SEM Capacity Market

2023/2024 T-1 Capacity Auction

Provisional Capacity Auction Results

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1. Executive Summary

This report contains the provisional Capacity Auction Results for the T-1 Capacity Auction in respect of the Capacity Year 2023/2024, which took place on the 18th July 2023. The Capacity Auction summary results are presented below in Table 1.

Table 1 –	Summary	of	provisional	Capacity	Auction	Results
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Parameter	Value
Auction Clearing Price	146,919.00 €/MW per year
Auction cleaning Frice	128,480.70 £/MW per year
Average Drice of Awarded Capacity	147,778.62 €/MW per year
Average Price of Awarded Capacity	129,232.40 £/MW per year
Total Awarded Capacity	638.809 MW
Qualified Capacity Market Units (> 0 MW)	34
Opt-Out Notifications	10
Capacity Market Units that submitted Offers	22
Capacity Market Units allocated Awarded Capacity	22

This report includes further details with respect to the Final Qualification Decisions for the 2023/2024 T-1 Capacity Auction as well as the Provisional Capacity Auction Results per individual Capacity Market Unit. The report also provides a breakdown of the results by technology class and locational area.

2. Background

The Capacity Market seeks to ensure that the generation capacity in Ireland and Northern Ireland (including Storage, Demand Side Units and Interconnector capacity) is sufficient to meet demand and that the regulatory approved generation adequacy standard is satisfied. It is a competitive auction-based design where the most efficient and lowest cost capacity is most likely to be successful.

Only those units who are successful in the capacity auctions will receive capacity payments. Capacity providers that are successful in the capacity auction will be paid regular payments during the year for each MW of capacity they successfully sold to the market in the Auction. In return, capacity providers that have been successful in the Auction are required to deliver on their Capacity Market obligations. These include making available the awarded capacity and providing sufficient energy to satisfy their awarded capacity through participation in the day-ahead, intraday and balancing market and paying difference charges where the energy price exceeds the strike price.

It should be noted that generators and other units operating in the Single Electricity Market (SEM) can also earn revenue from the energy market and system services.

The all-island capacity requirement is expressed in terms of de-rated MW. The requirement is calculated using an approved methodology and takes account of generator reliability and a wide range of future demand and renewable energy output scenarios. Use of this methodology helps to ensure that whatever mix of capacity is successful in the Capacity Auction will satisfy the generation adequacy standard. The final all-island requirement used in the auction is in the form of a Demand Curve set by the Regulatory Authorities, which has been adjusted accordingly for reserves, non-participating capacity and other considerations.

In addition to an all-island requirement, a number of locational capacity constraint areas and associated locational required quantities were also included in this auction. The areas for this auction were Northern Ireland, Ireland (excluding Greater Dublin) and the Greater Dublin area. These areas are included in the auction due limits on the transmission system that can restrict the flow of power from one area to another. The Required Quantities set in the auction for these areas are based on the System Operators' analysis using a detailed approved methodology, with the final values used in the auction set by the Regulatory Authorities. Like the Demand Curve, the final auction Required Quantities for each locational area are adjusted for reserves, non-participating capacity and other considerations.

In accordance with paragraph F.9.5.1A of the Capacity Market Code (CMC), this report contains provisional Capacity Auction Results for the T-1 Capacity Auction, which took place on the 18th of July 2023, in respect of Capacity Year 2023/2024.

The Final Capacity Auction Results for the 2023/2024 T-1 Capacity Auction are expected to be published on or before 7th of September 2023, subject to approval by the Regulatory Authorities in accordance with section F.9.3 of the CMC.

In accordance with section D.1.1.1 of the CMC, the Capacity Year 2023/2024 is the period commencing at the start of the Trading Day beginning at 23:00 on 30th September 2023 and ending at the end of the Trading Day ending at 23:00 on 30th September 2024. 'MW' refers to a megawatt of de-rated capacity, unless otherwise stated. For prices specified in \notin /MW per year or \pounds /MW per year, 'year' refers to a 12-month year, unless otherwise stated.

3. Final Qualification Decisions

A total of 143 Capacity Market Units sought to qualify for the 2023/2024 T-1 Capacity Auction, seeking to qualify a total of 815.977 MW of Net De-Rated Capacity. Of these, all 143 Capacity Market Units (CMUs) successfully qualified for the 2023/2024 T-1 Capacity Auction. 109 units qualified with a Net De-Rated Capacity of 0 MW as these units have Awarded Capacity for this Capacity Year from previous Capacity Auctions.

34 units qualified with a Net De-Rated Capacity of greater than 0 MW. A total of 815.977 MW successfully qualified for the 2023/2024 T-1 Capacity Auction. This equates to a total of 306.793 MW of Existing Net De-Rated Capacity and 509.184 MW of New Net De-Rated Capacity. Table 2 and Figure 1 provide a summary of Final Qualification Decisions by Technology Class for both Existing Capacity and New Capacity.

