



System Margins Outlook Ireland

This report is issued every Monday and Friday, excluding bank holidays. During periods when the system is particularly tight, ad hoc updates may additionally be issued.

Disclaimer:

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NOTE: Temporary Emergency Generation (TEG) has been included in this report, pursuant to its use in terms of the requirements for the use of non-market based generation in Article 16(2) of Regulation (EU) 2019/941 of the European Parliament and of the Council of 5 June 2019 on risk-preparedness in the electricity sector ('RP Regulation'), as well as the specific requirements for the use Temporary Emergency Generation specified in the Risk Preparedness Plan for Ireland ('RPP'), approved by the Commission for the Regulation of Utilities (CRU) on 31 May 2023. TEG may only be included in margin calculations when the power system would otherwise enter a system Alert State or Emergency State and dispatched where it is evident that market-based measures alone are not sufficient to prevent a further deterioration of the electricity supply situation. As specified in the RPP, Given the out-of-market application of TEG, its impact on the System Margin outlook is reported on separately in a new graph.



Outlook

Dispatchable Generation and Renewable Generation Forecast

The capacity provided by market-based dispatchable generation (**green**) and renewable energy (**blue**) is shown in relation to the demand and operating margin required to avoid a System Alert. The renewable generation forecast comprises grid-scale solar and wind energy. The probable low renewable generation between 09:00 and 21:00 (when peak system demand occurs) is shown in **dark blue**. The lowest average forecast renewable generation between 09:00 and 21:00 is shown in **light blue**. The available renewable generation forecast is shown for five days ahead.

If the outlook with non-market and renewable generation is below the required operating margin (approximately 500 MW), support via trades and flows on interconnectors between Ireland and Great Britain or Northern Ireland may be required to avoid a System Alert.

It should be noted that the dispatchable generation outlook and renewable generation forecast are highly variable. The outlook is based on estimates and is therefore subject to rapid changes.

Non-Market Generation: Temporary Emergency Generation

Temporary Emergency Generation (TEG) may be included by the System Operator in system margin calculations in real time when the power system would otherwise enter a system Alert State or Emergency State. These may be dispatched where it is evident that market-based measures alone are not sufficient to prevent a further deterioration of the electricity supply situation. The impact of **available TEG** on the system outlook is shown below.

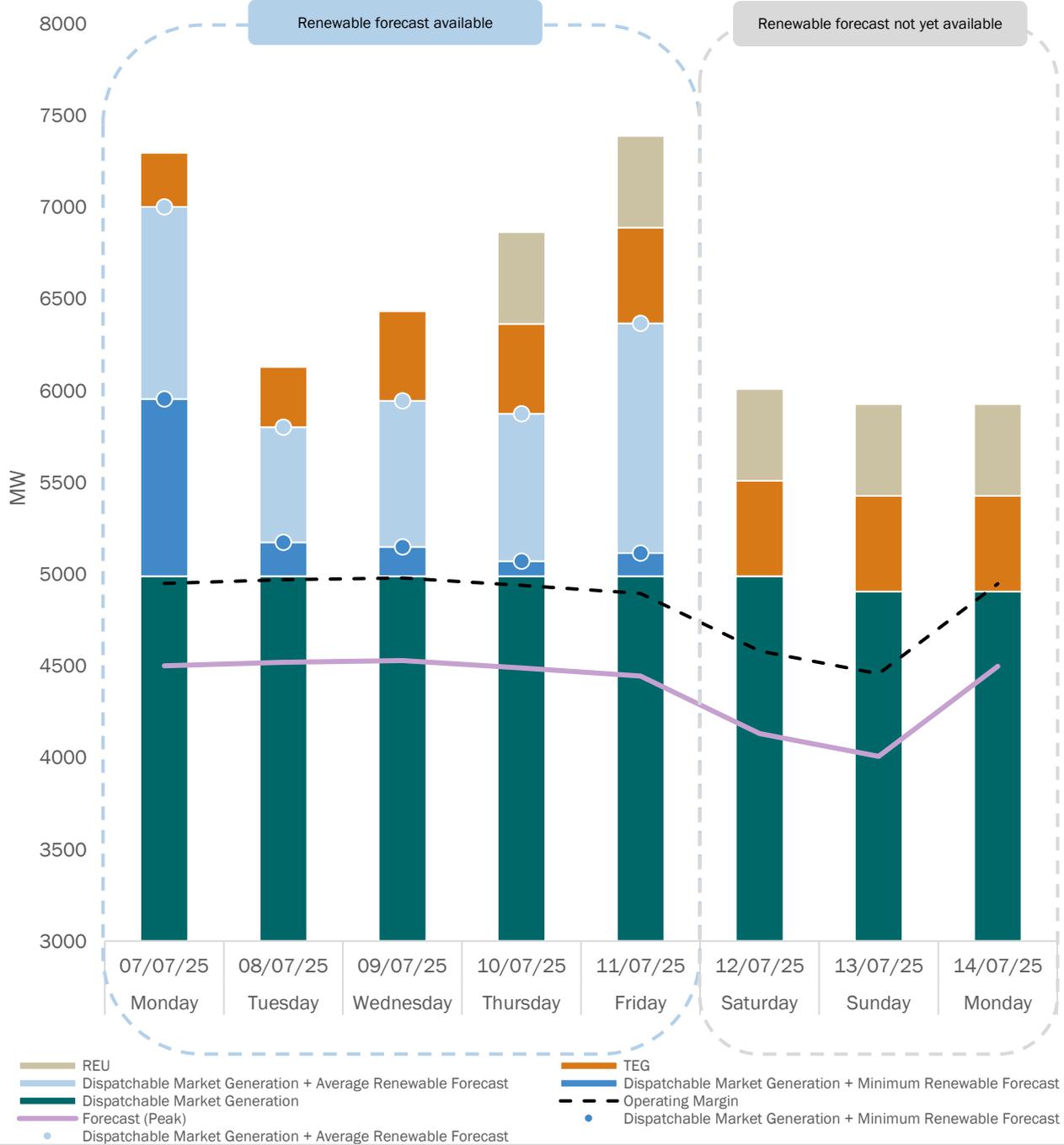
Non-Market Generation: Retained Existing Units

