

Proposed Testing Tariff Rates Paper

Calendar Year

01st January to 31st December 2026

21st August 2025



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ABBREVIATIONS

CPI	Consumer Price Index
PN	Physical Notification
FPN	Final Physical Notification
HICP	Harmonised Index of Consumer Price
OSC	Other System Charges
RA	Regulatory Authority
SEM	Single Electricity Market
SND	Short Notice Declaration
TSO	Transmission System Operator
UUT	Unit Under Test
FASS	Future Arrangements for System Services

1. Executive Summary

Testing tariffs are applied to Units Under Test (UUT) in the Single Electricity Market (SEM) based on the MW capacity of the generator unit. The tariffs are dependent upon the type of test being carried out and the impact on system security. There are several 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 or trips. These charges are specified in the methodology used for calculating the testing tariffs as per the I-SEM Testing Tariffs Decision Paper published on 10 May 2018¹ and complies with section F.13 of the Trading and Settlement Code (Part B²).

In this year's annual tariff consultation for calendar year 2026 the TSOs are proposing to:

- Adjust the charge rate of each component deemed relative to the testing tariff based on a detailed analysis of costs incurred during 2025 testing as per below.

	MW	High Impact Testing			
		Reserve System Services Cost	Reserve Imperfection Cost	Unit Commitment	Total Charge
		€/MWh	€/MWh	€/MWh	€/MWh
GEN <50	50	€ -	€ -	€1.21	€1.21
50 < GEN ≤100	100	€ -	€ -	€4.69	€4.69
100 < GEN ≤ 150	150	€ -	€ -	€6.09	€6.09
150 < GEN ≤ 200	200	€ -	€ -	€6.82	€6.82
200 < GEN ≤ 250	250	€ -	€ -	€6.99	€6.99
250 < GEN ≤ 300	300	€ -	€ -	€7.11	€7.11
300 < GEN ≤ 350	350	€ -	€ -	€7.11	€7.11
350 < GEN ≤ 400	400	€ -	€ -	€7.11	€7.11
400 < GEN ≤ 450	450	€ -	€ -	€7.11	€7.11
450 < GEN	500	€ -	€ -	€7.11	€7.11

- Keep at zero for Low Impact Testing, which was introduced as part of the revised SEM arrangements in 2018.

The TSOs welcome comments from industry on these proposals.

¹ <https://www.semcommittee.com/news-centre/i-sem-portion-2018-testing-tariffs-decision-paper>

² <https://www.sem-o.com/rules-and-modifications/balancing-market-modifications/market-rules/>

2. Introduction

The testing tariff is levied on the generator unit that are under test and are considered an Imperfection Charge component. If these imperfections costs are not paid for by the UUT, then they would be passed on to suppliers and the end consumer, which the TSOs believe is an undesirable outcome. The Trading and Settlement Code (Part B³) section F.13 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. There has been ongoing engagement between TSOs and the RAs reviewing the testing tariff.

The main objectives of the testing tariff review are:

- Ensure the requirements under section F.13 of the Trading and Settlement Code are met
- Provide a steady charge signal so participants can forecast costs ahead of time
- Promote active testing to ensure participant reliability
- Ensure costs are appropriately allocated

Generator testing is co-ordinated by the TSO in conjunction with the relevant Control Centre. Test profiles are submitted to the TSO in advance of the intended testing date for review and approval, which includes determining if the testing is deemed High Impact or Low Impact, per the following definitions:

High Impact testing (Significant Test, previously referred to as Tariff A) Operational Test with a total duration equal to or greater than 6 hours, or where the Active Energy produced during the total duration of the test is equal to or greater than:

- (i) 3 times the Active Energy which would be produced by the Test Proposer's Plant during 1 hour of operation at the Plant's Registered Capacity; or
- (ii) 500 MWh. The impact of the UUT is an increase in the costs associated with maintaining system security.

