

Single Electricity Market

Harmonised All-Island Ancillary Services Rates and Other System Charges

Information Note to Service Providers

29 June 2010

SEM-10-42

Purpose of this note

The new arrangements for Harmonised Ancillary Services (HAS) and Other System Charges (OSC) went live on 1 February 2010. The purpose of this note is to provide a brief update to industry and service providers on the project and to discuss outstanding issues in this area. The note also provides an outline of the arrangements, in relation to Harmonised Ancillary Services and Other System Charges, for the forthcoming tariff periods. This note should be read in conjunction with the Regulatory Authorities (RAs) decision paper on Harmonised Ancillary Services and Other System Charges (SEM-10-001).¹

This note includes the following:

1. A high level review of the HAS project, its implementation and the first four months of HAS operation.
2. The scope and timelines for the forthcoming first annual reviews of Harmonised Ancillary Services and Other System Charges (for the tariff year from 1 October 2010 to 30 September 2011).
3. The likely scope and timelines for the second annual reviews of Harmonised Ancillary Services and Other System Charges (for the tariff year from 1 October 2011 to 30 September 2012).

Outcome of harmonised ancillary services workstream

Ancillary services are services procured by the Transmission System Operators (TSOs) on a commercial basis from generators or others in order to enable the TSOs to operate the transmission system safely, securely, reliably and economically. Specifically, ancillary services comprise reserve, black start and reactive power. A joint RA/TSO project has taken place over the past two years with a view to rationalising and harmonising arrangements for the TSO procurement of these services. The review also covered charges for non compliance with certain Grid Code and operational requirements (Grid Code Performance Incentives (GPIs), trips and short notice declarations (SNDs)).

The new all-island arrangements for HAS went live on 1 February 2010 and settlement for the first few months is underway with no major issues arising. This was four months later than originally planned to allow service providers adequate time to implement their new systems and for all involved to be able to smoothly effect the

¹ http://www.allislandproject.org/en/transmission_decision_documents.aspx?article=5d1d418e-ed91-4718-9f30-98d095ca6449

transition to the new arrangements. In Northern Ireland the full legal and contractual framework was not in place until the end of February.

These new all-island arrangements are designed to incentivise good generator performance, improve compliance with the grid code, deliver increased overall efficiency and reduce system costs.

The joint RA/TSO project ended with implementation of the new HAS and OSC arrangements on 1 February 2010 and the arrangements covered by the various decision papers, directions, Grid Code changes, license changes and contractual changes now pertain. At a high level this will involve the TSOs annually reviewing the types, volumes and value of the various Ancillary Services and the levels of Other System Charges required to operate the system safely, securely, reliably and economically. Based on the TSOs' annual review and consultation, the RAs will assess and approve the TSOs' proposed changes to AS rates and to Other System Charges. Existing or new service providers will also be free to suggest changes or new services.

In the short term the approach of the Regulatory Authorities is primarily to allow the new arrangements to bed-in and to allow service providers, the TSOs and the Regulatory Authorities a reasonable period of time to assess the impacts of the new arrangements before considering any substantive amendments. Therefore, it is proposed that only small changes or refinements to existing services and rates will be introduced in the first annual review of the Harmonised Ancillary Services. Subsequent reviews may consider broader issues as outlined further below.

Outstanding Issues

Due to the timescales and complexity of the HAS project and the dependency on other developments there were a number of related issues which remained for consideration at the end of the project. These were not key to the proper operation of the new arrangements but rather represented areas for further consideration and development. They included some minor outstanding issues related to existing services such as the delivery of reactive power and Black Start (NI) and the provision of primary operating reserve (POR) for certain plant with low running hours; AS payments for small embedded or aggregated generators or providers of demand reduction; possible new services e.g. relating to synchronous compensators; Grid Code revisions required in NI; full harmonisation of ancillary services and the introduction of a single all island pot.

Other non-AS but interrelated work

Future reviews of Harmonised Ancillary Services and Other System Charges will take due account of other initiatives which relate to Ancillary Services, such as:

- Possible further reviews of Grid Codes (or parts of Grid Codes) and operating standards in Northern Ireland and Ireland: To date these Grid Codes have only been harmonised to the extent necessary for SEM implementation and more recently for HAS implementation in NI. Further harmonisation may be forthcoming in the context of emerging European requirements² for harmonisation of standards and codes and increasing wind penetration on the island of Ireland. The RAs will consider this in the context of the development of such codes at a European (ENTSO-E) level. In Northern Ireland further aspects of the NI Grid Code, in particular OC11, need to be reviewed;
- Increasing Penetration of Intermittent Generation on the Island: The TSOs have recently completed a report³ which included extensive modelling and analysis into the impact of high levels of wind generation by 2020 on system stability. This study explicitly did not examine the issue of flexibility of plant and the types and mechanisms of flexibility which may be needed as wind generation increases. However the TSOs have indicated that they are examining this area at present. The future power system requirements may necessitate some new ancillary services or changes to existing services; and,
- Interactivity with the Capacity Payment Mechanism (CPM): The aims of the Ancillary Services and CPM provisions in the SEM are distinct. Because wind is paid capacity payments on the basis of availability over the year, the probability of it being available at any point in time is already captured and so no further adjustment appears to be necessary. Generator response times and reliability are however key to the requirements for ancillary services. Therefore, while the CPM workstream will give further consideration to this issue, it is likely that initiatives to promote characteristics such as flexibility and fast response will be procured via ancillary services rather than via CPM.

