Proposed Testing Tariff Rates
2022

13 August 2021

Version 1.0

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 2021 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 introduction 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 SEM Committee Decision in 2020 (SEM-20-070) determined that the TSOs would conduct a full review of the testing tariff methodology, if a complete dataset was available, and report on the outcome before submitting its proposed 2022 testing tariff rates. The TSOs had always intended to complete a full review of the testing tariff methodology, when there was sufficient data on generator testing, under the revised market arrangements. Very limited generator testing took place at the start of the revised market arrangements; however the TSOs now have sufficient generator testing data and have commenced a comprehensive review of testing tariffs. The TSOs plan to issue a public consultation on testing tariff methodology, in Quarter 4 2021, which will review the testing tariff methodology, present options and recommendations for the 2023 testing tariffs, after the 2022 testing tariffs have been approved.

On the basis of that the proposed testing tariff public consultation will fall after the approval of the 2022 testing tariffs, the TSOs propose to make no change to the approved 2021 testing tariffs in setting the 2022 testing tariffs, apart from adjusting for inflation at a forecast rate of 1.95%[4].

[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] Inflation is calculated as a blended NI (25%) CPI and IE (75%) HICP rate from the following sources:
NI - https://obr.uk/efo/economic-and-fiscal-outlook-march-2021/
IE - https://www.centralbank.ie/publication/quarterly-bulletins/quarterly-bulletin-q3-2021

Acronyms

UUT	Unit Under Test
I-SEM	Integrated Single Electricity Market
LSI	Largest Single Infeed
OSC	Other System Charges
RA	Regulatory Authority
SEM	Single Electricity Market
SND	Short Notice Declaration
SONI	System Operator Northern Ireland
TSO	Transmission System Operator
FPN	Final Physical Notification
PN	Physical Notification

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 2022 it is proposed to make no change to the testing tariffs, which were approved for 2021, apart from an adjustment for inflation.

The RAs have requested that the TSOs publish the proposed 2022 Testing Tariff Rates, for comment.

[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 FOR 2022

2.1 TSOs' Proposed Option for Low Impact (Tariff B) Testing

As per the revised SEM arrangements, the TSOs have assumed that the UUT will be balance responsible and therefore propose that the Testing Tariff for Low Impact Testing (Tariff B) continue to be set to zero.

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

The TSOs propose the following option, for High Impact Testing Rates (Tariff A), applicable for 2022, as outlined in Table 1 below.

NOTE: the TSOs have assumed 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, i.*e.* ***the trip element of the testing tariff is removed.***

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

3. TSOs' Recommendation

The TSOs continue to recommend that for low impact (Tariff B) testing no tariff should be applied, and for high impact (Tariff A) testing the arrangements outlined in Table 1 should be applied. The rationale for these recommendations is outlined below.

3.1 Low Impact Testing

For low impact testing (Tariff B) the TSOs will assume that the unit is reliable, will meet the FPNs which it submitted and is not an increased risk of tripping. The TSOs propose that no testing tariffs should be applied to a UUT categorised as low impact.

For low impact testing 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. Also SNDs will be applied as if the unit was in normal operation.

3.2 High Impact Testing

For high impact (Tariff A) testing there are costs, such as unit commitment and reserve costs, which are not paid for by the UUT being balance responsible in the market. If these imperfections costs are not paid for by the UUT, then they would be passed on to suppliers and the end consumer; the TSOs believe that this is an undesirable outcome. Following the introduction of the revised SEM arrangements, it was assumed that the UUT would be balance responsible and the TSOs therefore are not recommending inclusion of a testing charge associated with tripping, at this time. The TSO are recommending that the unit commitment and reserve elements of the high impact testing should be retained for 2022, and are recommending the testing the arrangements outlined in Table 1, should be applied for high impact (Tariff A) testing.

The TSOs had always intended to complete a review of testing tariffs when there was sufficient data on generator testing, under the revised market arrangements. Very limited generator testing took place at the start of the revised market arrangements; however the TSOs now have sufficient generator testing data and have commenced a comprehensive review of testing tariffs. The TSOs plan to issue a public consultation on testing tariff methodology, in Quarter 4 2021, which will present options and recommendations for the 2023 testing tariffs, after the 2022 testing tariffs have been approved.

The TSOs propose the rates for high impact testing outlined in Table 2 below, are applicable in 2022. The methodology used for calculating the testing tariffs is as per the I-SEM Testing Tariffs Decision Paper published on 10 May 2018[6].

	MW	High Impact Testing			
		Reserve System Services Cost €/MWh	Reserve Imperfection Cost €/MWh	Unit Commitment €/MWh	Total Charge €/MWh
GEN <50	50	€ -	€ -	€0.73	€0.73
50 < GEN ≤100	100	€ -	€ -	€2.80	€2.80
100 < GEN ≤ 150	150	€ -	€ -	€3.64	€3.64
150 < GEN ≤ 200	200	€ -	€ -	€4.08	€4.08
200 < GEN ≤ 250	250	€ -	€ -	€4.17	€4.17
250 < GEN ≤ 300	300	€ -	€ -	€4.24	€4.24
300 < GEN ≤ 350	350	€ -	€ -	€4.36	€4.36
350 < GEN ≤ 400	400	€0.05	€0.04	€3.90	€4.00
400 < GEN ≤ 450	450	€0.25	€0.38	€2.81	€3.45
450 < GEN	500	€0.49	€1.12	€2.32	€3.92

Table 2: 2022 Proposed Testing Tariff Cost Components

For the purposes of the 2022 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.

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.

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

4. SUMMARY

In summary, the TSOs propose 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 2022 to 31 December 2022.

2. For high impact testing (Tariff A), the TSOs recommend testing tariffs, as per Table 2 above, effective from 1 January 2022 to 31 December 2022.

3. 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.

4. As noted, the TSOs are in the process of finalising analysis required to support a public consultation on the current testing tariff methodology, to take place in Quarter 4 of 2021, of which the outcome will support the determination of the 2023 testing tariffs.

5. CONTACT

If you have any comments or queries on these proposed Testing Tariffs for 2022 please E-mail: Tariffs@EirGrid.com or Tariffs@soni.ltd.uk by 27 August 2021.