Low impact testing (Minor Test, previously referred to as Tariff B) Operational Test with a total energy output of less than:

- (i) 3 times the Active Energy which would be produced by the Test Proposer's Plant during 1 hour of operation at the Plant's Registered Capacity; or
- (ii) 500 MWh. The impact of the UUT is an increase in the costs associated with maintaining system security.

³ <https://www.sem-o.com/rules-and-modifications/balancing-market-modifications/market-rules/>

High Impact testing carries additional risk and is typically associated with a new or recommissioned generators, including those that have made changes to controller software.

If the test profile is approved by the TSO, PNs with corresponding unit under test flags reflecting the approved profile are submitted by the generator wishing to test. If the tests are deemed to be High Impact, formal instruction is sent by System Operations Ireland or Northern Ireland to the Market Operator so that the CTEST charge can be applied. The Control Centre then issues Dispatch Instructions to the generator to reflect the submitted profile. This process is detailed further in BP_SO_12.1 Unit Testing⁴.

When scheduling generation for a day in which a generator wishes to carry out a High Impact Test, the Scheduler will initially carry out a market run that takes no account of the approved testing. This identifies the most economical generation schedule that meets the security criteria of the power system. The approved testing is then incorporated into the final schedule, and space is made for the additional power by decrementing the most expensive participant(s) without decommitting a unit. High Impact testing is scheduled in this manner to ensure system security is maintained due to the significant risk of the testing not proceeding to plan, due to either the unit not performing as expected or the testing being deferred at short notice.

All unit testing, regardless of whether it is Low Impact or High Impact, can result in an imperfections cost, as units which have cleared in the market are dispatched away from their market position in order to accommodate the additional power on the system, ultimately increasing the cost of electricity for the end consumer. This cost is primarily comprised of CDISCOUNT charges, as there is an excess of energy provided by the unit under test to what has been cleared in the market. Fixed Cost Payments or Charges do not contribute significantly to the imperfections cost associated with unit testing in the way that they are anticipated to be implemented in 2026, as units which have cleared in the market are not de-committed entirely, and additional units are rarely committed, to accommodate testing.

Historically, additional units were committed more frequently to increase system security when high-power testing was being carried out, particularly if the unit under test would be the Largest Single Infeed to the system. However, the system now typically has an abundance of reserve, and so additional units are rarely committed to accommodate testing. When the Future Arrangement for System Service (FASS) comes into effect, the TSO will need to procure additional reserve from the market, including potentially needing to commit an additional unit for services such as ramping reserve, which will carry additional cost.

It is important to the TSOs that we have a robust, reliable generation fleet, and unit testing is key to ensuring this. As such, any tariff regime must be designed so that testing is a forecastable and reasonable cost for generators, while not putting undue cost on the end consumer. In order to ensure the predictability of testing costs, it is the intention of the TSOs to have no link between the imbalance price and testing charge. Also, in acknowledgement of the mutually beneficial

⁴ https://www.sem-o.com/sites/semo/files/documents/general-publications/BP_SO_12.1_Unit_Testing.pdf

nature of unit testing, it is the intention of the TSOs to only recover a portion of the actual cost associated with accommodating unit testing, as will be explained further in this paper.

3. Review

As noted in the Testing Tariff Rates Consultation Paper for Calendar Year 1st January to 31st December 2025⁵, the testing tariff has been under review. The proposed revised methodology will be discussed in this paper. This section will provide a brief review of the existing methodology.

The table below gives a breakdown of the cost recovery components for High Impact testing. Low Impact testing did not have costs recovered in this period, i.e. the tariff was set to zero.

Unit Commitment/Dispatch Imperfection Costs	<p>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	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	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	There is no provision for a probability of a trip in the Testing Tariff and it is assumed 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 for High Impact Testing

For 2026 it is anticipated that Unit Commitment Imperfection Costs will be the only component of these four that contributes to the costs associated with a UUT. While additional units typically are not committed to facilitate testing, this component also includes the CDISCOUNT costs associated with decrementing units that have cleared in the market in order to accommodate the additional power on the system associated with the UUT.