First Annual Review

The first annual reviews of Harmonised Ancillary Services rates (Reserve, Reactive Power, Black Start) and separately of other system charges (Generator Performance Incentive charges, Trips, Short Notice Declarations), is currently underway and will be consulted upon shortly by the TSOs. The outcomes of these reviews will be applied

² The 3rd Package of energy legislation, adopted in July 2009, provides for EU-wide Network Codes. These will be drafted by the European TSO bodies on the basis of Framework Guidelines set out by the new Agency for the Cooperation of Energy Regulators (ACER). These Network Codes are critical for an integrated EU energy market. But, ACER cannot formally act until 3 March 2011. Taking into account the time required for European Commission approval and the comitology process it is unlikely that the new Network Codes will have a binding impact in the 2011-2013 timeframe.

³ All Island TSO Facilitation of Renewables Studies, 4 June 2010; available at <http://www.eirgrid.com/media/Facilitation%20of%20Renewables%20WP3%20Final%20Report.pdf>

from 1 October 2010 to 30 September 2011. The first annual review will include the following:

- Revision of rates and charges; this includes rates for Ancillary Services (Reserve, Reactive Power, Black Start). This will result in a revision to the size of the AS pot which will be approved by the RAs.
- Revision of Other System Charges (Generator Performance Incentive charges, Trips, Short Notice Declarations). This will involve a revision in the revenue to be offset against constraint costs in the following year.
- Revision of operating reserve charging arrangements to ensure that there is no disincentive to generators to provide their full capabilities while still ensuring that adequate performance incentives remain ,
- Inclusion of arrangements for the provision of reactive power through use of a generator in synchronous compensation mode as a new schedule to the harmonised AS agreement.
- Adjustments due to the fact that the largest single infeed in Ireland will be 445MW for the tariff year 2010-11.

The Regulatory Authorities and the TSOs do **not** plan to review the size of the two jurisdictional ancillary services pots or the movement to a single all-island pot in the first annual review.

Second Annual Review

The second annual reviews of Harmonised Ancillary Services rates and charges and, separately, of Other System Charges, relate to services, rates and charges which may apply in the tariff years immediately following i.e. from 1 October 2011. It is currently envisaged that the following will be included in the scope of the second annual review:

- Consideration of new services including new or augmented services resulting from studies and analysis carried out by the TSOs into impact of increasing levels of intermittent generation on system requirements. The RAs will consider proposals put forward by the TSOs in this regard;;
- Review of the size of the AS pot in light of any new or augmented services. It is important to point out that the RAs will not simply increase the size of the AS pot. The cost of services may change in line with changes to their system value, while any new services approved must be purchased efficiently; and,
- Movement to an all island-pot; Ancillary services payments and charges have not been fully harmonised to the extent that there are still separate 'pots' for Northern Ireland and Republic of Ireland with SONI and EirGrid separately estimating their requirements. This arrangement is non optimum in the long term for at least two reasons. Firstly, the exchange rate will have to be revised each year; major changes in exchange rate could significantly affect the revenue of generators in

one or other jurisdiction and cause significant distortion. Secondly, the objective of optimising competition and efficiency in the provision of ancillary services on an all island basis cannot be fully realised while there are separate pots. The whole-island requirement for AS needs to be identified with the TSOs procuring ancillary services as efficiently as possible across the island from 1 October 2011. This would result in some cross-border revenue adjustments.

It will primarily be the responsibility of the TSOs to propose any new services or amendments to the existing services on the basis of their experience following the first year of the harmonized arrangements. However, service providers will also be able to propose such changes. As part of their annual review process the TSOs will report on the performance of the Harmonised Ancillary Services arrangements to the RAs, including any analysis carried out or areas where they are considering new or amended services. The RAs will consider any proposals for new services.

The need for new or augmented services will be kept under constant review via the Ancillary Services work stream. The size of the AS pot, the distribution between existing services and the need for new services will be assessed annually.

Next Steps

- The TSOs will carry out a consultation during July 2010 on their proposed changes to AS Rates and Charges and, separately, Other System Charges. These consultations will relate to rates and charges which are proposed to apply for the forthcoming tariff period;
- Following consultation, the Harmonised AS rates and OSC rates, as proposed by the TSOs for the next tariff period, commencing 1 October 2010, will be submitted to the Regulatory Authorities for approval;
- By early August, the RAs will assess and, as appropriate, approve revised Harmonised AS Rates and Charges and Other System Charges
- These approved rates and payments will apply for the period 1 October 2010 to 30 September 2011 and will be published by the TSOs by October 2010;
- The TSOs will commence the second annual reviews of Harmonised AS and of Other System Charges as appropriate following the completion of the first annual review. It is noted that a full year's data on the Harmonised Ancillary Services and Other System Charges arrangements will not be available until post February 2011.

Conclusions

The objectives of Harmonised Ancillary Services as envisaged as far back as 2006⁴ during the development of the Single Electricity Market are to seek to:

- Create a common methodology for the provision of services that will apply on an all-island basis
- Remove any potential distortion caused by differing payment rates and mechanisms;
- Promote more competitive provision of services;
- Encourage more efficient utilisation of these services by the TSOs;
- Ensure that the services are procured and utilised on an efficient, non-discriminatory all-island basis.

The new arrangements for HAS and OSC went live on 1 February 2010 and settlement for the first few months is underway with no major issues arising. These new arrangements should incentivise generator performance and deliver improved overall efficiency and security of the power system.

The approach of the Regulatory Authorities is to allow the new arrangements for Ancillary Services time to bed-in and to only consider minor refinements to existing services and rates arising from the TSO's first annual review. Subsequent reviews may consider broader issues as outlined above.

The Regulatory Authorities will continue to look to the TSOs to engage with service providers and to advise and to recommend to the RAs rates and charges necessary to secure the amount and types of new or amended Ancillary Services as may be necessary and appropriate to ensure a safe, secure, reliable, economical and efficient electricity transmission system.

⁴ Refer to [AIP-SEM-07-447](#) and AIP-SEM-160-06