Opt-Out Notifications were submitted to the System Operators in respect of 10 Capacity Market Units. Please refer to Appendix A for the full provision of Final Qualification Decisions per CMC Section F.9.5.1A (c).

Table 2 below provide a breakdown of the qualified capacity for existing¹ and new units by technology class. Figure 1 provides a graphical representation of Table 2.

Technology Class	Qualified Capacity (Existing) (MW)	Qualified Capacity (New) (MW)
Demand Side Unit	10.209	73.180
Gas Turbine	78.300	403.692
Hydro	0.086	0
Interconnector	13.350	0
Battery Storage	3.923	32.312
Steam Turbine	200.925	0
Grand Total	306.793	509.184

Table 2 - Qualified de-rated Capacity by Technology Class

¹ An existing unit is defined as a unit that has been commissioned under the Grid Code and has an Operational Certificate

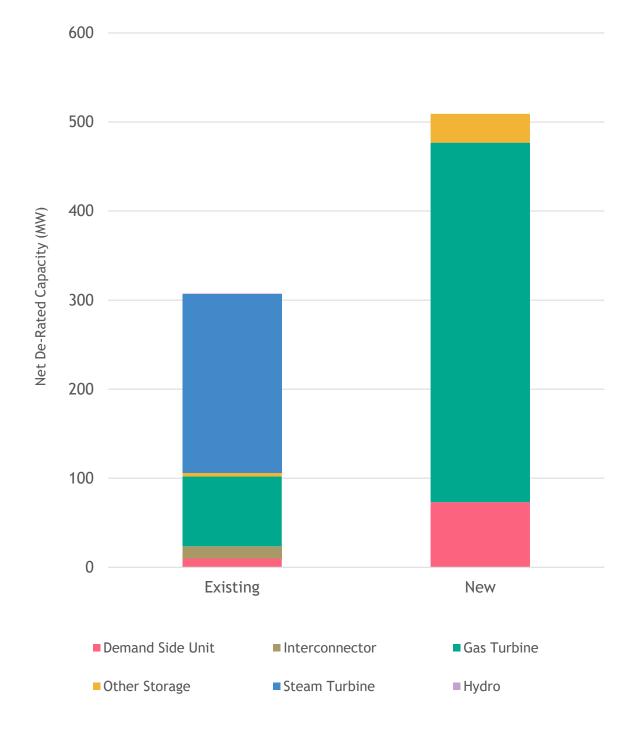


Figure 1 - New and Existing Qualified Capacity by Technology Class

4. Provisional Capacity Auction Results

4.1. Results by Capacity Market Unit

Capacity Auction Offers were submitted in respect of 22 Capacity Market Units for the 2023/2024 T-1 Capacity Auction. A total of 638.809 MW of de-rated capacity was offered into the auction and the total successful de-rated capacity in the auction was 638.809 MW.

The Auction Clearing Price was 146,919 €/MW per year and 128,480.70 £/MW per year. Where Offers are accepted at an Offer Price greater than the Auction Clearing Price, in order to maximise Net Social Welfare or to satisfy a Locational Capacity Constraint, the Capacity Payment Price is set equal to the Offer Price for that Capacity Market Unit.

The Capacity Auction Results and total Awarded Capacity for successful Capacity Market Units are listed in Table 3. All Awarded Capacity has a duration of one year. A total of 22 Capacity Market Units were allocated Awarded Capacity in the 2023/2024 T-1 Capacity Auction. Details of the Technology Class for each unit can be found in Appendix B.

A total of 13 Capacity Market Units were allocated Awarded New Capacity in the 2023/2024 T-1 Capacity Auction. Implementation Plans for these Capacity Market Units are listed in Table 4.

CMU ID	Party Name	Awarded Capacity (MW)	Capacity Payment Price (€/MW, £/MW)	LCC Area
CAU_400301	ESB	0.086	€ 146,919.00	L1-2: Rest of Ireland
DSU_403500	Powerhouse Generation Ltd	4.14	€ 146,919.00	L1-2: Rest of Ireland
DSU_403520	Electricity Exchange DAC t/a VIOTAS	0.545	€ 146,920.00	L1-2: Rest of Ireland
DSU_403590	Endeco Technologies Ltd t/a GridBeyond	1.117	€ 146,919.00	L1-2: Rest of Ireland
DSU_403650	iPower Solutions Ltd	3.398	€ 146,919.00	L1-2: Rest of Ireland
DSU_403660	Veolia Alternative Energy Ireland Ltd	6.352	€ 146,919.00	L1-3: Greater Dublin
DSU_403690	Endeco Technologies Ltd t/a GridBeyond	1.009	€ 146,919.00	L1-3: Greater Dublin
DSU_403730	Electricity Exchange DAC t/a VIOTAS	1.647	€ 146,920.00	L1-2: Rest of Ireland
DSU_403760	Electricity Exchange DAC t/a VIOTAS	7.33	€ 146,920.00	L1-2: Rest of Ireland
DSU_501560	Powerhouse Generation Ltd	0.746	£ 130,000.00	L1-1: Northern Ireland
DSU_503650	Endeco Technologies Ltd t/a GridBeyond	1.335	£ 128,480.67	L1-1: Northern Ireland
GU_400181	ESB	78.3	€ 146,919.00	L1-2: Rest of Ireland
GU_400271	ESB	200.925	€ 146,919.00	L1-2: Rest of Ireland
GU_400324	ESB	7.9	€ 146,919.00	L1-3: Greater Dublin
GU_400325	ESB	4.556	€ 146,919.00	L1-3: Greater Dublin
GU_403610	ESB	55.436	€ 146,920.00	L1-3: Greater Dublin
GU_403620	ESB	55.436	€ 146,919.00	L1-3: Greater Dublin
GU_404510	Statkraft Markets GmbH	0.893	€ 146,919.00	L1-3: Greater Dublin
GU_405070	Statkraft Markets GmbH	3.03	€ 146,919.00	L1-2: Rest of Ireland
GU_501130	iPower Solutions Ltd	2.318	£ 128,480.67	L1-1: Northern Ireland
GU_504110	EP NI Energy Ltd	200.06	£ 130,846.95	L1-1: Northern Ireland
GU_504120	EP NI Energy Ltd	2.25	£ 130,846.95	L1-1: Northern Ireland