Reserve Imperfection Costs and System Services Reserve Costs are not anticipated to be incurred in 2026, with the current DS3 arrangements. The system generally has an abundance of reserve, and so additional units are not committed for the provision of reserve to facilitate testing. It is proposed to maintain these cost components but to set its rate at €0/MWh for 2026.

With regards to Trip Charge Costs, the TSOs have not included any probability of a trip in the Testing Tariff and assume that any trips are levied automatically through the settlement system.

⁵ <https://consult.soni.ltd.uk/consultation/proposed-testing-tariff-rates-paper-calendar-year-1st-january-31st-december-2025>

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.

The TSO has carried out extensive analysis of the imperfections costs associated with UUTs for the first 6 months of the 2025 calendar year. This analysis has indicated that this cost is significantly higher than the monies recovered from the CTEST charge.

The three primary components of imperfections costs are CPREMIUM, CDISCOUNT and CFC. CPREMIUM is an imperfections top-up payment for incrementing a unit above its market position for instances where the incremental price is greater than the imbalance price. Unit testing largely involves additional power being supplied onto the power system outside of what the market has cleared, and therefore it is not considered likely that a CPREMIUM cost will be incurred in order to facilitate testing in 2026, in the context of the current system service arrangements. CDISCOUNT is an imperfections discount payment for decrementing a unit below its market position for instances where the decremental price is less than the imbalance price. This is deemed the primary imperfections cost associated with testing for 2026. CFC relates to fixed cost payments/charges to generators for being called upon when they don't have a market position or not being called upon when they do have a market position. Given testing is scheduled such that it does not have an impact on the commitment of units, it was deemed that CFC imperfection costs should not be factored into the determination of the testing tariff rate for 2026.

4. Proposed Testing Tariff Rates for 2026

Generation schedules are determined based on an optimisation software package that determines an overall least cost solution that satisfies all system security requirements simultaneously. Decremental actions might be required to resolve multiple issues simultaneously and it is impossible to identify single decremental actions and exclusively allocate these actions to satisfying testing requirements.

We have considered two opposing scenarios in our analysis to determine the actual cost of testing, over a 6-month period:

Scenario 1: Minimum Costs

In this scenario, CDISCOUNT was calculated using the cheapest decremental actions that equated to the energy volume of a testing profile. It is the TSOs view that the majority of these actions are required to satisfy system security needs, and that more expensive actions over and above these were required to facilitate the testing.

Scenario 2: Maximum Costs

In this scenario, CDISCOUNT was calculated for the most expensive decremental actions equating to the energy volume of the testing profile. It is the TSOs view that we cannot fully link this cost

to the test, as some system security actions linked to transmission restrictions could form part of these higher costs, and are not related to the testing.

The following chart demonstrates the discrepancy between CTEST recovery and CDISCOUNT costs for the two scenarios.

