

ESB Power Generation

Submission to Eirgrid/SONI on:

Eirgrid/SONI Consultation Paper on Harmonised Ancillary Services & Other System Charges; Rates Consultation 9th June 2009 SEM-09-062

ESB Power Generation welcomes the opportunity to respond to this Consultation paper.

This paper is of significance to conventional generators as it proposes the rates and charges in relation to Ancillary Services in the harmonised Single Electricity Market, and it also proposes additional charges for generator performance which are new to ROI.

Comments/ Points which ESBPG would like to raise include:

1. Ancillary Services Pot:

The RAs decision and principal constraint regarding no increase in the current AS allowance for harmonisation should be reconsidered, given the changing nature of the capacity and the increasing flexibilities that are required on the system. The reward for ancillary Services should take into account the changing mix of the generation portfolio and the increase in flexibilities required from conventional generators to facilitate this portfolio.

No overall analysis of how the new rates and charges would impact on the market and on the Ancillary Services pot has been included. It is not clear if it has been proven that the payments 'add up' to the Ancillary Services pot, or if this has been tested. Also, some Generators could offer additional flexibilities which could be useful to the system, but if the additional payments for these flexibilities were sourced from the same ancillary services pot of money, this could dilute the rates which are currently proposed.

2. Impact of proposed rates on Total Reserve and Reactive power payments:

Based on initial high level analysis, the net result for many conventional generators is that both their total reserve payments and their reactive power payments will reduce considerably. These reductions are in addition to the Generator Performance Incentive charges, new for ROI generators, which will penalise generators where they cannot comply with Grid Code conditions for which they have not received Grid Code derogations.

All of this contributes to considerably lower income for generators, at a time when additional flexibilities are needed on the systems to allow for the significant increase in intermittent wind generation. The reverse should be the case. Generators should receive higher income for ancillary services, to provide adequate incentives to ensure that all necessary ancillary service (reserve and reactive power) are provided to the level and quality required by the system.

3. Short Notice Declaration Penalties (SNDPs) and Trip Charges:

There is no apparent basis given for the increased SNDP and (in many cases) Trip Charges.

SND charges are increasing by factors of 8-10. Also, the timescale for SNDs is increasing from 4 hrs to 12 hrs, which will potentially lead to an increased level of SNDPs as plants often cannot anticipate availability reductions in this timescale. For example, gas turbine generators may need to re-declare their availability for ambient conditions. Also, peat and coal-fired units may need to re-declare if fuel quality changes

There will be an impact on units which are 2-shifted, as these units may incur more SNDPs e.g. if they miss their start time.

With the exception of larger trips, Trip Charges are also increasing.

It is recognised in the Consultation paper that 'a level of tripping is inevitable'. There should be an allowed number of trips before a Trip Charge is imposed to reflect this.

4. Proposed Timeline for Harmonised Ancillary Services implementation

The proposed timeline for the implementation of this project is tight. Most of this implementation must take place over the next 3 months, in order to ensure that systems are ready for Go-Live implementation on 1st Oct 2009. Changes need to be put in place to allow for validation of new Generator Performance Incentive charges, as well as changes to Ancillary Services rates and Trip and SND charges.

Also, new contracts have to be read through and signed before Go-live. This includes agreement of the operational parameters for all stations, as well as the detail in the contracts.

There will be new process changes, including changes to EDIL, which need to be implemented, communicated to staff and training provided in this timescale. The details around process changes, e.g. EDIL changes, have not yet been clarified.

To ensure all changes are communicated, understood and implemented correctly, the current timescale would need to be reviewed and revised.

ESBPG also considers that the aggressive timeline proposed has not afforded us sufficient time to assess the impact these changes will have on our plant.

5. Industry Consultations and Reviews

The RAs and SOs are carrying out other related Electricity Industry Consultations and Reviews e.g. CPM Review, Scheduling and Dispatch. We consider that a lot of these issues being dealt with in these reviews should not be looked at in isolation as they are related. It would be preferable if a more holistic and integrated approach was to be taken to these Consultations.

6. General points about Ancillary Services re EDIL and data:

- The reporting functionality within EDIL should be enhanced to enable generators to customise reports to assist them in analysing their Ancillary Services availability historically and assist in the validation of payments and charges.

