

Proposed Testing Tariff Rates Consultation

2017

15 September 2016



EXECUTIVE SUMMARY

Testing tariffs are applied to units under test in the Single Electricity Market (SEM) on the basis of the registered capacity of the generator unit. The tariffs are dependent upon the type of test being carried out and the risk 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 Generator Unit Under Test (GUUT) has on unit commitment decisions, and the costs incurred when a units output drops very quickly.

This paper sets out the proposed amounts for Tariff A and Tariff B for 2017 (up to the earlier of 31st December 2017 or I-SEM go live) accompanied by relevant justification and background. Comparisons are made between the rates calculated for 2016. The arrangements and corresponding values for the new I-SEM will be proposed separately in 2017 and are not within the scope of this consultation.

In this Testing Tariff Consultation we are proposing to:

- decrease the rates for Testing Tariff A for the period 1st January to the earlier of 31st December 2017 or I-SEM go live;
- slightly increase the rates for Testing Tariff B for the period 1st January to the earlier of 31st December 2017 or I-SEM go live; and
- seek feedback from industry on whether to remove the application of Short Notice Declaration (SND) charges to Generator Units Under Test or to keep the current process unchanged.

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1.0 INTRODUCTION

Testing tariffs are applied to all generator units that may be granted Under Test status in SEM. Paragraph 5.175 of the Single Electricity Market (SEM) Trading and Settlement Code (version 18.0) requires the System Operators to make a report to the Regulatory Authorities (RAs) at least 4 months before the start of the Year¹ proposing values for the testing tariffs Year.

The SEM Testing Tariffs Recommendations Paper², published in November 2011, set out the proposal for the application of two testing tariffs to Generator Unit under Test (GUUT) dependent upon the type of test being carried out and the risk to system security. The paper reviewed the methodology and background for the costs arising from GUUT when there is an increase in in system reserve requirement (high risk) and no increase in system reserve requirement (lower risk). The two types of tariffs considered in the paper were Tariff A and Tariff B.

Tariff A is applicable when new units are being commissioned on to the power system for the first time and when existing units require testing when returning from outages. In these cases the generator will carry out a range of tests to demonstrate Grid Code compliance to the System Operator. The impact of the GUUT is an increase in the costs associated with maintaining system security.

Tariff B covers the costs of when a unit is in the latter stages of commissioning or undergoing general testing. In this case the unit is deemed to be reasonably reliable and normal reserve requirements apply³.

This consultation paper presents the TSOs proposed Testing Tariff rates to the RAs for the period 1st January to the earlier of 31st December 2017 or I-SEM go live. The Regulatory Authorities have requested that the TSOs consult on these proposed rates.

¹ "Year" defined as per Trading and Settlement Code (Version 17.0) glossary: "means a period commencing at 00:00h on 1 January and ending at 24:00h on the next occurring 31 December.

² SEM Testing Tariff Recommendations Paper November 2011 sets out the methodology for calculating the cost components attributable to generator units under test. <https://www.semcommittee.com/sites/semcommittee.com/files/media-files/SEM-12-014b%20Testing%20Tariff%20Recommendations%20Paper.pdf>

³ Operating reserve requirements are set out in: http://www.eirgridgroup.com/site-files/library/EirGrid/OperationalConstraintsUpdateVersion2_40_July_2016.pdf and are updated when required

2.0 REQUEST FOR COMMENTS

Comments are invited from interested parties on this consultation paper and should be aligned with the sections and sub-sections of this document. This consultation relates to the revision of the Testing Tariffs and the application of Short Notice Declarations only, and not the underlying methodology approved in SEM-12-014b. Comments should be submitted by email to tariffs@eirgrid.com or tariffs@soni.ltd.uk. If confidentiality is required, this should be made explicit in the response as the comments will be published on our websites⁴. Please note that, in any event, all responses will be provided to the RAs.

The closing date for responses is 5pm on Thursday 13th October 2016.

