Proposed Testing Tariff Rates Recommendations Paper

2021

30 September 2020

EIRGRID SONI

Executive Summary

Testing tariffs are applied to Units Under Test (UUT) in the Single Electricity Market (SEM) on the basis of the MW capacity[1] of the generator unit. The tariffs are dependent upon the type of test being carried out and the impact to system security. There are a number of costs that the Transmission System Operators (TSOs) consider are appropriate for inclusion in the testing tariffs. These costs relate to the additional operational reserve carried to maintain system security when a unit is testing, the effect a UUT has on unit commitment decisions, and the costs incurred when a UUT output drops very quickly.

Testing tariffs were approved for the 2020 calendar year, as follows:

1. Rates for High Impact Testing[2] (Tariff A[3]): Testing Tariff A consists of a Unit Commitment and Reserve element. The Tripping element was removed with the introduced of the revised SEM arrangements in 2018.
2. Testing Tariff for Low Impact Testing (Tariff B) remained set to zero. This was introduced as part of the revised SEM arrangements in 2018.

The TSOs are committed to completing a review of the testing tariffs when there is sufficient data available of generation units testing under the revised SEM arrangements. At present, there is still insufficient data to complete a comprehensive review of the testing tariffs, especially in relation to the impact of the testing of larger generation units. Therefore for 2021, the TSOs are recommending no change to the testing tariffs, which were approved for 2020, apart from adjusting for inflation. Taking into account the latest forecast inflation rates[4], the TSOs recommend an updated inflation rate of 0.55% in the calculation of the final tariffs.

[1] Also referred to as the Registered Capacity or Maximum Generation Capacity

[2] High impact testing (Tariff A) is when new units are being commissioned on the power system for the first time, when existing units require testing on returning from outages, and for testing which is determined to be high risk. The impact of the UUT is an increase in the costs associated with maintaining system security.

[3] Tariff A is applied for high impact testing and Tariff B is applied for low impact testing

[4] Central Bank of Ireland and the Office for Budget Responsibility in the UK both issued updated economic forecasts in July (the most recent information available). See Table 2.

Acronyms

CPI	Consumer Price Index
HICP	Harmonised Index of Consumer Prices
I-SEM	Integrated Single Electricity Market
OSC	Other System Charges
RA	Regulatory Authority
SEM	Single Electricity Market
SND	Short Notice Declaration
SONI	System Operator Northern Ireland
TSO	Transmission System Operator
FPM	Final Physical Notification
PN	Physical Notification
PR5	Price Review Five
UUT	Unit Under Test

1. INTRODUCTION

The Trading and Settlement Code (Part B[5]) requires the System Operators, if requested by the Regulatory Authorities (RAs), to make a report to the RAs at least four (4) months before the start of the year proposing values for the testing tariffs for the upcoming year.

For 2021 it is proposed to make no change to the testing tariffs, which were approved for 2020 (apart from inflation).

The TSOs received responses from the following parties:

Party	**Abbreviation**
Bord Gáis Energy	BGE
Scottish and Southern Energy plc	SSE

The TSOs welcome all comments received on the proposed testing tariff rates for 2021.

[5] https://www.semcommittee.com/sites/semcommittee.com/files/media-files/SEM-17-024c%20Trading%20and%20Settlement%20Code%20Part%20B%20%28clean%29.pdf

2. PROPOSED TESTING TARIFF RATES 2021 CONSULTATION RESPONSES

2.1 TSOs' Proposal for Low Impact (Tariff B) Testing

As in 2020, the TSOs have assumed that the UUT will be balance responsible and therefore propose that the Testing Tariff for Low Impact Testing (Tariff B) be set to zero.

2.2 TSOs' Proposed Options for High Impact (Tariff A) Testing

The TSOs propose the following option, for High Impact Testing Rates (Tariff A), applicable for 2021, as outlined in Table 1 below.

