



EirGrid Group Response To:

**“Demand Side Vision for 2020”
SEM – 10 – 052**

18th October 2010

Overview

The EirGrid Group (representing EirGrid TSO, SEMO and SONI) welcomes the publication of this Demand Side vision consultation paper and believes that it is a positive first step in determining a Demand Side vision for the island of Ireland.

The three pillars of the Demand Side strategy are sustainability, competitiveness and security of supply. The policy goals around this strategy are accelerating the growth of renewables, maximising energy efficiency, ensuring electricity supply meets demand and encouraging competition. The Republic of Ireland has set a binding electricity target of 40%¹ from renewable resources by 2020. Northern Ireland has set a similarly challenging policy goal of 40%². Wind power will provide the dominant share of this renewable electricity generation and, hence, wind capacity will continue to grow significantly in the period up to 2020 and beyond.

As the level of variable generation on the power system continues to increase, the flexibility of the power system becomes even more crucial. In this context, the response capability of Demand Side could form part of the overall solution to the management of the power system. However, to effectively harness the potential flexibility that Demand Side could offer it is important that the power system operational requirements are carefully considered and understood.

Integration of Renewables

EirGrid has recently carried out an All Island TSO Facilitation of Renewable study³. This study investigated the implications for the real time operation of the power system as the level of renewable generation increases. It was shown in these studies that operational strategies will need to change to successfully manage a power system with a renewable penetration of 40% and above. Demand Side has the potential to be a key enabler in the management of that power system. However, for Demand Side to play that role, it is essential that the power system perspective is integrated into the Demand Side solution. Notwithstanding all of this, there will be a need for flexibility on the power system. Some of this flexibility/system support services should be incentivised via the ancillary services mechanism. It is important that the true value of ancillary services is captured as we move toward a power system with greater levels of renewable generation to manage the system in

¹ http://www.greenparty.ie/en/news/latest_news/carbon_budget_09

² <http://www.detini.gov.uk/deti-energy-index.htm>

³ <http://www.eirgrid.com/media/Renewable%20Studies%20V3.pdf>

an efficient and secure manner. The market and support mechanisms need to be such that they act to encourage the right balance of ancillary services that are needed to operate the system. The structure and form of ancillary services is under review by EirGrid following the facilitation of renewables study results.

Licensing & Governance

EirGrid agrees that a review of the Trading and Settlement Code and Irish and Northern Irish Grid Codes is required to identify potential barriers to Demand Side participation in the SEM. However, EirGrid believes that a broader review of the licensing arrangements for Demand Side Units and Aggregated Generator Units needs to be considered by the Regulatory Authorities. There has been considerable interest from industry about participation in the SEM as both Demand Side Units and Aggregated Generator Units. However there has been no take up by interested stakeholders in the Republic of Ireland, and limited uptake in Northern Ireland.

At present there is only one Aggregated Generator Unit in the SEM. To register an Aggregated Generator Unit in the SEM, approval must first be obtained from the regulatory authorities. A bilateral agreement between the Regulatory Authorities and the unit is then required to ensure that the Generator Aggregator complies with the same obligations in the SEM as a licensed generator. The absence of a licence may pose challenges in terms of enforcing Grid Code compliance and appears to act as a barrier to interested third party users. EirGrid recommends a review of the governance arrangements for both Demand Side Units and Aggregated Generator Units.

We would recommend the immediate establishment of an expert group to review the arrangements and compile a report with recommendations on how best to proceed in amending the various Codes and legal frameworks/arrangements to create an environment that is more conducive to Demand Response in the SEM.

Firm Day-Ahead Price

The paper puts forward the merits of a firm day-ahead price as something that is of high value and to be pursued immediately.

As we understand it, there is consideration currently being given to the establishment of a day-ahead price via a financial market outside of the SEM as part of the work on Regional Integration. This work is very much at the exploratory stage and the main focus of the current regional integration work is on the implementation of an intraday trading arrangement.

Any consideration of establishing a firm day-ahead price in the SEM would be a significant change to the design of the SEM, essentially changing it from an ex-post priced market to an ex-ante priced market. Accordingly, such a change would need to be considered not solely in the context of promoting Demand Side participation but in the context of the development of the market as a whole.

It is important to note that the introduction of a firm day-ahead price could promote increased Demand Side participation, which in turn could deliver energy efficiencies. However, the introduction of a firm day-ahead price would not in itself, provide the increased flexibility that will be required to manage a system with a significant penetration of wind generation.

Considering regional integration and other developments in the market that are currently underway we would regard the establishment of an ex ante price – either through financial or physical means as a medium term rather than an immediate objective.

Stakeholder Forum

EirGrid believes that it is important that there is active stakeholder engagement to further develop the roadmap for the Demand Side vision for 2020. EirGrid recommends that a working group of the key stakeholders is established. There are a number of other ongoing consultations on dispatch and scheduling⁴ and the capacity payment mechanism⁵ and the resulting decisions will help inform the path to a 2020 Demand Side vision for the island of Ireland. In addition, there is an upcoming review of ancillary services which would need to be considered in the context of creating the Demand Side vision.

Summary

There are a number of key issues that have been highlighted in this response. These are outlined below.

- The EirGrid Group welcomes the publication of the Demand Side Vision and believes it forms an important part of the strategy for the integration of renewables out to 2020. EirGrid recommends that a working group of the key stakeholders is established.
- It is important that the needs of the power system are considered in the context of the Demand Side Vision; the Facilitation of Renewables studies provide a clear outline of the system needs with high renewable penetration, this information is central to the Demand Side vision.

⁴ http://www.allislandproject.org/en/renewable_decision_documents.aspx?article=b94b7748-1faf-41e3-975a-a0323d074eca

⁵ http://www.allislandproject.org/en/cp_current-consultations.aspx?article=4dde96cc-fdda-458b-9a3c-dc4a00692ac5

- There are various consultations underway at the moment and it is important that the resultant decisions when taken together form a coherent solution for the strategy for the power system out to 2020.
- The true value of ancillary services needs to be captured and therefore changes are needed in the support and market mechanisms required to incentivise the provision of the right ancillary services. This will enable the potential for the Demand Side services to be realised.
- The consideration of the governance and licensing arrangements should not be limited to the Irish and Northern Irish Grid Codes and the Trading & Settlement Code.
- The creation of a firm day-ahead price would need to be considered in the context of the development of the market as a whole rather than just in the context of promoting Demand Side participation.