The steps following the closing date are as follows:

- The TSOs will consider the comments received on the consultation paper and make recommendations to the RAs based on these;
- The RAs will approve/reject the recommendations proposed in light of the responses received; and
- The TSOs will implement any changes and tariffs in accordance with the RAs decision paper.

⁴ www.eirgridgroup.com and www.soni.ltd.uk

3.0 GENERATOR TESTING TARIFFS

3.1 PURPOSE OF GENERATOR TESTING

As stated in the SEM Testing Tariffs Recommendations Paper⁵, published in 2011, testing of a new generator unit or of an existing generator unit returning from major overhaul is required by the relevant TSO in advance of the plant becoming fully operational. During such testing the generator will be classified as a GUUT in the SEM. A unit may also request with the TSO to be classified as a GUUT in SEM to carry out their own testing, for example for maintenance works.

GUUT status in the SEM has a number of advantages for the generator. These include the flexibility to nominate its output and conduct unit tests while being exempt from the application of short notice declaration (the exemption from short notice declarations only applicable if the unit follows its agreed load profile) and trip charges.

Testing tariffs are applied on a €/MWh basis to units that have been granted GUUT status in the SEM. The testing tariff applied is determined on the basis of a generator unit's registered capacity. Typically units with a larger registered capacity pay a higher testing tariff on all the MWh the units generate. This is considered reflective of the higher system risk associated with the sudden loss of a large generator and their impact on unit commitment decisions.

Under the current Trading & Settlement Code Version 18.0, testing tariffs may be applied to Generator Units and Interconnector Error Units. The units that are exempt are Autonomous Generator Units, Pumped Storage Units, Demand Side Units, Interconnector Units and Interconnector Residual Capacity Units.

Testing tariffs follow the following principles:

1. **Efficient Testing** - testing should be carried out in an efficient and prompt manner.
2. **Cost Reflectivity** – where charges are imposed they should be proportionate and cost reflective. Due consideration has been given to making the proposed testing tariffs as cost reflective as possible.
3. **Positive Incentives** – the two different testing tariffs provide a clear financial incentive to units under test to progress through testing promptly.

3.1.1 COST OF TESTING

The costs to the power system incurred that may be attributed to the GUUT are highly volatile and variable. As such, generators pay for the costs of testing based on an agreed schedule of charges. The testing tariffs have been set at a level that should, on average, recover the additional costs imposed on the power system during generator testing. It should be noted that zero provision has been made for the net contribution of generator testing charges to the forecast imperfections revenue requirement as

⁵ SEM Testing Tariff Recommendations Paper November 2011 sets out the methodology for calculating the cost components attributable to generator units under test. <https://www.semcommittee.com/sites/semcommittee.com/files/media-files/SEM-12-014b%20Testing%20Tariff%20Recommendations%20Paper.pdf>

the costs of testing are assumed to be recovered through the testing tariffs. A GUUT leads to increased system operating costs for several reasons.

- There may be a need to commit extra units to ensure a rapid response to changes from the GUUT's scheduled output and to ensure that the system would remain within normal security standards following the loss of the GUUT. This leads to additional constraint costs, known as Dispatch Balancing Costs (DBC) in the SEM.
- As the GUUT typically poses a higher risk of tripping, additional operating reserve will be required to ensure that system security is not compromised (e.g. 100% or 90% of largest single infeed).
- Potential increase to the overall reserve requirement if the testing unit's output increases the existing reserve requirement on the system.

3.1.2 GENERATOR TESTING

To ensure system security, the TSO divides testing into phases according to the reliability of the GUUT. There are three phases of testing that a unit undergoes:

- **Phase 1 Test Criteria** - In this phase, the unit is considered to be highly unreliable and it is necessary to have sufficient system reserve on line to cover 100% of the MW produced by the generator under test.
- **Phase 2 Test Criteria** - The unit is assumed to be more reliable than in Phase 1 but not as reliable as a unit in normal operation. Sufficient system reserve to cover 90% of the MW produced by the generator under test will be maintained.
- **Phase 3 Test Criteria** - At this stage of testing the unit is deemed to be reasonably reliable and normal reserve rules will apply. However, any tripping or unreliable behaviour or known reliability problems occurring during Phase 3 testing may require a restart of Phase 2 with the appropriate operating conditions being restored. Typically, Phase 3 testing will apply to a GUUT during latter stages of commissioning and other general testing on an ongoing basis.