- If the TSO feels it is necessary to override a Generator's declaration, the TSO should ensure that the Generator is advised by phone. The Generator may not become aware of the change if it is only inputted to EDIL. Generators should be given the opportunity to either accept the re-declaration beforehand or accept them afterwards. .
The issue of the deemed notice time where declarations are made by EirGrid retrospectively to correct any errors within the original declaration made by the station needs to be clarified.
- It takes some months for Ancillary Services data to be made available. If proper validation is to be carried out, this data should be provided in a timely readily accessible report. All Ancillary Services / Charges data should be provided in a timely manner to ensure that generators have a reasonable opportunity to dispute a penalty or to become aware of, or rectify, a fault.

Comments on Consultation Sections titled beginning with the word 'Proposed':

Section 3.3. Proposed Exchange Rate:

The proposal to introduce an exchange rate could introduce a risk element e.g. if there are exchange rate fluctuations. Also, it is important to ensure that no generator is unfairly discriminated against as a result of the inclusion of an exchange rate.

Section 4.1 Paragraph 5

This refers to a 'key assumption in creating the model to derive the harmonised reserve and reactive power rates' is that the system needs are similar to 'previous levels. This was presented at the workshop as inputs to setting the rates. The inputs from the service providers (e.g. Generators) were based on historic characteristics, availabilities, dispatch and performance.

As significant changes are occurring on the system which impact on future generator dispatch and performance, the key assumptions should also include future system needs, as these are changing very significantly. For example, the forecast dispatch should be taken into account.

Section 4.2 Proposed Harmonised Ancillary Services Rates

Comparing these rates with published 2009 AS rates published in 'Statement of Charges and Payments for Ancillary Services Providers 2009:

The rates for POR, SOR and TOR1 are increasing (by 7%, 13% and 2% resp).

The rate for TOR2 is reducing slightly, by -0.5%

The rate for RR is also reducing in the various options, by -0.6% to -0.85%

Reactive power rates are reducing. Generators currently receive payments for both availability (€0.166/Mvarh) and utilisation.(€1.4/Mvarh). The proposed harmonised payment is €0.13/Mvarh for availability only.

Black start payments don't change.

So overall, the main increases are for POR, SOR, TOR1 with decreases for the slower reserves TOR2, RR and lagging and leading Reactive power.

In particular, this will lead to reductions in slower reserve payments. These are the categories which earn many generators the majority of their reserve payments. This means that although there are increases in primary and secondary rates, the reductions in the slower rates will reduce the overall reserve payments for many generators. This does not reflect the increasing value of ancillary services to a system which needs the flexibility to accommodate the increasing wind generation/ renewables expected in the future.

High level calculations have been analysed. However, a more detailed analysis of forecast running of all units, forecast MWh reserves and forecast Mvarh with the new rates would take further time.

It would be useful if an impact assessment of the proposed rates on different categories of generators was carried out before any decisions are made regarding changes to rates.

Proposed Reactive Power Charges

The reductions in reactive power rates will lead to very significant reductions in reactive power payments for generators. This is at a time when there is an increase in intermittent wind generation coming onto the system which means that reactive power as supplied by conventional generators is of even more importance than ever as wind generation can't produce any reactive power. There have been issues around generators being asked to contribute to voltage control.

So, the value of reactive power should be increasing, and yet the proposed rates are reducing.

Also, reactive power payments will only be made when units are synchronised, so mid and lower merit units will lose out on reactive power payments, although these generators will need to provide reactive power in the current intermittent market.

Section 4.2.2 Proposed Alternative Replacement Reserve Options

ESB PG welcomes the option to receive a replacement reserve payment for both a syncd and a desyncd generator, although there is no increase in rates. Reduced payment for replacement reserve is not acceptable given that:

- many generators will have less running with reduced demand and more capacity, so they will receive less reserve payments anyway.
- more reserve/flexibility is required from generators so there should be additional reward.

Section 5 Proposed Trip charges and SND Charges

There are a number of issues with these much higher SNDs, and some current issues with SNDs which should now be resolved especially given the higher charges.