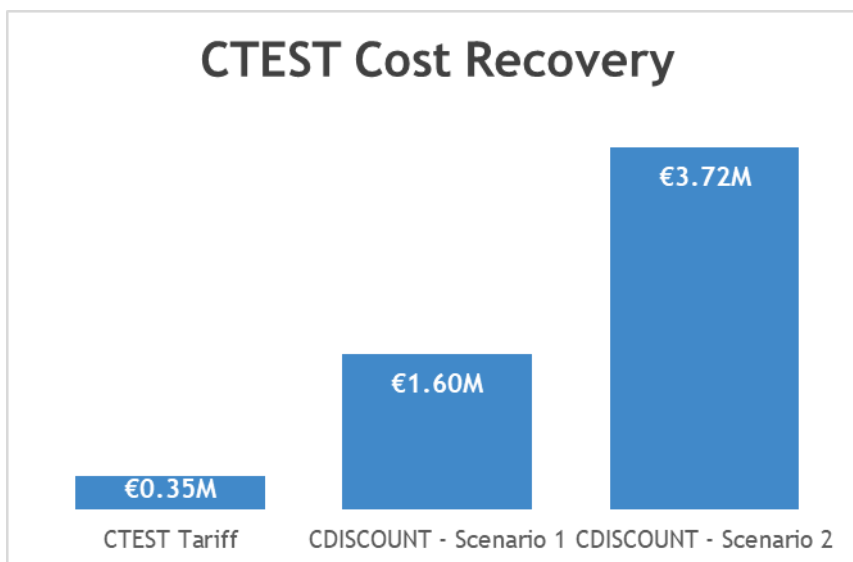


Figure 1: CTEST Cost Recovery vs CDISCOUNT for Scenario 1 and 2

Based on the 2025 analysis, it has been determined that the CTEST tariff has recouped ~22% of the Scenario 1 costs and ~9% of the Scenario 2 costs.

In the review period, the TSO's also investigated the cost recovery of the CTEST tariff for each of the participant capacity ranges applicable to the current testing tariff charge structure. Following this review, it was determined that the majority of the 2025 testing data related to units in the 250 - 300 MW size range. The chart below shows the number of trading periods with testing data for units of varying size.

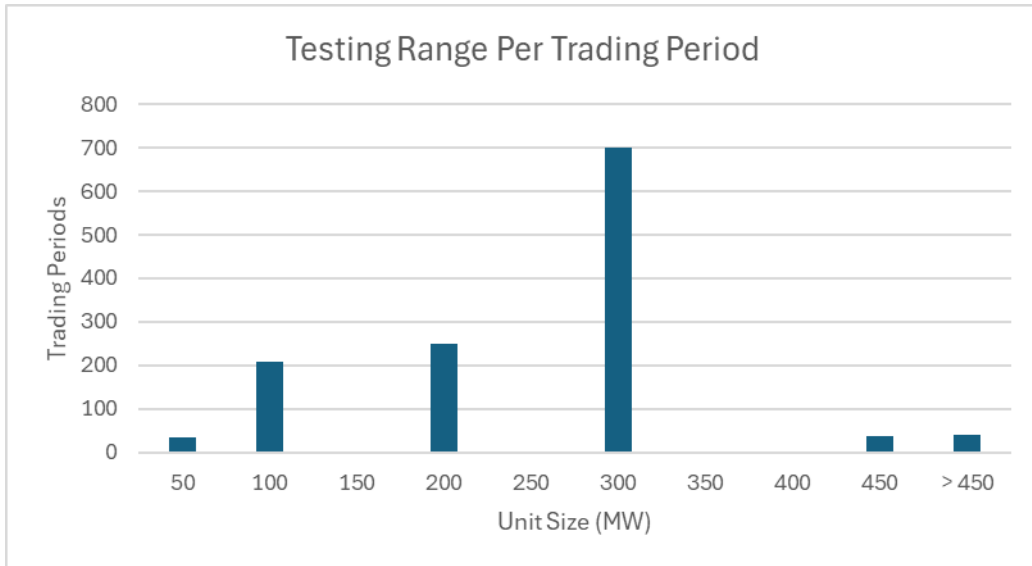


Figure 2: Trading Periods of testing data for units of varying size

Similarly, looking at the same dataset from an energy perspective, the majority of energy relating to tests was for units in the 250 - 300 MW size range.