Tariff A covers the system operator cost of higher risk testing, which is typically Phase 1 and 2 testing. Tariff B covers the costs when a unit enters Phase 3 of testing, either upon completing Phases 1 and 2 of testing or when an existing operational unit is granted GUUT status in SEM.

3.2 ASSUMPTIONS

The testing tariff studies and calculations for 2017 are underpinned by the following assumptions:

- The current largest single infeed connected to the transmission system on the island of Ireland is 504 MW. It should however be noted that the actual largest single infeed will vary depending on system dispatch.

- In the base case, the level of reserve carried, in normal operation, is reflective of the reserve guidelines being implemented at the time the studies and calculations were carried out (75% of the largest single infeed for Primary Operating Reserve (POR) and Secondary Operating Reserve (SOR)).
- The reserve payment rates are correct at the time of writing this paper in accordance with the DS3 System Services Interim Tariff Rates 2016/2017⁶.
- The modelling is performed using the Plexos modelling tool which uses the Regulatory Authorities' validated generator dataset to represent the generators in the SEM, in combination with assumptions developed to determine the annual DBC forecast⁷. The transmission system is not modelled.
- The cost components⁸ associated with Testing Tariff A are:
 - additional reserve constraint cost;
 - increased cost of operational reserve
 - additional run hours, and
 - The cost of sudden output loss of units under phase 1 and phase 2 of testing (cost of interconnector trip is not considered).
- The only cost component associated with this Testing Tariff B is the cost of tripping of units under phase 3 testing.
- Interconnector flows are assumed not to be affected by the testing unit.

3.3 PROPOSED TESTING TARIFFS

Testing tariffs (A and B) which are applied to GUUT in the SEM have been analysed for 1st January to the earlier of 31st December 2017 or I-SEM go live and the results are discussed below.

3.3.1 TESTING TARIFF A

This testing tariff is intended to cover the additional costs to the power system of a GUUT. Tariff A is used in scenarios where additional system reserve is required and there is a high risk of tripping of the generator. This tariff is applied to the commissioning phases of a new unit and units coming back from a significant outage, which are deemed at a high risk of tripping or not following the load profile. The costs associated with this type of testing are the increased reserve, additional reserve constraint costs, increased reserve premium, additional run hours, and costs of tripping. Historical analysis carried out on previously commissioned generators showed that a generator will typically export 30% of its combined

⁶ Available from: <http://www.eirgridgroup.com/site-files/library/EirGrid/DS3-System-Services-Interim-Tariffs-FINAL.pdf>

⁷ DBC forecast assumption as set out in Imperfections Charges for October 2016 – September 2017; SEM-16-031 <https://www.semcommittee.com/sites/semcommittee.com/files/media-files/SEM-16-031%20Imperfections%20Charge%202016-17%20and%20Incentive%20Outturn%202014-15%20Consultation%20Paper.pdf>

⁸ SEM Testing Tariff Recommendations Paper November 2011 sets out the methodology for calculating the cost components attributable to generator units under test. <https://www.semcommittee.com/sites/semcommittee.com/files/media-files/SEM-12-014b%20Testing%20Tariff%20Recommendations%20Paper.pdf>

phase 1 and phase 2 output while in phase 1 of testing. Therefore, when summing the cost components calculated for phase 1 and phase 2 they were given a weighting of 0.3 and 0.7 respectively.