- The SND charges are increasing by orders of magnitude, in particular for smaller plants, based on analysis with the proposed charges. The current rate is €12/MW. The Proposed SND Charge rate is €100/MW. This empirical value was derived from the rebalancing between Trips and SNDs. However, it appears that this rebalancing only works for a higher capacity unit e.g. the example used was a 400MW unit. 'used as a starting point for rates'.
- The SND charges are increasing by 8-10 times, depending on the size of the unit.
- There are also significant increases in Trip charges in many instances. Only trip charges for larger units are reducing, and by less in magnitude than some of the significant increases for smaller units.
- It is recognised in the Consultation paper that 'a level of tripping is inevitable'. There should be an allowed number of trips before a Trip Charge is imposed to reflect this.
- The current timescale for an SND charge is 4 hours. The proposed SND charge is for 12 hours (720mins), with no clear reason for the increase from 4hrs. This is a long time for generators to always know in advance that there is going to be an availability reduction and precisely what it is. Some generators have to declare down their availability for technical reasons e.g. CTs need to change their declaration for ambient conditions; peat and coal-fired units may need to redeclare if peat quality changes. There should be no charges for these declarations.
- The changes to SNDPs include the removal of the reduction in the penalty for short-duration declarations (<4hrs duration).
- There could be an SND charge for a delay in synchronising e.g. if a unit trips immediately on reverse power or similar event, and then resynchronises immediately.
- There should be a 10MW limit but this is not included in the formulae.
- There will be an impact on units which are 2-shifted, as they are more likely to incur more SNDs e.g. if they miss their start time. They could alternatively be hit with UIs ie units with more starts could be hit with more SNDPs and UIs, whereas units with more running and less starts are unlikely to experience the same level of penalties/charges.
- EDIL is not always available so it is not always possible to redeclare with sufficient notice to avoid a penalty. If the TSO redeclares while EDIL is down, this should not be classified as a short notice declaration.
Ancillary services are declared by Stations through EDIL. The notice is calculated based on the difference between the 'send time' of the declaration and the 'effective time' time of the declaration. Problems can arise which would have commercial implications for generators. For example:
 - At times EDIL is not available and therefore there may be a delay in the SM being able to record the change in AS availability within EDIL (and consequent reduction in notice given as recorded by EDIL, even though verbal communication may be given by phone).
 - EirGrid frequently make declarations unilaterally on behalf of generators, in some cases a couple of days after the 'effective time' of declaration. In some previous cases discussed with Eirgrid, these have been incorrect

and have cost ESBPG money in terms of SNDPs and / or lost revenue in availability payments and AS payments. However, even in the case where the correction they make at a later time is genuine (e.g. modifying the reason code for a declaration), the settlement system will use the most 'up to date' declaration for a given event

- Example: A generator had a short term maintenance outage planned in May 09. The station declared the unit unavailable with 4 hours notice. About 11 hours after the event, EirGrid recorded a re-declaration effective from the correct day/ time as there was an error in the reason code recorded in the original declaration. The AS Settlement System recorded this as zero hours notice of reduced availability? This is one of many incidents.
- It is not clear how EDIL will distinguish changes in output for testing reasons e.g. will there be a flag for changes in availability associated with declarations for testing?
 - Also, there should not be an SND charge for units which declare down for an agreed outage e.g. for an STMO or AOH.
 - Re Trips – it is not clear if Trips curves will be provided for validation purposes.

Proposed Generator Performance Incentive Charge Rates

- These are new charges for ESBPG, so changes to current systems/processes need to be considered so that the charges can be correctly monitored and validated. This takes time to implement, and the current timeline is very tight.

- The charges for Max Number of Starts and Minimum on Time are based on the 'Declared Minimum Generation'. If this is correct (?), they should be based on the difference between Declared Min Load and Grid Code (or derogation) Min Load, similar to the formulae for Min Generation Charge, Governor Droop Charge and Operating Reserve Charges, which are based on the difference between Declared and Grid Code.

The Minimum On Time charge formula could be based on the declared Minimum Up time – Grid Code (or derogated) Min up time.

- Loading and deloading rate charges: Any deviation from these rates is already penalised by UIs. Does the introduction of these charges mean that UIs would no longer apply below min load?

Also, do these charges apply if a generator is doing a test at a low load prior to desynchronising e.g. could be testing generator or boiler protection, fuel changeover etc.

- Late sync and early sync penalties

It should be ensured that charges are unlikely to ever be high enough to exceed the annual payment.

- The proposal that Generator Performance incentive charges should be doubled for Late declarations should be removed, as this is an unnecessary double penalty

