

Proposed Testing Tariff Rates

2021

01 September 2020



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 2020 calendar year, as follows:

1. Rates for High Impact Testing² (Tariff A³): 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 TSOs observe that the current testing tariffs, as detailed above, are not covering all the costs associated with generation units testing, under the revised SEM arrangements, in particular for the larger generation units. The TSOs are committed to completing a review of the testing tariffs when there is sufficient data available of generation units testing in 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 propose 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%.

The TSO will continue to review the generation unit testing data over the coming 12 months with the aim of consulting on recommendations for 2022.

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

The RAs have requested that the TSOs publish the proposed 2021 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 2021

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) 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 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	<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 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. (Note: The RAs have approved the TSOs' recommendation, for the 2020/21 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 did not recommend inclusion of a testing charge associated with tripping. The TSOs continue to recommend that the unit commitment and reserve elements of the high impact testing should be retained for 2021, and are recommending that cost recovery proposal 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 2020/21 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 approved this change and it will apply for 2020/21.

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. At the moment, there is still insufficient data from generation unit 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 (i.e. large units returning from outage which are considered high risk). The TSOs will continue to review the data available with a view to consulting on recommendations for 2022.

⁵ <https://www.semcommittee.com/sites/semc/files/media-files/SEM%20-%202020-047%20-%20Other%20System%20Charges.pdf>

The TSOs propose the rates for high impact testing outlined in Table 2 below, are applicable in 2021. 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	€ -	€ -	€0.71	€0.71
50 < GEN ≤100	100	€ -	€ -	€2.75	€2.75
100 < GEN ≤ 150	150	€ -	€ -	€3.57	€3.57
150 < GEN ≤ 200	200	€ -	€ -	€4.00	€4.00
200 < GEN ≤ 250	250	€ -	€ -	€4.09	€4.09
250 < GEN ≤ 300	300	€ -	€ -	€4.16	€4.16
300 < GEN ≤ 350	350	€ -	€ -	€4.27	€4.27
350 < GEN ≤ 400	400	€0.05	€0.04	€3.82	€3.93
400 < GEN ≤ 450	450	€0.24	€0.38	€2.76	€3.39
450 < GEN	500	€0.48	€1.10	€2.28	€3.84

Table 2: 2021 Proposed Testing Tariff Cost Components

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 2021 to 31 December 2021.
2. For high impact testing (Tariff A), the TSOs recommend testing tariffs, as per Table 2 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 testing element for high impact testing (Tariff A) in future years, should material imperfections costs arise, 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 2021 please E-mail: Tariffs@EirGrid.com or Tariffs@soni.ltd.uk by 15 September 2020.