Table 1 sets out testing tariff A schedule for 2017 compared with the schedule for 2016:

| Tariff A | | 2017 | 2016 | Difference |
|------------------|-----|--------|---------|------------|
| Generator Output | MW | Charge | Charge | % |
| GEN <50 | 50 | € 6.09 | € 9.01 | -32% |
| 50 < GEN ≤100 | 100 | € 4.74 | € 7.76 | -39% |
| 100 < GEN ≤ 150 | 150 | € 5.17 | € 7.82 | -34% |
| 150 < GEN ≤ 200 | 200 | € 5.58 | € 7.27 | -23% |
| 200 < GEN ≤ 250 | 250 | € 5.99 | € 7.59 | -21% |
| 250 < GEN ≤ 300 | 300 | € 6.34 | € 7.80 | -19% |
| 300 < GEN ≤ 350 | 350 | € 6.25 | € 8.16 | -23% |
| 350 < GEN ≤ 400 | 400 | € 6.00 | € 8.10 | -26% |
| 400 < GEN ≤ 450 | 450 | € 6.93 | € 9.41 | -26% |
| 450 < GEN | 500 | € 9.36 | € 12.06 | -22% |

Table 1: Testing Tariff A schedule results and comparison

Testing tariff A has decreased from the previous period. The key influencing factors contributing to these changes are set out as follows.

3.3.1.1 INCREASED RESERVE

When the output of the GUUT exceeds the normal operating reserve requirement, the TSOs will increase POR and SOR for system security.

Testing tariffs in the SEM are applied on the basis of the registered capacity of the GUUT. To prevent over recovery of testing charges it is necessary to take account of load factors and to apply a load factor adjustment. The load factor adjustment is designed in such a way that the costs recovered over the entire duration of testing will cover the total cost of the increased operating reserve payments to other generators and the additional reserve constraint during that same period. The load factor adjustments were calculated by analysing a sample set of generators that had previously completed commissioning testing in the SEM and this remains unchanged from the load factor used in the 2016 rates.

3.3.1.2 RESERVE CONSTRAINT COST

A GUUT may require extra operating reserve to cover the additional risk of that generator tripping. In order to provide operating reserve, cheaper generators are constrained down from their most economic generating level, and more expensive generators are constrained on to meet system demand. In this period, the extra reserve constraint cost aligns closely with the figures for 2016.

3.3.1.3 RESERVE PREMIUM

Generator units on the system receive an ancillary service payment for the availability and provision of operating reserve. The GUUT that is causing an incremental increase in operating reserve should cover the incremental cost of increased operating reserve payments through the testing tariff mechanism. The rates at which operating reserve are paid are set out in the DS3 System Services Interim Tariff Rates 2016/2017⁹. The rate for Primary Operating Reserve has increased from 2016, however the rate for Secondary Operating Reserve has decreased so overall the reserve premium cost aligns with the figures for 2016.

3.3.1.4 ADDITIONAL RUN HOURS

The GUUT can be regarded as unreliable as it may not start or run as scheduled, or it may become unavailable at short notice. To manage the risk to the system that this unreliability poses, the TSO must constrain on additional unit(s) to mitigate the risk of the GUUT becoming unavailable. The additional run hour cost component is intended to represent the cost arising from scheduling this additional generation. The cost for smaller generators can be considerably higher than that of larger generators as the model optimises the generation dispatch to minimise the overall production cost. For example, if a 50MW unit is testing, the unit chosen to cover the GUUT may have a much higher minimum load. It is more expensive to run the replacement unit at this higher minimum load than it would be to run the 50MW unit. If a 400MW unit is under test the unit replacing it may also be 400MW therefore there is less additional MW than in the first example.

There was a large decrease in this cost compared to previous years. In general, there is a large variation between the no load cost of generating units. Therefore the additional run hour costs are quite sensitive to the particular unit/units that are scheduled in the model to cover the loss of the GUUT's MW. The model used for forecasting the 2017 rates includes updated fuel price forecast, forecasted interconnector flows and wind generation capacity. Based on the model for the forecast year, the unit in merit that the GUUT may be replacing can vary, which can have a huge impact on the costs of having the additional run hours available. This is the main factor in the decrease in rates for 2017 compared to 2016.