NOTE: the TSOs have assumed that no provision for the probability of a trip would be made in the Testing Tariff and that any trips are levied automatically through the settlement system. This ensures that UUT which do not trip are not unduly charged through the tariff.

Unit Commitment Imperfection Costs	This is the same as the existing Testing Tariff A i.e. the UUT pays for the additional Imperfection cost of unit commitment as it is determined to be unreliable and may not meet its load profile. The UUT will be dispatched so that no Uninstructed Imbalances should apply since the UUT is paying for additional unit commitment. No SNDs will be levied, except if the unit trips unexpectedly.
Reserve Imperfection Costs	This is the same as the existing Testing Tariff A i.e. the UUT pays for the additional Imperfection cost of providing reserve if it drives the system reserve requirement as the Largest Single Infeed.
System Services Reserve Costs	This is the same as the existing Testing Tariff A i.e. the UUT pays for the additional System Services cost for the reserve paid to units which are providing the additional requirement. This is on the basis that the UUT drives the system reserve requirement as the Largest Single Infeed.
Trip Charge Costs	This proposes that no provision for a probability of a trip would be made in the Testing Tariff and that any trips are levied automatically through the settlement system. This ensures that UUT which do not trip are not unduly charged through the tariff.

Table 1: Summary of Cost Recovery Proposal for High Impact (Tariff A) Testing

In the proposal, the TSOs outlined that it was their opinion that testing tariffs do not cover all of the costs associated with generation units testing. For this reason, the TSOs committed to completing a full review of testing tariffs once a complete dataset of testing within the revised SEM arrangements is available. The TSOs stated that there is still insufficient data from generation units testing, to finalise a comprehensive review, with definitive recommendations for 2021. This is especially the case for the testing of large generation units, which are assigned to Tariff A (e.g. large units returning from outage which are considered high risk). The TSOs committed to reviewing the data when it becomes available.

In the Proposed Testing Tariff Rates 2021 paper[6], the TSOs proposed to make no change to the testing tariffs, which were approved for 2020, apart from adjusting for inflation at a forecast rate of 1.7%.

[6] http://www.soni.ltd.uk/media/documents/Proposed-Testing-Tariff-Rates-2021.pdf

2.2.1 Respondents' Comments

There were two responses to the proposals, from SSE and BGE.

SSE expressed the view that there is incomplete justification and assessment to demonstrate the need for increasing the testing tariffs in 2021. SSE stated that this was similar to the approach taken for increases in GPIs and trip charges in the 2020/21 Other Services Charges (OSC) consultation.

SSE referenced the proposed incentive under PR5 to reduce Imperfection Charges. SSE stated that the incentive mechanism for Imperfections Charges should ideally be isolated from decisions on Testing Tariffs and OSC. SSE outlined that there should be no incentive for the TSO to utilise testing tariffs to offset inefficient dispatch and balancing decisions, or system defects in central market systems.

With regard to the TSOs' opinion that testing tariffs do not cover the full cost impact of testing, SSE stated that there is no evidence of this and asserted that charges to generators have continued to increase since the introduction of I-SEM.

SSE outlined a number of recommended areas of review:

- Whether inflation is an appropriate method for adjusting the cost of testing tariffs or whether there is a more appropriate index/methodology available
- Whether unit commitment costs are actually as high as modelled on the basis of observed generator behaviour (large generators may choose not to sell energy in order to minimise risk, allowing the auction to provide a committed unit for the TSO to re-dispatch)
- Whether other interactions through the Balancing Market (i.e. repayment of starts/no-loads) act to offset some of the costs that the TSO has stated that they are seeing for units under test and whether these mechanisms are appropriate for units that are already being charged for testing

SSE stated that testing charges essentially impose the problem of the TSOs' efficiencies onto generators by levying this additional cost on them. SSE suggests that the starting point should be realistic charges for consumers and then a review of market-based solutions.

SSE expressed their view that the application of trip charges and testing charges is wholly disproportionate. SSE stated that units do not make any revenue during testing but are charged for both trip charges and increased testing charges.

