

SINGLE ELECTRICITY MARKET COMMITTEE

SEM Generator Testing Tariffs 2017

SEM Committee Decision

SEM-16-087

22 December 2016

1 Introduction

In March 2012 the SEM Committee published SEM-12-014, which approved a revised methodology for the calculation of SEM generator testing tariffs. It also stated that *“the TSOs shall review these tariffs annually and submit their recommendations to the SEM Committee not later than 31st August each year. The SEM Committee may revise the tariffs taking these recommendations into consideration”*. In accordance with SEM-12-014, and based on the application of the approved methodology, the TSOs presented proposals to the RAs as to the SEM generator testing tariffs that should apply in 2017. A consultation paper was published on those proposed tariffs. The consultation also included questions in relation to Short Notice Declaration (SND) charges.

As part of SEM Committee’s decision on Other System Charges (OSC) for 2016-17¹, the RAs requested that the TSOs consult on the application of SND charges to units under test. SND charges have applied on an all-island basis to units under test since 2010. However, on a number of occasions through the years, industry has queried the appropriateness of this and raised concerns with such an approach. Based on such comments, raised during the setting of the OSC for 2016-17, the SEM Committee decided that the application of SND charges to units under test would be consulted upon as part of the 2017 testing tariff process.

This paper provides a brief background of testing tariffs and SND charges, before summarising comments received to the consultation and the RAs’ responses. A summary of the RAs’ decision on testing tariffs and SND charges is presented at the end of this paper. The TSO’s recommendations paper is published alongside this document.

2 Testing tariff rates

There are two SEM generator testing tariffs - tariff A and tariff B. Tariff A is generally associated with commissioning units. Tariff B is associated with units in the latter stages of commissioning or where existing units are conducting general testing activities. The SEM generator testing tariffs proposed by the TSOs for 2017 are presented at the end of this document. They have been calculated in line with the approved methodology - as detailed in SEM-12-014. Tariff A is decreasing in all tariff categories, while tariff B is increasing in all tariffs categories. Though tariff B is increasing it remains below 2015 levels.

It should be noted that the SEM generator testing tariffs presented in this paper are slightly lower than those included in the consultation paper. This is due to a mistake in applying inflation rates. When calculating the SEM generator testing tariff rates for 2017, the forecast inflation rate for 2017 as per the SEM Committee’s decision on OSC for 2016-17 should be used. This inflation rate was 1.6 %. However, because of a mistake, a higher figure of 1.9% was used in the calculation of the tariffs presented in the consultation paper. This has now been corrected.

Tariff Cost Drivers

There are four cost components that pertain SEM generator testing tariffs. As illustrated in the following Table, all four components feed into the calculation of tariff A. One component

¹ [Decision Paper Other System charges for 2016-17](#)

feeds into the calculation of tariff B. See table directly below. For tariff A, additional run hour costs have the most impact. For more information on these cost components please refer to the [consultation paper](#).

SEM Generator Testing Tariff Cost Component	Applicable to Tariff A	Applicable to Tariff B
Additional reserve constraint cost	Yes	No
Increased reserve premium cost	Yes	No
Additional run hours cost	Yes	No
Cost of output drops/tripping	Yes	Yes

Tariff A

In comparison to 2016 tariffs, tariff A for 2017 is decreasing. The key driver is a lower fuel price forecast – making reserve and run hour costs cheaper. This is in addition to a forecast showing increased exports from Ireland and Northern Ireland to Great Britain over the East West and Moyle interconnectors leading to a lower constraint cost on the island. Both of these factors influence the type of unit(s) scheduled when units are testing – resulting in lower costs.

Tariff B

In comparison to 2016 tariffs, tariff B is increasing for 2017. The key driver is the to inflation rates for 2017. The only cost component associated with tariff B is the cost of output drops/tripping. That cost component has increased in line with the inflation forecast of 1.6% for 2017, as per the decision on OSC charges for 2016-17.

A summary of industry's views and the RAs recommendation on the SEM generator testing tariffs can be found in section 4.

3 Short notice declaration charges

In February 2010 Short Notice Declaration (SND) charges were introduced as part of a RA High Level Decision paper², which provided a policy framework for the all-island harmonisation of OSC. SND charges have been applied to incentivise timely notification of availability. They are similar to trip charges. However, while a trip charge is associated with the loss rate of actual output, the SND charge is associated with availability declarations. In this regard, a single incident at a generating unit could give rise to both an SND charge and a trip charge.

