

Proposed Testing Tariff Rates

2020

26th September 2019

Version 1.0



Executive Summary

Testing tariffs are applied to Units Under Test (UUT) in the Single Electricity Market (SEM) on the basis of the MW capacity¹ 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 2019 calendar year, as follows:

1. Rates for High Impact Testing² (Tariff A³): The Unit Commitment and Reserve element of Testing Tariff A remained, but the Tripping element was removed.
2. Testing Tariff for Low Impact Testing (Tariff B) was set to zero.

The TSOs observe that the current testing tariffs, as detailed above, do not seem to cover all the cost associated with generation units testing, under the revised SEM arrangements, in particular for the larger generation units. However there is limited data available for generation units testing since the revised SEM arrangements. Therefore for 2020, the TSOs propose to make no change to the testing tariffs, which were approved for 2019, apart from adjusting for inflation at forecast rate of 1.2%. However the TSOs plan to complete a comprehensive review of testing costs in advance of proposing the 2021 testing tariffs, when more data for UUT in the revised SEM arrangements will be available.

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

Acronyms

| | |
|-------|--------------------------------------|
| UUT | Unit Under Test |
| 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 |
| FPN | Final Physical Notification |
| PN | Physical Notification |

1. INTRODUCTION

The Trading and Settlement Code (Part B⁴) 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 2020 it is proposed to make no change to the testing tariffs, which were approved for 2019.

The RAs have requested that the TSOs publish the proposed 2020 Testing Tariff Rates, for comment.

⁴ <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 2020

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

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 Option for High Impact (Tariff A) Testing

The TSOs propose the following option, for High Impact Testing Rates (Tariff A), applicable for 2020, 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 | <p>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.</p> <p>The UUT will be dispatched so that no Uninstructed Imbalances should apply since the UUT is paying for additional unit commitment.</p> <p>No SNDs will be levied, except if the unit trips unexpectedly.</p> |
|------------------------------------|--|
| Reserve Imperfection Costs | <p>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.</p> |
| System Services Reserve Costs | <p>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.</p> |
| Trip Charge Costs | <p>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.</p> |

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

3. TSOs' Recommendation

The TSOs 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. (Note: The RAs did not approve the TSOs' recommendation, for the 2019/2020 Harmonised Other System Charges, to increase the Trip and SND charges for units with no day ahead position (QEX) back to the 2017/2018 tariff rate⁵.)

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 recommend 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 2020, and are recommending the testing the arrangements outlined in Table 1, should be applied for high impact (Tariff A) testing.

As noted in 3.1 above, regarding the TSOs' recommendation, for the 2019/2020 Harmonised Other System Charges: the TSOs recommended that the Trip and SND charges for units with no day ahead position (QEX) should be increased back up to the 2017/2018 tariff rate. The RAs decided not to approve this increase for the 2019/20 OSC but noted that the RAs will consider the recommendation further, if required, when more data is available and following a full review to be undertaken by the TSOs in advance of the 2020/21 OSC consultation. In parallel the TSOs propose completing a full review of testing tariffs, in advance of proposing the 2021 testing tariffs, as initial data would seem to indicate that the current testing tariffs, do not cover all of the costs associated with generation units testing, under the revised SEM arrangements, in particular for the larger generation units. Currently there is limited data available for generation units testing since the revised SEM arrangements; however more data will be available in advance of the TSOs proposing the 2021 testing tariffs.

⁵ <https://www.semcommittee.com/sites/semc/files/media-files/SEM%20-19-038%20OSC%20decision%20paper%202019-20%20pb1.1.pdf>

The TSOs propose the rates for high impact testing outlined in Table 2 below, are applicable in 2020. The methodology used for calculating the testing tariffs is as per the I-SEM Testing Tariffs Decision Paper published on 10 May 2018⁶.

| | 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 | € - | € - | €2.70 | €2.70 |
| 100 < GEN ≤ 150 | 150 | € - | € - | €3.51 | €3.51 |
| 150 < GEN ≤ 200 | 200 | € - | € - | €3.93 | €3.93 |
| 200 < GEN ≤ 250 | 250 | € - | € - | €4.02 | €4.02 |
| 250 < GEN ≤ 300 | 300 | € - | € - | €4.09 | €4.09 |
| 300 < GEN ≤ 350 | 350 | € - | € - | €4.20 | €4.20 |
| 350 < GEN ≤ 400 | 400 | €0.05 | €0.04 | €3.76 | €3.86 |
| 400 < GEN ≤ 450 | 450 | €0.24 | €0.37 | €2.71 | €3.33 |
| 450 < GEN | 500 | €0.47 | €1.08 | €2.24 | €3.78 |

Table 2: 2020 Proposed Testing Tariff Cost Components

For the purposes of the 2020 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 minimal. However the TSOs may recommend re-introduction of the trip element of Testing Tariffs for 2021, when more data is available, should material imperfections costs arise in the revised SEM arrangements, as a consequence of UUT behaving unreliably.

In addition 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 1st January 2020 to 31st December 2020.
2. For high impact testing (Tariff A), the TSOs recommend testing tariffs, as per Table 2 above, effective from 1st January 2020 to 31st December 2020.
3. The TSOs may recommend re-introduction of Testing Tariffs for low impact testing (Tariff B) and /or a testing 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.

5. CONTACT

If you have any comments or queries on these proposed Testing Tariffs for 2020 please E-mail:

Tariffs@EirGrid.com or Tariffs@soni.ltd.uk by 10th October 2019.