BGE outlined their view that testing tariffs shouldn't be linked to the UUT's registered capacity, which doesn't adequately meet the principle of cost-reflectivity. BGE outlined an approach whereby the relevant tariff is applicable to the level of generation a UUT operates at during testing.

BGE supported the proposed unchanged testing tariff rates for 2021, but requested that in the context of COVID-19, that the inflation rate should be close to flat depending on the scenario.

With regard to any future tariff review, BGE requested that full robust analysis and evidence justifying any change, be included in the consultation. BGE also asked that a considerably longer consultation period beyond the current two weeks is given for any new proposals.

3. TSOs' Recommendation

The TSOs welcome all responses to the proposed Testing Tariffs for 2021.

3.1 Low Impact Testing

The TSOs are not recommending any changes for low impact testing and therefore propose that the Testing Tariff for Low Impact Testing (Tariff B) remain set to zero. Should any UUT trip during low impact testing, the UUT will continue to be automatically levied a trip charge through the automated OSC settlement system.

3.2 High Impact Testing

With regard to SSE's statement that there is incomplete justification and assessment to demonstrate the need to increase the testing tariffs in 2021, the TSOs would like to highlight that there is no proposed evidence-based increase in testing tariffs. The proposed increase in testing tariffs for 2021 is inflationary only. The TSOs stated in the Testing Tariff Proposal, that currently, there is insufficient data to justify any change to testing tariffs. The TSOs will propose an evidence-based change to the tariffs when there is sufficient data available to justify the change.

SSE referenced the proposed incentive under PR5 to reduce Imperfection Charges, requesting that there should not be an incentive for the TSOs to use Testing Tariffs to offset inefficient dispatch and balancing decisions. The TSOs cannot comment on the PR5 proposed incentive as this is the subject of a separate consultation. SSE did not provide any details with regard to their reference to 'inefficient dispatch and balancing decisions'. However, in response to the statement, the TSOs would like to reiterate that testing tariffs exist to ensure that the end-consumer should not be unfairly burdened with the cost of securing the power system during testing. These costs cannot be forecasted in the annual Imperfections submission and are therefore recovered through testing tariffs. Testing tariffs can also act as an incentive for the UUT to complete their testing in an efficient and effective manner, with the outcome of reducing the impact on the cost of securing the power system and thereby reducing costs for the end-consumer.

SSE also referenced the increase in Other System Charges (OSC) for 2020/21. The consultation for OSC is complete, and is not associated with this proposal.

With regard to the TSOs' opinion that Testing Tariffs do not cover the complete cost of testing, SSE stated that they cannot currently see any evidence of this and that charges to generators have continued to increase since the introduction of I-SEM. The TSOs would like to highlight that since the introduction of the revised market arrangements in 2018, there has been a significant drop in the cost of testing tariffs[7]. Testing tariffs were removed for low impact testing and trip charge component was removed from high impact testing charges. As a result, trip charges no longer apply universally, but only to those units which actually trip during testing.

The TSOs welcome the SSE submission of suggested areas of review and are committed to a testing tariff review once a complete dataset is available. The TSOs are of the view that market-based mechanisms for mitigating the cost of testing may be limited, but nonetheless should be investigated, as part of any future comprehensive review. Any potential market-based methodology

[7] https://www.semcommittee.com/sites/semc/files/media-files/SEM-18-027a%20TSOs%20Recommendation%20paper%20on%20I-SEM%20portion%20of%202018%20Testing%20Tariffs.pdf

would have to be flexible for the UUT and for System Operators during real-time dispatch, and feasible within the market systems.

SSE stated that testing charges 'foists the problem of the TSOs' efficiencies onto generators'. In the absence of further detail on this point, the TSOs are unsure as to exactly what SSE was referring to. However the TSOs can confirm that testing tariffs are used to ensure that the end-consumer is not unfairly burdened with the increased cost of securing the power system during testing. The TSOs are of the opinion that this cost should be levied on a causer-pays basis. The charges are not used by the TSOs as a mechanism to impose unnecessary charges, but are a safeguard for the end-consumer, while also acting as an incentive for efficient testing.