The 2011 SEM Generator Testing Tariffs Recommendations Paper³ set out the proposal for the application of SND charges to units that are testing. However, as a result of ambiguity in the phrasing within the paper, the applicability of the SND charge has been and continues to

² [SEM-08-013] 'Harmonised All-Island Ancillary Services Policy - A Decision Paper, February 2008

³ SEM Generator 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>

be interpreted differently by industry and the TSOs. Industry's interpretation, generally, is that SND charges should not apply to units under test, while the TSOs' view the charge as applicable in such instances. In this regard, the TSOs have been imposing the SND charge to units under test that unexpectedly trip or deviate from their test profile, on an all-island basis, since 2010. However, on numerous occasions, industry have queried the application and raised concerns with such an approach. Consequently, the RAs requested the TSOs consult on the matter as part of the 2017 SEM generator testing tariff process.

The consultation presented two options to industry pertaining to SND charges for units under test:

- Option 1 – Remove charging for SNDs when a unit is under test
- Option 2 – Retain charging for SNDs when a unit is under test

A summary of industry's views and the RAs' recommendation on the matter can be found in section 4.

4 Consultation: industry comments and RA responses

Three responses to the consultation were received and will be published alongside this decision paper. Comments raised by respondents can be categorised under:

- 2017 SEM generator testing tariff rates
- methodology
- applicable tariff for RoCoF testing
- short notice declaration charges

2017 tariff rates

Comments from Industry

One respondent stated that they could not comment on the derivation of the SEM generator testing tariffs as not enough information was provided.

Regulatory Authorities' response

The RAs note that the TSOs published more granular information of the rates this year than in previous years. The 2017 SEM generator testing tariffs consultation paper provided a breakdown of the cost components that make up testing tariff A and B as a means to improving transparency. Furthermore, the methodology used for calculating the testing tariffs is as per the SEM Testing Tariffs Recommendations Paper published in November 2011⁴ and has remained unchanged.

The RAs note the additional information published and are satisfied that, to the extent possible, sufficient information pertaining to the calculation of the testing tariffs has been made publically available.

⁴ <https://www.semcommittee.com/sites/semcommittee.com/files/media-files/SEM-12-014b%20Testing%20Tariff%20Recommendations%20Paper.pdf>

Methodology

Comments from Industry

In relation to the underlying methodology, one respondent questioned the cost reflectivity of SEM generator testing tariffs applying to a generator unit's registered capacity as opposed to the unit's dispatch position during a test phase. Another respondent queried i) why the transmission systems are not assessed individually, ii) why costs are calculated in euro and iii) why some units are exempt from testing tariffs.

Regulatory Authorities' response

With regard to generator testing tariffs applying on the basis of the registered capacity of the generator unit under test, this has been the case since generator testing tariffs were developed and consulted upon in 2005. This approach is in line with the approved methodology in the 2011 Recommendations Paper, whereby the generator testing tariff applicable to a unit testing is:

(the registered capacity rate) x (the output of the unit) x (the duration of testing)

The calculation reflects the higher system risk associated with the sudden loss of a large generator and its impact on unit commitment decisions.

In relation to the transmission systems being assessed on an all island basis, the modelling tool (PLEXOS), which is used to simulate the Single Electricity Market, models the transmission and generation systems across the whole island. This is in line with the approved methodology referred to above.

In response to the currency query, the methodology used for calculating the testing tariffs applies euro to the calculation. However, it should be noted that, invoices sent to generators detail the charges in the currency of the jurisdiction where the generating unit is based.

Lastly, some units are exempt from generator testing tariffs, in line with the Trading and Settlement Code (version 18.0). Section 5.169 states that "*the Market Operator shall not grant the status of Under Test for the purposes of this Code to Pumped Storage Units, Demand Side Units, Interconnector Units, Interconnector Residual Capacity Units or Autonomous Generator Units except for Interconnector Error Units*".

In summary, the RAs have reviewed the concerns raised by respondents and engaged with the TSOs as appropriate. The RAs are satisfied that the information provided above and detailed in the TSOs' recommendation paper addresses respondents' comments.

Applicable tariff for RoCoF testing

Comments from Industry

One respondent requested that the TSOs reconsider the actual risks to the system during RoCoF testing and apply a more appropriate fee to units than tariff A. The respondent referred to generator testing tariff B as an example of an appropriate fee.