3.3.1.5 COSTS OF OUTPUT DROPS (INCLUDING TRIPPING)

As per the 2016 Testing Tariff Paper, the TSO utilised actual trips from GUUT whilst under test since 2010. Also as per 2016, rates have been weighted based on actual trips since 2010, 62.4% direct trip, 22% fast wind down and 15.6% slow wind down. The increase in the cost of output drops for Tariff A is due to the analysis of trips from GUUT under test and updated Other System Charges rates. The charges for direct trip, fast wind down and slow wind down have increased by 1.9%.

⁹ Available from: <http://www.eirgridgroup.com/site-files/library/EirGrid/DS3-System-Services-Interim-Tariffs-FINAL.pdf>

3.3.1.6 TARIFF A COST COMPONENTS

The following table gives a breakdown of the cost components associated with Tariff A. These are reserve premium, reserve constraint cost, additional run hours and cost of tripping. Additional run hours is the only cost associated with units under test below 150 MW for Tariff A. Reserve premium and reserve constraint costs are small components of the overall charge for units above 350 MW. The cost of tripping is included in units above 150 MW. The additional run hours cost is determined by the unit constrained on by the Plexos model to cover the unit under test.

| | MW | TARIFF A | | | | | TARIFF B |
|-----------------|-----|-----------------|-------------------------|----------------------|----------|--------------|----------|
| | | Reserve Premium | Reserve Constraint Cost | Additional Run Hours | Tripping | Total Charge | Tripping |
| GEN <50 | 50 | € - | € - | € 6.09 | € - | €6.09 | € - |
| 50 < GEN ≤100 | 100 | € - | € - | € 4.74 | € - | €4.74 | € - |
| 100 < GEN ≤ 150 | 150 | € - | € - | € 5.17 | € - | €5.17 | € - |
| 150 < GEN ≤ 200 | 200 | € - | € - | € 5.22 | € 0.36 | €5.58 | € 0.22 |
| 200 < GEN ≤ 250 | 250 | € - | € - | € 5.41 | € 0.58 | €5.99 | € 0.36 |
| 250 < GEN ≤ 300 | 300 | € - | € - | € 5.39 | € 0.94 | €6.34 | € 0.58 |
| 300 < GEN ≤ 350 | 350 | € - | € - | € 4.71 | € 1.53 | €6.25 | € 0.95 |
| 350 < GEN ≤ 400 | 400 | € 0.05 | € 0.11 | € 3.35 | € 2.49 | €6.00 | € 1.54 |
| 400 < GEN ≤ 450 | 450 | € 0.24 | € 0.73 | € 1.92 | € 4.05 | €6.94 | € 2.51 |
| 450 < GEN | 500 | € 0.46 | € 1.59 | € 0.72 | € 6.59 | €9.37 | € 4.08 |

Table 2: Testing Tariff Cost Components

3.3.2 TESTING TARIFF B

This testing tariff is intended to cover the costs when a unit enters phase 3 of testing, either upon completion of phases 1 and 2 of testing or when an existing operational unit is granted GUUT status in SEM. The cost associated with this type of testing is the cost of tripping.

Table 3 sets out testing tariff B schedule for 2017 compared with the schedule for 2016:

| Tariff B | | 2017 | 2016 | Difference |
|------------------|-----|--------|--------|------------|
| Generator Output | MW | Charge | Charge | % |
| | | | | |
| GEN <50 | 50 | € - | €- | |
| 50 < GEN ≤100 | 100 | € - | €- | |
| 100 < GEN ≤ 150 | 150 | € - | €- | |
| 150 < GEN ≤ 200 | 200 | € 0.22 | € 0.22 | 1.04% |
| 200 < GEN ≤ 250 | 250 | € 0.36 | € 0.35 | 2.95% |
| 250 < GEN ≤ 300 | 300 | € 0.58 | € 0.57 | 2.56% |
| 300 < GEN ≤ 350 | 350 | € 0.95 | € 0.93 | 2.07% |
| 350 < GEN ≤ 400 | 400 | € 1.54 | € 1.51 | 2.17% |
| 400 < GEN ≤ 450 | 450 | € 2.51 | € 2.46 | 2.01% |
| 450 < GEN | 500 | € 4.08 | € 4.01 | 1.86% |