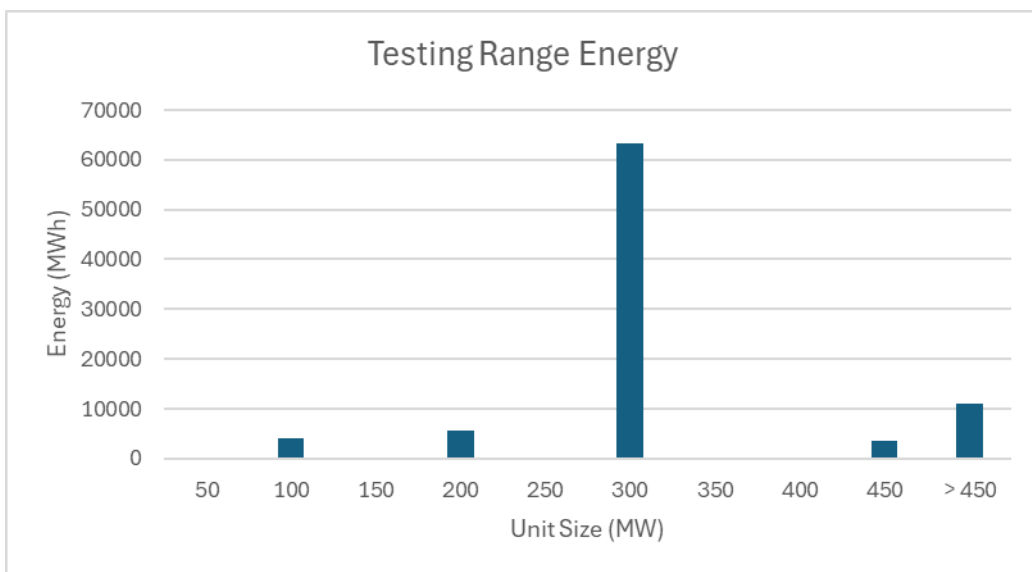


Figure 3: Testing energy for units of varying size

When looking at the CTEST cost recovery within these generation ranges we also see a disproportionate trend as displayed below

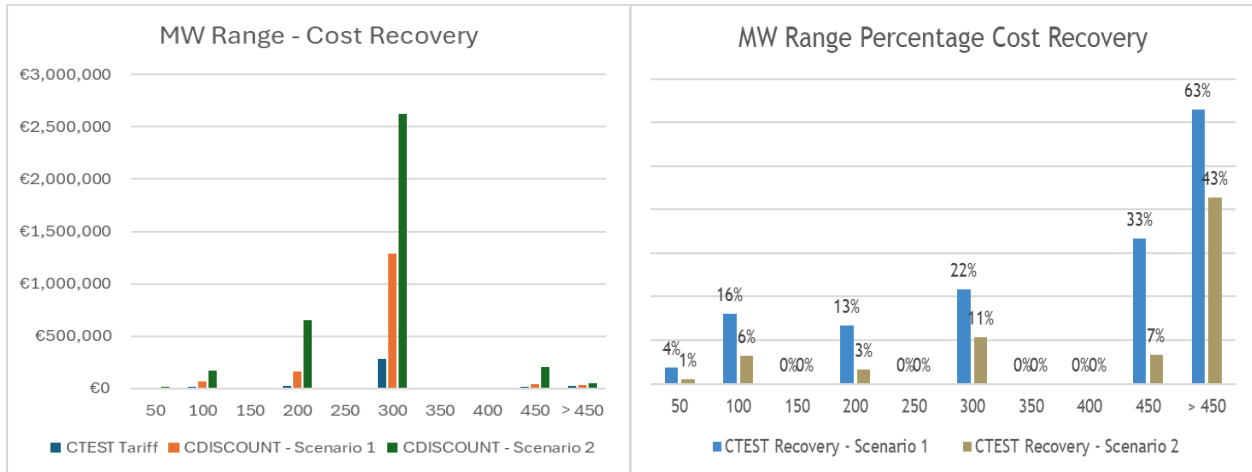


Figure 4: Participant Range Cost Recovery

As per figure 4 above it can be seen that data in relation to the 250 - 300 MW capacity range relates to the overall average cost recovery figures. As this was the largest dataset available, it was deemed that this was the only reliable source of data and as a result formed the primary basis of our analysis.

