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INFRASTRUCTURE

**RESPONSE TO CONSULTATION ON
'INCENTIVISATION OF ALL-ISLAND DISPATCH BALANCING COSTS'
PAPER SEM-11-048 OF JUNE 23 2011**

Dated 27 July 2011

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On June 23rd 2011 the Regulatory Authorities (RAs) published a paper which seeks to ascertain the thoughts of stakeholders on the introduction of some form of incentive for the Transmission System Operators (TSOs) around Dispatch Balancing Costs (DBC), which account for almost the total amount of Imperfections Charges.

The context of this consultation is the very large recent increase in DBC which are forecast to be over €60million over budget in 2010/11 and the 29% proposed increase, to €142.6 million, in the Imperfections Charges budget for 2011/12 compared with the budgeted cost for 2010/11 (see SEM-11-054).

This submission is the response of Energy Generation Infrastructure [EGI] to the RAs’ invitation.

Causes of Dispatch Balancing Costs

It is difficult for stakeholders to comment on arrangements for incentivisation of the TSOs in relation to DBC without information on the causes of these costs. We welcome the SEM Committee proposal that the TSOs publish a regular report on the level of constraints, drivers behind constraints, mitigating measures and other information on DBC. We urge early implementation of this proposal. Unfortunately, the information that would be contained in such reports is not available to stakeholders as a basis for commenting on SEM-11-048.

What is clear from the pattern of increase in Imperfections Charges in 2010/11 is that the outage of Turlough Hill pumped storage plant is the major contributor to the cost overrun for this year. Not only has the outage of this plant increased electricity costs in Ireland through higher Imperfections Charges, it has also led to an increase in average System Marginal Price of €2-3/MWh. The overall cost of this outage in terms of customer impact may exceed €150 million.

The market mechanisms of the SEM do not reward pumped storage in a benefit-reflective way. While the RAs have confined this consultation to the subject of incentivisation of the TSOs in relation to DBC, it should be acknowledged that any such incentivisation will have minimal effect on customer costs compared with introducing market mechanisms that incentivise flexible, fast-acting generating and demand-side capacity that has low starting cost and can be continuously operated in either demand or generating mode. With the planned quadrupling of the amount of wind generation capacity connected to the system over the next ten years, unless more flexible

plant such as pumped storage is commissioned there will be continuing increases in DBC each year.

EGI response to incentivisation proposals

We welcome any effective mechanism to control and reduce Imperfections Charges. However, as is discussed in the paper, there are many problems for incentive design, not least the problem for TSOs of operating in real time while guessing market outcomes which only become clear some days after the event. Projected DBC can be substantially influenced by the tuning of model parameters and variations in the setting of parameters could easily result in the TSOs being unfairly rewarded or penalized.

A further problem which is described in the consultation paper is that the two TSOs operate in different regulatory environments. Also, actions or events that occur in one jurisdiction can lead to increased DBC in the other, making it difficult to operate an incentive mechanism that could be applied fairly.

As pointed out in the consultation paper, there are differences in the market design between Ireland and Great Britain that make it more difficult to introduce the type of incentives that apply to National Grid, the Great Britain Electricity Transmission System Operator.

In relation to the wind forecasting incentive described in the SONI Price Control consultation paper and cited in SEM-11-048, we note that the Northern Ireland regulator decided against introduction of such an incentive. Improved wind forecasting is likely to require investment by the TSOs and a cost-benefit analysis of such investment should be undertaken before implementation. If investment in better forecasting can be proven conclusively to reduce DBC, then such investment should be made and allowed for in future TSO price controls.

We suggest that as an alternative to any DBC incentive mechanism, efforts at DBC reduction should be targeted at a robust reporting mechanism which catalogues and publishes dispatch instructions which deviate from the unconstrained schedule. These should be classified according to cause so that economically attractive solutions to DBC reduction can be more easily identified. Relevant stakeholders could then be incentivised to implement such solutions where suitable.

Many of the current causes of high DBC can be alleviated by flexible plant such as pumped storage. Advances in pumped storage technology with variable speed pumping and generating provides fast starting; load following and fast load changing; demand side management when pumping; provision of reactive power and black starting. It also offers the features of instantaneous active and reactive power injection/absorption (thus enhancing frequency and voltage control) together with continuous power flow and voltage control during grid disturbances. Furthermore, pumped storage can be arranged to provide high inertia, a requirement that has been identified in studies of the system impacts of high wind. Variable speed pumped storage provides the capability to significantly control the dynamic behaviour of the entire power system. Finally, variable speed pumped storage can operate at up to 98% availability for 8760 hours per year.

We believe that the best method of minimizing DBC is to incentivise investment in flexible generating and demand side capacity so that the TSOs have the tools to operate the system in the most cost-effective manner while maintaining security and quality of supply. In view of the lead times involved in planning, permitting and constructing such plants it is vital that the necessary incentives are proposed without delay.