Table 3: Testing Tariff B schedule results and comparison

3.3.2.1 COSTS OF OUTPUT DROPS (INCLUDING TRIPPING)

As per the 2016 Testing Tariff Paper, the TSO utilised actual trips from GUUT whilst under test since 2010. Also as per 2016, rates have been weighted based on actual trips since 2010, 62.4% direct trip, 22% fast wind down and 15.6% slow wind down. The increase in the cost of output drops for Tariff B is due to the analysis of trips from GUUT under test and the updated Other System Charges rates. The charges for direct trip, fast wind down and slow wind down have increased by 1.9%.

4.0 SHORT NOTICE DECLARATION CHARGES (SND'S)

4.1. INTRODUCTION

In the SEMC decision paper on Other System Charges for 2016/17¹⁰ the RAs requested that the TSOs consult on the inclusion or exclusion of Short Notice Declarations (SNDs) to units under test within the 2017 Testing tariffs process, having regard to the specific concerns raised by respondents to the OSC consultation paper. The RAs approved the interpretation of the Other System Charges (OSC) Methodology Statement articulated by the TSOs in their recommendations paper with regard to the application of SND to units under test in the intervening period, until an enduring decision is made at the conclusion of the 2017 Testing Tariff process.

4.2. BACKGROUND

Commentary on the application of SNDs can be found in a number of publications. The TSOs believe the most pertinent ones are included below.

Section 2.5 of the Other System Charges Methodology Statement¹¹ notes that:

“SNDs relate to unscheduled variations in availability of committed plant or to the unscheduled outage of dispatched plant. The charges are intended to incentivise behaviour to enhance system security and reduce operating costs. Further details can be found in the June 2009 consultation paper. SND charges are not applied when a unit is Under Test in the SEM on condition that the Generator has declared the change in availability in EDIL using the TSO agreed reason code.”

Section 3.5 of the 2011 SEM Testing Tariffs Consultation Paper¹² noted that:

“Under normal operating conditions, short notice declaration payments are made by generators who re-declare their availability at short notice. Such declarations can result in a constraint cost as other generation must be re-dispatched. It is assumed that the cost associated with short notice declarations is covered by the additional run hours and the additional reserve constraint cost components of the testing tariffs. For this reason, a GUUT will not be liable for the specific application of short notice declaration charges.”

Section 3.5 of the 2011 SEM Testing Tariffs Recommendations Paper¹³ noted that:

¹⁰ <https://www.semcommittee.com/sites/semcommittee.com/files/media-files/SEM-16-047%20OSC%20Decision%20Paper%20for%20the%20Tariff%20Year%202016-17.pdf>

¹¹ http://www.eirgridgroup.com/site-files/library/EirGrid/OSC_Methodology_Statement_Oct%2014_updated.pdf

¹² https://www.semcommittee.com/sites/semcommittee.com/files/media-files/SEM-12-014a%20Testing%20Tariff%20Consultation%20Paper%202011_2012.pdf

¹³ <https://www.semcommittee.com/sites/semcommittee.com/files/media-files/SEM-12-014b%20Testing%20Tariff%20Recommendations%20Paper.pdf>

“GUUT are not charged for short notice declarations as it is assumed that DBC and the additional run hours are sufficient to cover any costs associated with a GUUT making a declaration at short notice”

Since the introduction of the harmonised OSC in 2010 the TSOs have levied SNDs associated with unexpected trips, based on our interpretation of the consultation and OSC methodology statement included above. Due to queries received from generating units following SNDs which were levied the TSOs, in the 2016 Testing Tariffs consultation paper, included the following in relation to SNDs:

“The TSO would like to clarify that whilst the GUUT nominate in their half hourly load profiles, SND’s are not applicable if they follow their agreed load profile. Any unexpected deviation, i.e. trip, will result in the charge of a SND.”