4.1. TSOs' Proposed Option for High Impact Testing

The proposed 2026 tariff change is based on a targeted recovery of 35% of the calculated cost of testing, using the minimum cost model of Scenario 1 and the setting of all charges associated with increased reserve requirements to €0/MWh. The rationale of choosing a low target of recovery is to avoid over-recovery of testing costs by the TSOs, ensuring it is not made financially prohibitive to carry out testing, while redressing the disproportionate amount currently being paid by suppliers and ultimately end electricity users.

Given the range of data available to the TSO's following conclusion of the 2025 review of CTEST charges it was deemed that there was only sufficient data available for participants in the capacity range of 250 - 300 MW to make any determination in relation to a new testing tariff rate for 2026. To recover 35% of the 2025 Scenario 1 Imperfections Costs in this capacity range the current tariff of €4.70 per MWh would need to have been increased by 1.51 times to €7.11.

For all participants in capacity ranges above 250 MW - 300 MW, it is deemed that there is increased exposure to Imperfections Costs in the form of CDISCOUNT payments as testing profiles of above this 300 MW cap will be facilitated and incur higher decremental cost actions by the TSO to facilitate the test. In the absence of suitable data however, the TSO's initially propose to set a fixed testing tariff rate of €7.11 for all participants in the capacity range 250 MW and above for 2026.

For all participants in capacity ranges below 250 MW, it is deemed that there is reduced exposure to Imperfections Costs in the form of CDISCOUNT payments as testing profiles of below this 250 MW cap can only be facilitated. For these participants, the TSO's propose to maintain the current

cost structure and apply 1.51 times increment in the existing rates aligned with the increment of the 250-300 MW tariff.

The TSO's will continue gathering this analysis over a longer time period and review the appropriateness of the testing tariff rates in each of the participant capacity ranges which will be determined when a suitable amount of data is available.

	MW	High Impact Testing			
		Reserve System Services Cost €/MWh	Reserve Imperfection Cost €/MWh	Unit Commitment €/MWh	Total Charge €/MWh
GEN <50	50	€ -	€ -	€0.80	€0.80
50 < GEN ≤100	100	€ -	€ -	€3.10	€3.10
100 < GEN ≤ 150	150	€ -	€ -	€4.03	€4.03
150 < GEN ≤ 200	200	€ -	€ -	€4.51	€4.51
200 < GEN ≤ 250	250	€ -	€ -	€4.62	€4.62
250 < GEN ≤ 300	300	€ -	€ -	€4.70	€4.70
300 < GEN ≤ 350	350	€ -	€ -	€4.82	€4.82
350 < GEN ≤ 400	400	€0.06	€0.05	€4.32	€4.43
400 < GEN ≤ 450	450	€0.28	€0.42	€3.11	€3.81
450 < GEN	500	€0.54	€1.24	€2.57	€4.35

Table 2: 2025 CTEST rates for High Impact Testing

	MW	High Impact Testing				Rate of Increase	Objective
		Reserve System Services Cost €/MWh	Reserve Imperfection Cost €/MWh	Unit Commitment €/MWh	Total Charge €/MWh		
GEN <50	50	€ -	€ -	€1.21	€1.21	1.51	
50 < GEN ≤100	100	€ -	€ -	€4.69	€4.69	1.51	
100 < GEN ≤ 150	150	€ -	€ -	€6.09	€6.09	1.51	
150 < GEN ≤ 200	200	€ -	€ -	€6.82	€6.82	1.51	
200 < GEN ≤ 250	250	€ -	€ -	€6.99	€6.99	1.51	
250 < GEN ≤ 300	300	€ -	€ -	€7.11	€7.11	1.51	35% Recovery of Scenario 1
300 < GEN ≤ 350	350	€ -	€ -	€7.11	€7.11	1.48	
350 < GEN ≤ 400	400	€ -	€ -	€7.11	€7.11	1.60	
400 < GEN ≤ 450	450	€ -	€ -	€7.11	€7.11	1.87	
450 < GEN	500	€ -	€ -	€7.11	€7.11	1.63	

Table 3: Proposed Testing Charge for High Impact Testing

4.2. TSOs' Proposed Option for Low Impact Testing

The TSOs propose no change to the current approach for Low Impact Testing, i.e. no testing charge will be applied.

