

Winter Outlook 2014/15

EirGrid Group expects there will be adequate generation capacity to ensure security of supply over the coming winter period in Ireland and Northern Ireland.

Northern Ireland

- The analysis presented in the Generation Capacity Statement (GCS) 2014-2023 remains valid for Northern Ireland for the coming winter period: Generation capacity margins are expected to be adequate. Capacity margins decrease in February 2015 during outages at Ballylumford, but are still considered acceptable.
- Demand growth remains low in Northern Ireland with a prediction of 0.6% growth by the end of 2014.
- Installed Wind Capacity In Northern Ireland is expected to increase to over 637MW during the Winter months, with a corresponding capacity credit of 130MW.
- The Moyle Interconnector, due to a prolonged fault, continues to be limited to half of its capacity (250MW).

Ireland

- The situation for Ireland is updated slightly from that presented in the GCS 2014-2023 due to changes in circumstances, however the generation capacity margin remains adequate at approximately 2,000MW, which should ensure security of supply over the winter 2014/15.
- A new 460MW combined-cycle gas turbine (CCGT) at Great Island is now expected to become commercially available during April 2015. This will be offset somewhat by the retirement of the three existing oil-fired units in Great Island power station, which have a total capacity of 217MW.
- Demand growth for 2014 remains low, with a prediction of 1% growth by the end of 2014.
- Demand-side response, where certain customers reduce their overall demand at peak periods, has increased significantly in the past year to 161MW in Ireland, up from 69MW at the end of 2013.
- Installed wind generation in Ireland now exceeds 2,000 MW, with a corresponding wind capacity credit of 334MW towards overall capacity margin and security of supply.
- Natural gas continues to be the main fuel used, although its proportion of the energy mix has shrunk to approximately 40%, with 20% of electrical energy coming from coal, and almost 20% from renewables (wind and hydro).
- Interconnection with Great Britain via the East-West interconnector (EWIC) is contributing strongly to the security of supply in Ireland.

Notes:

1. Expected winter values correct at time of printing (27th August 2014)
2. Demand Growth based on All-Island Generation Capacity Statement 2014-2023 Median Forecast
3. Great Island commissioning dates based on latest information received from the generator.

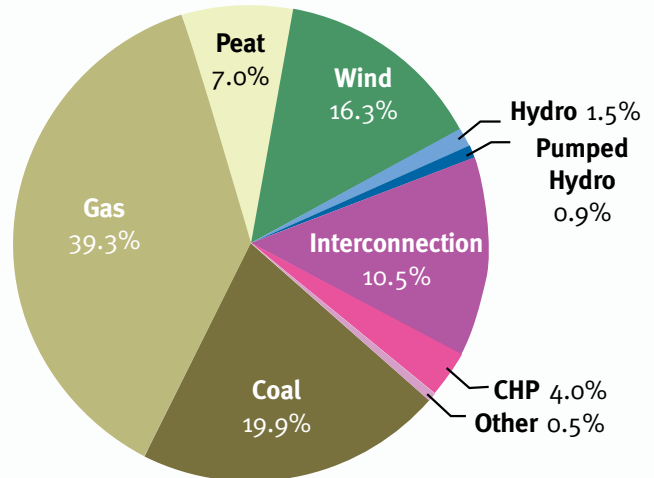
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Energy Mix

The approximate 2013 energy mix is shown in the figure, based on EirGrid Group data (note that this does not include very small scale generation). The impact of EWIC is clearly seen with imports now comprising over 10% of the fuel mix. The relatively cheap price of coal has seen coal's percentage increase to almost 20% of the fuel mix. The category 'other' includes waste-to-energy and distillate. (Distillate is a 'secondary' fuel, used by gas plants in the event of a supply interruption.)

Note that the fuel mix can change based on installed wind and how much the wind blows, plant closures or forced outages, as well as the relative prices of coal and gas.

2013 All-Ireland Fuel Mix Percentages

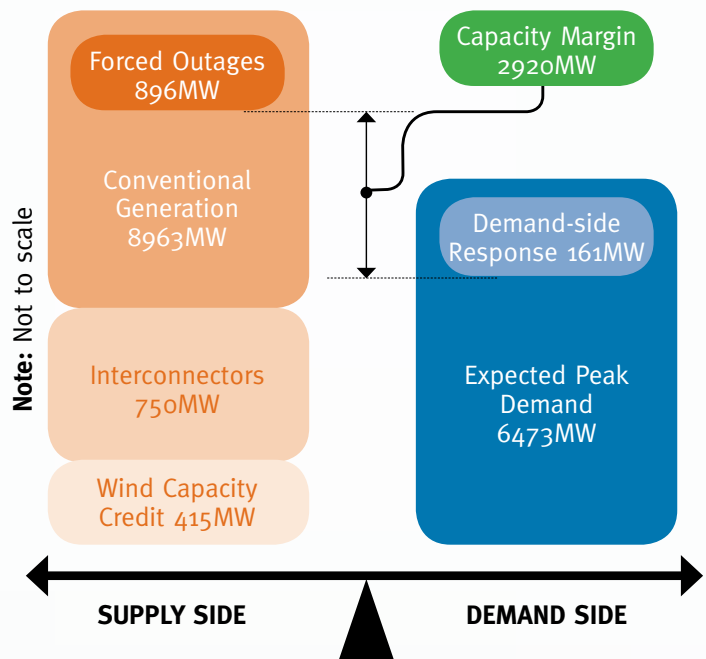


Capacity Margin and Security of Supply

The all-island capacity margin is expected to be 2,920MW over the winter period. Note that security of supply is dependent on a number of factors, not just the capacity margin. These factors include:

- **Fuel reserves:** uninterrupted supply of natural gas via the Moffat terminal
- **Availability of interconnectors:** 750MW of capacity has been assumed to be available over the winter period
- **Generator forced outage rates:** a conservative estimate of a 10% forced outage rate has been assumed
- **Transmission system maintenance and operation:** assumed that a fully intact network will be available over winter
- **Transmission system constraints:** generators have to be dispatched to avoid bottlenecks in the transmission system
- **Plant closures:** it has been assumed that these will take place as currently indicated in the All-Island Generation Capacity Statement 2014-2023 <http://tinyurl.com/pcpklel>
- **Demand growth rates:** it has been assumed that these remain low, while being consistent with a general economic recovery
- **Limited interconnection between Ireland and Northern Ireland grids:** north-south tie-line flow normally limited to 450MW for system security reasons, but this value includes reserve / rescue flows

All-island Capacity Margin



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