In order to improve transparency on the decision making process in relation to testing tariff selection the TSOs published the *Selection Guideline for SEM Testing Tariffs*¹⁴ document in February 2016. This outlined that generating units should declare their availability in line with their output. This helps to both minimise Dispatch Balancing Costs (DBC) and also in the event of an unexpected trip would minimise any SND to the generating unit e.g. a 400 MW CCGT has an output of 100 MW therefore it should only declare availability at 100 MW and if the generating unit trips unexpectedly then any SND will only be charged based on 100 MW.

For the avoidance of doubt, when a generating unit is under test, SNDs are currently only levied if the generating unit trips unexpectedly. All other SND charges are not eligible provided the generating unit declares their availability in line with the test profile and reason codes agreed with the control rooms.

Respondents to the 2016/17 Harmonised Other System Charges consultation queried the interpretation of the application of SNDs to generating units under test. These comments are outlined in section 4.3.1.

¹⁴ http://www.eirgridgroup.com/site-files/library/EirGrid/16.02.01.TT-Selection-Guideline_Ext.pdf

4.3. INCLUSION OF SND CHARGE WHEN UNDER TEST

In the 2016/17 OSC consultation paper a number of respondents commented on the TSOs clarification on SNDs being levied when a generating unit is under test.

4.3.1. RESPONDENT COMMENTS

Energia (ENE) responded to the OSC consultation that they rejected the proposed reinterpretation of the application of SND charges. They believe it changes the fundamental application of SND charges to units Under Test and is contrary to the stated text of the current OSC Methodology Statement. ENE considers it necessary that such a change be supported by evidence and that it be consulted on separately as a material change in the OSC Methodology Statement.

ESB Generation & Wholesale Markets (EGWM) quoted from the SEMC Recommendations Paper (SEM-12-014b) stating that 'GUUT are not charged for short notice declarations as it is assumed that DBC and the additional run hours are sufficient to cover any costs associated with a GUUT making a declaration at short notice (SND)'.

EGWM further stated that testing of a generating unit cannot be expected to follow its agreed load profile exactly and that SNDs should not be charged when a unit is under test as the methodology that is applied to calculate the Testing Tariffs already recovers this cost.

Power NI Energy Limited Power Procurement Business (PPB) stated that they did not agree that a generator should have to declare availability during a test. If a unit has declared to zero due to a Trip being likely the TSO should schedule additional plant to cover this, the cost of such being recovered through Testing Tariff A. This, according to PPB, encourages a generator to test, knowing it will not incur huge SND charges for being prudent.

Bord Gáis Energy (BGE) stated they disagreed with the condition that makes units Under Test liable for SNDs if they trip as it is acting as a double payment to the TSOs in addition to Testing Tariffs. They requested further clarity around SNDs and trip charges for units Under Test with reference to the published 'Selection Guideline for SEM Testing Tariffs Guidance Document'. BGE also stated they disagreed that Generators must pay SNDs as per their registered capacity as it is recovering costs of running the system at hypothetical levels rather than recovering the costs from fallen output.

4.3.2. OPTIONS FOR SNDS

The following sections outline the two options available for addressing the treatment of SNDs when a generating unit is under test.

4.3.2.1. OPTION 1 – REMOVE CHARGING FOR SNDS WHEN A UNIT IS UNDER TEST

If charges for SNDs were removed for a unit under test, the generator would continue to pay the applicable Testing Tariff, however, would not pay SND charges for unexpected trips when the unit is testing. Given that the SND charges are not included in the testing tariff calculation, the additional cost (from the unexpected trip), would increase DBC, which is borne by the end consumer.