High Impact Testing can cause considerable disruption to the operation of an island power system, in terms of ensuring a reliable and secure system for all users. In addition, the nature of generator testing can be variable due to on-site issues, and thus requires a flexible mechanism incorporated into real-time dispatch. Without this real-time flexibility, generator testing would become a prolonged process, with associated increased costs for all users. The current process has proven to provide the flexibility that is required by both the UUT and System Operators, while also protecting the end-consumer.

SSE stated that they find it wholly disproportionate that UUT are exposed to testing charges and trip charges, since units do not make any revenue during testing. The TSOs would like to highlight that with the introduction of the revised market arrangements in 2018, the trip charge cost component was removed from testing tariffs. Trip charges now only apply (via the normal settlement arrangements) when a UUT trips. It is important to highlight that trip charges exist to mitigate the cost impact of securing the power system when a UUT trips. It is not related to the revenue streams of the UUT, and applies on a causer-pays basis regardless of a unit's revenue streams. This ensures that the end-consumer is not burdened with the additional cost triggered by a sudden loss of MWs, when the TSO may have to dispatch generation out-of-merit to secure the power system.

BGE requested a more cost reflective testing tariff that is linked to MW output and not registered capacity. The TSOs acknowledge this point and will consider it in any future, more comprehensive, review of testing tariffs. The TSOs also acknowledge the need for evidence-based proposals, which are clearly explained.

The TSOs agree that a longer consultation period would be required in the event of major changes to the testing tariffs, as requested by BGE.

BGE requested for a revised inflation rate of close to flat depending on scenario. The Proposed Testing Tariff Rate 2021 paper used an inflation rate that was consistent with the rate used for other tariffs (i.e. 1.7%). However, since this proposal and feedback from BGE, the TSOs now recommend a revised tariff rate of 0.55% which takes into account the latest forecast inflation rates. The Central Bank of Ireland and the Office for Budget Responsibility in the UK, have both issued updated economic forecasts in July 2020 (the most recent information available). The calculation of the blended rate of 0.55% is outlined in Table 2. The methodology used for calculating the testing tariffs is as per the I-SEM Testing Tariffs Decision Paper published on 10 May 2018[8].

[8] https://www.semcommittee.com/news-centre/i-sem-portion-2018-testing-tariffs-decision-paper

Source		2021	Blended Rate Methodology	Blended Rate
OBR July 2020	CPI	1.3%	1.3*25%	0.325%
Central Bank July 2020	HICP	0.3%	0.3*75%	0.225%
			Blended Rate:	0.55%

Table 2: Proposed Blended Inflation Rate for 2021

The TSOs now propose the rates for high impact testing outlined in Table 3 below, are applicable in 2021.

	MW	High Impact Testing			
		Reserve System Services Cost €/MWh	Reserve Imperfection Cost €/MWh	Unit Commitment €/MWh	Total Charge €/MWh
GEN <50	50	€ -	€ -	€0.70	€0.70
50 < GEN ≤100	100	€ -	€ -	€2.71	€2.71
100 < GEN ≤ 150	150	€ -	€ -	€3.53	€3.53
150 < GEN ≤ 200	200	€ -	€ -	€3.95	€3.95
200 < GEN ≤ 250	250	€ -	€ -	€4.04	€4.04
250 < GEN ≤ 300	300	€ -	€ -	€4.11	€4.11
300 < GEN ≤ 350	350	€ -	€ -	€4.22	€4.22
350 < GEN ≤ 400	400	€0.05	€0.04	€3.78	€3.88
400 < GEN ≤ 450	450	€0.24	€0.37	€2.72	€3.35
450 < GEN	500	€0.47	€1.09	€2.25	€3.80

Table 3: 2021 Proposed Testing Tariff Cost Components

For the purposes of the 2021 testing tariffs it is assumed that the revised SEM arrangements and OSC will recover any unreliability of the UUT and any imperfections costs being passed through to suppliers, arising as a consequence of UUT behaving unreliably, will be minimised.

