Firm Access Quantities Scenario Analysis for ROI

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Introduction

This document has been prepared for ROI only.

Connecting Parties contract with the relevant System Operator (TSO or DSO) for access to the Transmission or Distribution System based upon a Maximum Export Capacity (MEC).

System access is primarily premised on two components, connection works and associated transmission reinforcements (ATRs - previously referred to as Deep Reinforcements). The SEM High Level Design (AIP/SEM/42/05) provided that parties would be accorded 'firm capacity' once ATRs were complete but that a party could connect on a 'non firm' basis once the Site Related Connection Equipment and safety associated ATRs (Short Circuit Driven Deep Reinforcement Works) have been completed. In such instances the applicant may be 'partially firm' if the ATRs associated with only a portion of its capacity are complete. The capacity available to a party on a firm basis is referred to as its firm access quantity (FAQ). The FAQ can impact on generator scheduling and remuneration in the market and hence is an important commercial consideration.

FAQs are determined by reference to network capacity, against a set of credible network planning scenarios which drive investment in transmission infrastructure. They are not related to wider system limitations which drive curtailment. The FAQ level available is dependent on a number of factors including transmission build and demand levels. The FAQ studies have been completed and published for Gate 1 and Gate 2 on the EirGrid website and the original Gate 3 studies, completed in 2009/10, are currently being re-studied to reflect current projections.

The term full firm access denotes that a connecting party has an FAQ of 100% of the requested Maximum Export Capacity (MEC). The term partial firm access denotes an FAQ of between 0.1% and 99.9% (inclusive) of the requested MEC. Finally, non-firm access denotes an FAQ of 0% of the requested MEC.

In order to present this at an aggregate level, EirGrid has carried out preliminary analysis on the level of wind plant currently connected or with connection contracts/offers and the amount that is currently anticipated to be firm within a given period (2017/18) given current assumptions concerning network build.

This analysis was completed assuming there was no impact on the investment portfolio and it does not take into account planning permission, or the siting of wind farms in SPAs and SACs, etc, which may also influence how the wind plant portfolio evolves.

Analysis Results

A table illustrating the level of those plant with connection offers which would be expected to have firm access in Ireland by 2017/18 is appended below in Table 1.

Table 1: Current Status and Projected Firmness of Wind (Ireland)

	MEGAWATTS (MW)				
	PRE GATE 1 & Non-GPA	**GATE 1**	**GATE 2**	**GATE 3**	**TOTAL**
Current Operational Wind Farms (Installed Capacity)	**878**	**249**	**506**	**1**	**1,634**
Wind Farms with Connection Contracts/Offers (not yet operational – based on MEC)	22	114	829	3,989	**4,954**
Total	900	363	1,335	3990	**6,588**
Full Firm Access by 2017/18 (current assumed network build[1])	900	363	1,335	1,458	**4,056**
Partial Firm Access by 2017/18 (current assumed network build[1])	n/a	n/a	n/a	301	**301**
No Firm Access by 2017/18 (current assumed network build[1])	n/a	n/a	n/a	2,231	**2,231**
Total	900	363	1,335	3,990	**6,588**

1. Assumes c. 2,000 kms transmission uprates, c. 440 kms new transmission build (incl. North-South 400kV interconnector but excl. all other 400kV new build), c. 13 transmission station busbar up-ratings completed by 2017/18.

NOTES:

1. Figures rounded to the nearest megawatt (MW).
2. Gate 1 and Gate 2 firm access figures based on 2011 analysis.
3. Gate 3 firm/partial access figures are estimates which have been extrapolated from analysis undertaken in 2009/10 with the above transmission build/uprate assumptions. A re-study of Gate 3 FAQs is scheduled to be undertaken August-December 2012 to take account of (a) latest forecasts on electricity usage levels, (b) current transmission reinforcement delivery timelines, (c) EirGrid's current transmission development plans, (d) certain revisions made to the FAQ calculation methodology since the original (2009/10) analysis and (e) any connection agreement terminations or lapsed connection offers since the original (2009/10) analysis.
4. Firm access figures assume all shallow connections (excl. Grid West (400kV Line to Bellacorick)) complete.
5. Table 1 above only includes those Non-GPA generators which are currently operational.