Should this option be chosen, the wording in the 17/18 OSC Methodology Statement will be revised to reflect this change.

4.3.2.2. OPTION 2 – RETAIN CHARGING FOR SNDS WHEN UNDER TEST

If charges for SNDS were retained for a unit under test, the generator would continue to pay the applicable Testing Tariff and SND charges for unexpected trips when the unit is testing. Given that the SND charges are not included in the testing tariff calculation, the additional cost (from the unexpected trip), would be captured in this SND charge.

Should this option be chosen, the wording in the OSC Methodology Statement will be revised to reflect that proposed in the TSOs 2016/17 OSC consultation as follows:

Short Notice Declarations (SND) relate to unscheduled variations in availability of committed plant or to the unscheduled outage of dispatched plant. The charges are intended to incentivise behaviour to enhance system security and reduce operating costs. Further details can be found in the SEM Committee decision paper, SEM-10-001, published in January 2010. SND charges will not be applied when a unit is Under Test in the SEM on condition that the Generator has followed their testing profile. It should be noted that all units Under Test in the SEM will be liable for SND charges should they Trip, as if the unit was in normal operation.

4.3.2.3. SUMMARY

In summary, if a generating unit is being levied Testing Tariff A then the TSOs have not included their submitted load profile as part of the generating commitment schedule. This generating unit is determined to be unreliable. Any deviations from their submitted load profile will incur DBC and the Additional Run Hours component of Testing Tariff A is designed to recover some of this cost. If this generating unit however trips unexpectedly the TSOs will be required to take immediate short term actions to return the system to normal operating conditions. These short term actions will increase DBC which is borne by the end consumer. Whilst there is a provision in Testing Tariff A to recover some of these costs (i.e. trip charge) the SND costs associated with the unexpected trip is not recovered, hence this is then charged by the TSOs to any generator that trips unexpectedly.

If a generating unit is being levied Testing Tariff B then their submitted load profile is included as part of the generation commitment schedule. Any deviation from this load profile incurs DBC which are borne by the end consumer. There is no recovery of this cost through testing tariff B, since only the risk of tripping is recovered. Likewise if the generating unit trips unexpectedly the TSOs will be required to take short term actions to return the system to normal operating conditions and the SND component of this event will not be recovered.

If charges for SNDS were removed for a unit under test, the generator would not pay this charge for an unexpected trip and DBC would increase. SND charges are not included in the testing tariff calculation.

If SNDs are completely removed when a generating unit is under test then the TSOs believe that the increased costs associated with not following the submitted load profile when on Tariff B and for unexpected trips, when on either Tariff A or B, will not be recovered and this will increase DBC. The TSOs would not be in favour of this option.

If SND charges are retained for a unit under test, the generator will continue to pay this charge for an unexpected trip. The TSOs would be in favour of retaining charging for SNDs when a generating unit is under test.

The TSOs welcome comments on both options.

The TSOs would like to note that the testing tariff methodology will need to be reviewed in light of the new I-SEM design and will be engaging with the RAs on this. This will provide a further opportunity to revisit this issue raised by industry.

5.0 I-SEM PARAMETERS

Paragraph 5.175 of the Single Electricity Market (SEM) Trading and Settlement Code requires the System Operators to make a report to the Regulatory Authorities at least 4 months before the start of the Year¹⁵ proposing values for the testing tariffs for the coming calendar Year. The new I-SEM design is due to go live on 1st October 2017. Based on this timeline, the System Operators have proposed testing tariffs for the period 1st January 2017 to the earlier of 31st December 2017 or I-SEM go live. When the new market design under I-SEM comes into effect, the testing tariff parameters will need to be reviewed in light of this new market design. The TSOs will be engaging with the RAs in due course on testing tariffs for I-SEM and a submission will be made before the start of the I-SEM go live.

¹⁵ “Year” defined as per Trading and Settlement Code glossary: “means a period commencing at 00:00h on 1 January and ending at 24:00h on the next occurring 31 December.”