each product.
PPB also commented that they discussed at the time of the introduction of the Harmonised Ancillary Services arrangements, and still believe, that the Transmission Use of System (TUoS) Agreement is not the correct agreement to contain GPIs. For example, disputes in relation to RoCoF GPIs could end up being referred to the Utility Regulator as a licence breach. Also the interconnector owners have also argued that GPIs should not be applicable to them as they do not sign up to a TUoS agreement.

3.1 TSOs' Response

It should be noted that GPIs were introduced to incentivise compliance to the Grid Code and this has been stated in every annual OSC consultation since their introduction in 2010.

With regards to the comments from BGE and ESB GWM we intend to review the OSC in full in relation to the introduction of I-SEM. This will be carried out as part of next year's consultation. With regards to PPB's comment on reporting, reporting on Ancillary Service products is outside the scope of this consultation however the comment will be forwarded to the DS3 implementation team. PPB also made comment on the TUoS agreement not being the correct agreement to contain GPIs, in the RAs Decision Paper SEM-10-001[10] published on 4th January 2010 provided a policy framework for the all-island harmonisation of Ancillary Services (HAS) and Other System Charges (OSC) and it is not proposed to re-open this framework at this stage.

[10] https://www.semcommittee.com/

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 2016-2017 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 report[11] (Nov 2015) the current RPI inflation was forecast in the UK for the 2016/17 tariff year at 2.675% while the Central Bank report[12] (Q1 2016) forecast HICP in Ireland for the same period at 1.675%.

Source		2016	2017	Tariff Year Methodology	2016/2017 Tariff Year	Blended Rate Methodology	Blended rate
OBR Nov 2015	RPI	2%	2.9%	(.020*25% + .029*75%)	2.675%	2.675*25%	0.669
Central Bank Q1 2016	HICP	1%	1.9%	(.010*25% + .019*75%)	1.675%	1.675*75%	1.256
Blended Rate							**1.9%**

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 2016/17 period was 1.9% as shown in Table 4.0.

At the time of publishing this recommendations paper the latest available Office of Budgetary Responsibility report[13] (Mar 2016) the current RPI inflation forecasts in the UK for the 2016/17 tariff year is 2.225% while the Central Bank report[14] (Q2 2016) forecasts HICP in Ireland for the same period at c.1.425%.

[11] http://budgetresponsibility.org.uk/efo/economic-and-fiscal-outlook-november-2015/
[12] https://www.centralbank.ie/publications/Pages/QuarterlyBulletin.aspx
[13] http://budgetresponsibility.org.uk/efo/economic-and-fiscal-outlook-march-2016/
[14] https://www.centralbank.ie/publications/Pages/QuarterlyBulletin.aspx

Source		2016	2017	Tariff Year Methodology	2016/2017 Tariff Year	Blended Rate Methodology	Blended rate
OBR Nov 2015	RPI	1.7%	2.4%	(.017*25% + .024*75%)	2.225%	2.225*25%	0.556
Central Bank Q1 2016	HICP	0.6%	1.7%	(.006*25% + .017*75%)	1.425%	1.425*75%	1.069
Blended Rate							**1.6%**

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 2016/17 period is 1.6% 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 1.6%. 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 2016-2017 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.

	2015-2016	2016-2017
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	2015-2016	2016-2017
Direct Trip Charge Rate	€4,183	€4,250
Fast Wind Down Charge Rate	€3,137	€3,187
Slow Wind Down Charge Rate	€2,091	€2,125

Table 4.3: Proposed Trip Rates

4.2 Short Notice Declaration (SND) Charges

The following tables propose the SND Charges and Constants for the 2016-2017 tariff year. As seen in Table 4.4 and 4.5 there is no change to the proposed constants and charges compared with the 2015-2016 tariff year other than increasing in line with the recommended inflation rate.

SND Constants	2015-2016	2016-2017
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	2015-2016	2016-2017
SND Charge Rate	€73 / MW	€74 / MW

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 2016-2017 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 2016-2017 other than increasing in line with the recommended inflation rate.

GPI Constants	2015-2016	2016-2017
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

	2015-2016	2016-2017
GPI Declaration Based Rates	**€ / MWh**	**€ / MWh**
Minimum Generation	1.23	1.25
Max Starts in 24 hour period	1.05	1.06
Minimum On time	1.05	1.06
Reactive Power Leading	0.30	0.31
Reactive Power Lagging	0.30	0.31
Governor Droop	0.30	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

	2015-2016	2016-2017
GPI Event Based Rates	**€ / MWh**	**€ / MWh**
Loading Rate	0.62	0.63
De-Loading Rate	0.62	0.63
Early Synchronisation	2.77	2.82
Late Synchronisation	27.68	28.12

Table 4.8: Proposed GPI Event Based Charge Rates

4.4 Respondents' Comments

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

PPB believed that the GPI rates should not be inflated for 2016/17 given many of the payment rates for the provision of Ancillary Services are reducing.

BGE commented that they appreciated the TSOs' additional detail on the sources of both the UK and Irish inflation rates and their blending methodology which we sought in our response to HAS/OSC in 2015. They also stated that given that the consultation OSC rates are based on last year's rates adjusted for inflation, they believe the figures should be indicative inflation rates and that they be updated in the Decision Paper to reflect the most up-to-date forecasts.

4.5 TSOs' Response

The TSOs welcome the comments received. We would like to remind respondents that GPIs were introduced to incentivise compliance to Grid Code and therefore are not linked to any underperformance of Ancillary Services contracts and therefore also the payments for these services.

With regards to the comment from BGE regarding the consultation figures being indicative rates and that they be updated in the decision paper to reflect the most up-to-date forecasts we have taken this into account and utilised the 1.6% figure in the recommended rates. We will indicate in next year's consultation paper that the consulted rate is indicative and use the most up to date forecast in the recommendation paper.

4.6 TSOs' Recommendation

A blended inflation rate of 1.6% to be implemented.

5. NEXT STEPS

Following a review of comments on the OSC consultation paper we are now making these recommendations to the RAs. Following RA approval, we will then publish revised TUoS Statement of Charges for the 2016-2017 tariff period.