

The ITC (Incremental Transfer Capability) program is a computer program used by EirGrid for the Gate 3 project. The purpose of the ITC program is to determine the amount of extra electricity that the transmission system can accommodate from the proposed applicant's facility without breaching thermal network limits. It identifies firm capacity available in the transmission system and allocates it to the Gate 3 applicants on a date-order basis.

The available firm generation capacity is calculated for each project in Gate 3 for three study seasons: maximum electricity demand in summer, maximum electricity demand in winter and minimum electricity demand in summer. For each of these study seasons, an average of four credible dispatch scenarios are considered. For each calculation the computer program iteratively finds the point at which the applicant causes a thermal overload on the transmission system. The output of the project at the point of the thermal overload is the available firm capacity for a given scenario. The worst case available firm capacity for each season and dispatch scenario is taken as the scheduled Firm Access Quantity for that year.

The program examines each project for each year from 2010 to 2025 (or until such time as the project has obtained firm access for its requested Maximum Export Capacity (MEC)). At the end of each year an agreed program of upgrade works is added to the network models to reflect the on-going development of the transmission system. This takes account of the proposed developments outlined in Grid25 – EirGrid's strategy for the development of Ireland's electricity grid over the period to 2025 – and considers certain practical considerations such as ability to obtain outages and sustainable capital spend. Reinforcements are prioritised as much as is practically possible to provide as much firm access as quickly as possible to those applicants known to be receiving an offer under Gate 3.