5. TSOs Recommendation

The TSOs continue to recommend that for low impact testing no tariff should be applied, and for high impact testing the arrangements outlined in Table 3 should be applied. The rationale for these recommendations is outlined below.

5.1. Low Impact Testing

For low impact testing the TSOs will assume that the unit is reliable, will meet the Final Physical Notification (FPNs) which it submitted and is not at increased risk of tripping. The TSOs propose that any UUT which trips should be automatically levied a trip charge through the automated Other System Charges (OSC) settlement system. This ensures that UUT, which do not trip are not unduly charged. Short Notice Declaration (SND) will be applied as if the unit was in normal operation. This is to promote increased participant reliability by facilitating short duration low impact tests on the system.

The TSOs plan to include low impact tests in their analysis of Imperfections Costs Implications and continually review the appropriateness of this approach.

5.2. High Impact Testing

For high impact testing there are costs, such as decrementing other units away from their market position, which are not paid for by the UUT being balance responsible in the market.

The TSOs propose the rates for high impact testing outlined in Table 4 below, are applicable in 2026.

	MW	High Impact Testing			
		Reserve System Services Cost	Reserve Imperfection Cost	Unit Commitment	Total Charge
		€/MWh	€/MWh	€/MWh	€/MWh
GEN <50	50	€ -	€ -	€1.21	€1.21
50 < GEN ≤100	100	€ -	€ -	€4.69	€4.69
100 < GEN ≤ 150	150	€ -	€ -	€6.09	€6.09
150 < GEN ≤ 200	200	€ -	€ -	€6.82	€6.82
200 < GEN ≤ 250	250	€ -	€ -	€6.99	€6.99
250 < GEN ≤ 300	300	€ -	€ -	€7.11	€7.11
300 < GEN ≤ 350	350	€ -	€ -	€7.11	€7.11
350 < GEN ≤ 400	400	€ -	€ -	€7.11	€7.11
400 < GEN ≤ 450	450	€ -	€ -	€7.11	€7.11
450 < GEN	500	€ -	€ -	€7.11	€7.11

Table 4: 2026 Proposed Testing Tariff Cost Components

6. Summary

In summary, the TSOs propose the following:

1. The TSOs recommend Testing Tariffs for low impact testing continue to be set to zero, effective from 1 January 2026 to 31 December 2026;
2. The TSOs recommend Testing Tariffs for high impact testing as captured in Table 4 above, effective from 1 January 2026 to 31 December 2026;
3. Retain TSOs proposal 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 should be applied as if the unit was in normal operation;
 - c. For high impact testing: SNDs will continue to apply if a unit trip unexpectedly.

The TSOs will continue to engage with the RAs throughout its comprehensive review of Testing Tariff methodology, ultimately consulting on the outcome of this review.

7. Next Steps

Comments on this consultation paper are invited from interested parties. Preferably these should be aligned and referenced with the relevant sections and sub-sections of this document. If confidentiality is required, this should be made explicit in the response, otherwise the submissions will be published on the TSOs' websites⁶.

Please note that, in any event, all responses will be provided to the RAs.

- The TSOs will consider all comments received on the consultation paper and make recommendations to the RAs based on these,
- The RAs may approve/reject the recommendations proposed by the TSOs considering the responses received, and
- The TSOs will implement in accordance with the regulatory decision.

The closing date for responses is 5pm on 19th September 2025.

If you have any comments or queries on these proposed Testing Tariffs for 2026, please respond via the Consultation Portal.

⁶ www.eirgrid.com and www.soni.ltd.uk