The TSOs propose that any UUT which trips, should be automatically levied a trip charge, through the automated OSC settlement system. This ensures that UUT which do not trip are not unduly charged. No SNDs will be applied unless the unit trips.

4. SUMMARY

In summary, the TSOs recommend the following:

1. The TSOs recommend that Testing Tariffs for low impact testing (Tariff B) continue to be set to zero, effective from 1 January 2021 to 31 December 2021.

2. For high impact testing (Tariff A), the TSOs recommend testing tariffs, as per Table 3 above, effective from 1 January 2021 to 31 December 2021.

3. The TSOs may recommend re-introduction of Testing Tariffs for low impact testing (Tariff B) and/or a tripping element for high impact testing (Tariff A) in future years, should material imperfections costs arise in the revised SEM arrangements, as a consequence of UUT behaving unreliably.

4. In addition the TSOs propose that:
    a. Any UUT which trips, should be automatically levied a trip charge, through the automated OSC settlement system
    b. For low impact testing: SNDs would be applied as if the unit was in normal operation
    c. For high impact testing: SNDs will continue to apply if a unit trips unexpectedly.

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RE: Proposed Testing Tariff Rates 2021

15th September 2020

Dear Sir, Madam,

Bord Gáis Energy (**BGE**) welcomes the opportunity to response to the TSOs' consultation on the proposed testing tariff rates for 2021.

One of the principles applicable to the testing tariff methodology is that the relevant testing tariffs should be cost-reflective of the current costs incurred when a unit is under test in the SEM. We believe that this principle of cost-reflectivity could be better achieved. Currently generators are charged based on the tariff directly link to their registered capacity. We do not believe that this adequately meets the principle of cost-reflectivity. We suggest that in place of charging generators testing tariffs based on their registered capacity, they would instead be charged the relevant tariff applicable to the level of generation they operate at during testing periods. For e.g. taking a 400MW unit operating for example at a minimum generation level of 180MW, instead of the tariff applicable to the "400 < GEN ≤ 450" category applying, the tariff applicable to the "150 < GEN ≤ 200" category would apply for the duration of time the unit is operating at 180MW≤200MW. The tariffs at the different output levels between the minimum generation of the unit and its registered capacity should be applied until the unit is back into its full registered capacity category of tariffs. At minimum generation there is little or no threat to the system given that there is already sufficient reserve to allow for the loss of the largest infeed. Reflecting the application of the testing tariff in this linear manner related to linear output would in our view also be fairer for new units that may take some time to reach installed capacity level output during initial commissioning. This proposal is a transparent way of mitigating the potential over-recovery of tariffs and could be deemed more cost-reflective given the level of output would directly translate to accurate estimates of reserve, system service and unit commitment needs. We ask that the TSOs and CRU consider this proposal as a transparent and fairer way of ensuring cost-reflectivity of testing tariffs.

We support the proposed unchanged level of the testing tariffs for 2021. We request however that consideration is given to public sources' forecasts on the appropriate level of inflation that should apply in the context of COVID19, e.g. Central Bank of Ireland and equivalent in Northern Ireland. Initial indications are that inflation in 2021 could be close to flat depending on the scenario.

Regarding the planned review of testing tariffs next year, BGE requests that full robust analysis and evidence justifying any change, and the quantum of change, in next year's consultation is included. Any variances in costs between the difference size generator categories need to be clearly explained and evidenced also. We also ask that a considerably longer consultation period beyond the current two weeks given for annual testing tariff proposals is given – at least six weeks should apply for a wide scale review of the approach and quantum in testing tariffs alluded to in the Consultation.