Regulatory Authorities' Response

With regard to categorising units under tariff A or B, in February 2016 the TSOs published the *Selection Guideline for SEM Testing Tariffs*⁵. The guideline outlines the decision process in determining whether a unit should be levied testing tariff A (including those testing for DS3) and also the change over from tariff A to tariff B. Notwithstanding this, the TSOs' recommendation paper welcomes engagement from generating units to further understand the testing being carried out and the risk this could pose on the system.

The RAs, noting the TSOs welcomed engagement from industry, are satisfied that the TSOs have considered the respondent's comments.

Short notice declaration charges

Comments from Industry

All three respondents raised concern with SND charges applying to a generating unit under test. One respondent commented that the generator testing tariffs pay for extra reserve on the system to manage system risks. As such, making units under test also liable for SND charges infers a double payment. In that regard, the respondent was of the view that units under test should be exempt from paying SND charges.

Another respondent stated that the cost of the worst case scenario is covered by generator testing tariff A. Considering that, the respondent noted that there should not be a further increase to system costs when a unit deviates from its testing profile. Separately, as no additional reserve is scheduled under tariff B, the respondent noted there is a stronger case for SND charges applying to units testing under tariff B.

The third respondent stated that they understood that additional costs due to an unexpected trip are already included in generator testing tariff A and that no SND charge should apply in such circumstances.

Comments from the TSOs

The TSOs noted that the additional short term system costs which arise as a result of SNDs are not covered by the generator testing tariff. With regard to a unit testing under tariff A, the TSOs noted that additional plant would be scheduled and dispatched to cover the overall MWs associated with the testing profile that the unit declares due to the higher level of risk associated with such tests. With regard to a unit testing under tariff B, the TSOs noted that additional plant will not be scheduled and dispatched to cover the overall MW associated with the testing profile, as this is lower risk testing. However, in both cases, should a unit unexpectedly trip or deviate from its test profile, the TSOs would need to bring on additional generating units to restore the system to normal operating conditions. The TSOs indicated that by levying this charge it ensures that the additional system costs posed by SNDs are not borne by the end consumer.

⁵ http://www.eirgridgroup.com/site-files/library/EirGrid/16.02.01.TT-Selection-Guideline_Ext.pdf

Regulatory Authorities' Response

The RAs have reviewed the topic of SND charges applying to a unit that unexpectedly trips or deviates from its test profile. While the RAs note the potential ambiguity in the phrasing in the 2011 Recommendations Paper with regard to the application of SND charges, the RAs are of the view that the application of an SND charge is reasonable and appropriate to cover additional costs posed on the system. The RAs recommend that SND charges remain applicable to units testing should they unexpectedly trip or deviate from their test profile in the understanding that such costs are not already captured in generator testing tariffs. This would see the practice of charging SND to units under test, which began on an all-island basis in 2010, continuing.

5 SEM Committee Decision

The SEM Committee approves the 2017 SEM generator testing tariffs, as proposed by the TSOs and as detailed in the tables at the end of this paper, effective from the 1st January, 2017. Furthermore, the SEM Committee approves the application of SND charges to generator units under test, should the unit unexpectedly trip or deviate from their test profile. Generator testing tariffs will be maintained under review and any merit to change their methodology will be considered by the SEM Committee, when and where necessary.

Tariff A:

Generator Capacity	MW	2017 €/MWh	2016 €/MWh	% Variance
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	€6.33	€7.80	-19%
300 < GEN ≤ 350	350	€6.24	€8.16	-24%
350 < GEN ≤ 400	400	€5.99	€8.10	-26%
400 < GEN ≤ 450	450	€6.92	€9.41	-26%
450 < GEN	500	€9.34	€12.06	-23%

Tariff B:

Generator Capacity	MW	2017 €/MWh	2016 €/MWh	% Variance
GEN <50	50	-	-	-
50 < GEN ≤100	100	-	-	-
100 < GEN ≤ 150	150	-	-	-
150 < GEN ≤ 200	200	€0.22	€0.22	1.6%
200 < GEN ≤ 250	250	€0.36	€0.35	1.6%
250 < GEN ≤ 300	300	€0.58	€0.57	1.6%
300 < GEN ≤ 350	350	€0.95	€0.93	1.6%
350 < GEN ≤ 400	400	€1.54	€1.51	1.6%
400 < GEN ≤ 450	450	€2.50	€2.46	1.6%
450 < GEN	500	€4.07	€4.01	1.6%