The notice and ramp times for the Retained Existing Units (REU) at Moneypoint are significantly longer than those of the TEG units. The Moneypoint units may therefore be instructed to prepare for synchronisation by the System Operator where the outlook indicate a heightened risk that market-based and TEG capacity may be inadequate to keep the system from entering Alert or Emergency State. The NCC may also cancel such synchronisation instructions, should the risk abate.

The capacity of these units may be included by the System Operator in system margin calculations, from the time that these can be synchronised to the system considering the heat state and ramp times of these units. This capacity will also be shown for the minimum duration that these units are required to operate before being desynchronised. The impact of **available REUs** on system margins and the system outlook is shown below.

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*Excludes potential support from Great Britain and Northern Ireland



TEG Availability

The outlook for the maximum generation capacity for TEGs is shown below.

TEG Availability (MW)	Mon	Tues	Wed	Thu	Fri	Sat	Sun	Mon
North Wall (NW8)	0	0	193	193	193	193	193	193
Huntstown (DG1)	50	50	50	50	50	50	50	50
Shannonbridge (SQ1)	96	128	96	96	128	128	128	128
Tarbert (TB5)	150	150	150	150	150	150	150	150

Non-Market (REU) Availability

The outlook for the maximum generation capacity for REUs is shown below, taking into consideration the respective notification and ramp times associated with the heat state of these units.

REU Availability (MW)	Mon	Tues	Wed	Thu	Fri	Sat	Sun	Mon
Moneypoint (MP1)	0	0	0	0	0	0	0	0
Moneypoint (MP2)	0	0	0	250	250	250	250	250
Moneypoint (MP3)	0	0	0	250	250	250	250	250

Interconnector Availability

Imports via interconnector will be subject to trades on the day. The outlook for the maximum import capacity from Great Britain to Ireland is shown below. In real-time, interconnector trades will be included in the system margin calculation before considering Temporary Emergency Generation.

Interconnector Availability (MW)	Mon	Tues	Wed	Thu	Fri	Sat	Sun	Mon
East-West Interconnector	500	500	500	500	500	500	500	500
Greenlink Interconnector	500	500	500	500	500	500	500	500

Description of Terms

	Summary
Daily Dispatch Margin	<p>The Daily Dispatch Margin (light green) is the anticipated difference between how much dispatchable market-based capacity (generation, batteries, and demand response) is expected to be available to the System Operator, and the forecast peak system demand on the day. The margin takes into consideration local grid constraints.</p> <p>When the margin is negative, available generation is inadequate to meet demand if supply from other sources is not available on a given day. Other sources include renewable generation, flows from Northern Ireland via the North-South Tie-Line, and trades (imports) from Great Britain via the East-West Interconnector (EWIC).</p> <p>This margin can change on any given day, should generation capacity unexpectedly become unavailable due to forced outages or if the demand forecast changes.</p> <p>NOTE: The Daily Dispatch Margin with TEG included is shown in orange to indicate that this may only be considered in margin calculations under the conditions defined in Section 3.1(c)(i) of the Risk Preparedness Plan for Ireland.</p>
Renewable Generation	<p>The installed wind and solar generation capacity in Ireland is approximately 4.8 GW. When renewable generation is high, the quantity of dispatchable generation required to meet demand and operational security requirements is reduced.</p> <p>Given the variability in the renewable generation forecast, the impact on the margin of a probable low value (dark blue) and a probable average value (light blue) is shown in the outlook.</p>
Operating Margin	<p>In order to operate the power system securely (i.e. to exceed the ability to meet demand), the Transmission System Operator makes provision for loss of a single largest source of capacity on the day. This operating margin is indicated by a 450 MW provision in the outlook (black).</p>
System Alert	<p>A System Alert (Amber) will be issued by the System Operator on a given day if the operating margin is not met by a combination of available generation, imports and renewable generation (i.e., loss of the single largest unit), and Temporary Emergency Generation capacity.</p>
System Emergency	<p>A System Emergency (Red Alert) will be issued in real time by the System Operator on a jurisdictional basis if there is a high probability that controlled demand reduction may be required, or if this has been instructed. Controlled demand reduction includes procedures for large energy users to curtail demand and for customers to be temporarily disconnected to secure the power system.</p>