I hope that you find the above comments and suggestions clear and helpful. Please do not hesitate to contact me should you have any queries thereon.

Yours faithfully,

Julie-Anne Hannon
Regulatory Affairs – Commercial
Bord Gáis Energy

{*By email*}

PROPOSED TESTING TARIFFS 2021

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INTRODUCTION

SSE welcomes the opportunity to comment on *Proposed Testing Tariffs 2021*. For the avoidance of doubt, this is a non-confidential response.

SSE is a large generator and supplier operating circa 2,000MW of generation in the all-island centrally dispatched SEM. This generation undergoes periodic testing to ensure the health and capability of the units. We also note that testing charges is an aspect of the Dispatch and Balancing Costs forecast and recouped via the Imperfections Charges mechanism. This mechanism set these charges very high for the last period. This is something we considered would continue as a trend to reflect the higher costs associated with the operation of the new market amongst other reasons.

SSE RESPONSE

We have provided a high-level response in reflection of the fact that we do not consider that there has been suitable justification for this increase in testing tariffs for 2021. We wish to note the following:

1. There has been incomplete justification and assessment to demonstrate the need to increase the testing tariffs in 2021. This is similar to the approach taken for increases in GPIs and trip charges in the previous Other Services Charges consultation. At that time, and now, we indicated that it is inacceptable to increase the burden on generators without sufficient and robust justification and rationale. This is lacking and therefore, it is inappropriate to propose these increases.

2. Testing charges is one aspect of Dispatch and Balancing Costs under the Imperfections Charges mechanism. We note that there is a proposed incentive under PR5 to reduce Imperfections Charges. The RAs indicate that this proposed incentive would include a process where EirGrid needs to identify specific measures (market-based or otherwise) and then they will be incentivised against delivery of these. We are concerned that these mechanisms do not seem to be fully aligned and that charges levied on generators could be used as a mechanism to offset Dispatch Balancing Costs incurred elsewhere by the TSO. The incentive mechanism for Imperfections Charges should ideally be isolated from decisions on Testing Tariffs and Other System charges, such that there is no incentive for the TSO to use these to offset inefficient dispatch and balancing decisions, or system defects in central market systems.

   The paper states that: "*the TSOs are of the opinion that testing tariffs do not cover all of the costs associated with generation units testing. For this reason, the TSOs are committed to completing a full review of testing tariffs once a complete dataset of testing within the new SEM arrangements is available".* SSE cannot currently see any evidence of this and would note that charges to generators have continued to increase since the introduction of I-SEM. If the TSO is minded to increase the cost recovered from generators from both Other System Charges and Testing Charges, this should be supported by clear

evidence that is ideally independently produced or reviewed. We would highlight a couple of areas that we feel could be useful to review:

- Whether inflation is an appropriate method for adjusting the cost of testing tariffs or whether there is a more appropriate index/methodology available
- Whether unit commitment costs are actually as high as modelled on the basis of observed generator behaviour (large generators may choose not to sell energy in order to minimise risk, allowing the auction to provide a committed unit for the TSO to redispatch)
- Whether other interactions through the Balancing Market (i.e. repayment of starts/no-loads) act to offset some of the costs that the TSO has stated that they are seeing for units under test and whether these mechanisms are appropriate for units that are already being charged for testing

3. We would note that there are other aspects of Imperfections Charges which could be targeted for a more meaningful reduction. Increasing of testing charges essentially foists the problem of EirGrid's efficiencies onto generators by levying this additional cost on us. We consider rather the starting point should be realistic charges for consumers and then review of market-based solutions, as suggested in the PR5 papers, to seek to address the systemic issues associated with the hike in Imperfections Charges over the last financial year, i.e. system defects, cashout reform etc.

4. It appears that trip charges and testing charges will be applied to units that are on test. We consider this is wholly disproportionate. Units do not make any revenue during test, yet they are now being charged for both trip charges and increased testing charges.