Table 3 - Summary of Successful Capacity Market Units

	Party / Unit Details	Awarded Capacity	Implementation Plans Milestone Dates							
CMU ID	Company Name	Awarded New Capacity (MW)	Substantial Financial Completion	Commence- ment of Construction Works	Mechanical Completion	Completion of Network Connection	First Energy to Network	Start of Performance/ Acceptance Testing	Provisional Acceptance/ Completion of Performance Testing	Substantial Completion
DSU_403500	Powerhouse Generation Ltd	4.14	31/07/2023			30/08/2023				30/09/2023
DSU_403590	Endeco Technologies Ltd (GridBeyond)	0.149	30/09/2023			30/09/2023				30/09/2023
DSU_403650	iPower Solutions Ltd	3.398	30/09/2023			30/09/2023				30/09/2023
DSU_403730	Electricity Exchange DAC (VIOTAS)	1.647	09/01/2025			01/10/2023				01/10/2023
DSU_403760	Electricity Exchange DAC (VIOTAS)	7.33	09/01/2025			01/10/2023				01/10/2023
DSU_501560	Powerhouse Generation Limited	0.746	31/07/2023			30/08/2023				30/09/2023
GU_400324	ESB	7.9	30/06/2023	30/06/2023	30/03/2023	30/03/2023	30/03/2023	30/03/2023	30/06/2023	01/08/2023
GU_400325	ESB	4.556	30/06/2023	30/06/2023	30/03/2023	30/03/2023	30/03/2023	30/03/2023	30/06/2023	01/08/2023
GU_403610	ESB	55.436	02/11/2022	02/11/2022	01/09/2023	01/09/2023	01/09/2023	01/10/2023	30/11/2023	31/12/2023
GU_403620	ESB	55.436	02/11/2022	02/11/2022	01/09/2023	01/09/2023	01/09/2023	01/10/2023	30/11/2023	31/12/2023
GU_501130	iPower Solutions Ltd	2.318	31/08/2023			31/08/2023				31/08/2023
GU_504110	EP NI Energy Ltd	200.06	01/11/2021	01/02/2022	26/07/2023	15/08/2023	22/08/2023	20/10/2023	27/10/2023	27/10/2023
GU_504120	EP NI Energy Ltd	2.25	01/11/2021	01/02/2022	30/07/2023	21/08/2023	23/08/2023	23/10/2023	30/10/2023	30/10/2023

Table 4 – Implementation Plans for Awarded New Capacity

4.2. Capacity Auction Results by Technology Class and Locational Capacity Constraint Area

Table 5 and Table 6 provide details relating to the total successful and unsuccessful capacity in the auction for Northern Ireland, Ireland (not including Greater Dublin) and Greater Dublin. The values are given in terms of De-rated Capacity.

Total Capacity (MW)	Northern Ireland	Ireland (excluding Dublin)	Greater Dublin	Market Total
De-Rated Quantity Offered	206.709	300.518	131.582	638.809
De-Rated Quantity Successful	206.709	300.518	131.582	638.809
De-Rated Quantity Unsuccessful	0	0	0	0

Table 5 - Total Capacity per Locational Constraint Area

Table 6 - New Capacity per Locational Constraint Area

New Capacity (MW)	Northern Ireland	Ireland (excluding Dublin)	Greater Dublin	Market Total
De-Rated Quantity Offered	205.374	16.664	123.328	345.366
De-Rated Quantity Successful	205.374	16.664	123.328	345.366
De-Rated Quantity Unsuccessful	0	0	0	0

Figure 2 provides a graphical representation of Table 5 and Table 6. It gives the breakdown by existing and new capacity for each locational capacity constraint area and also shows the auction required quantity for that locational area.

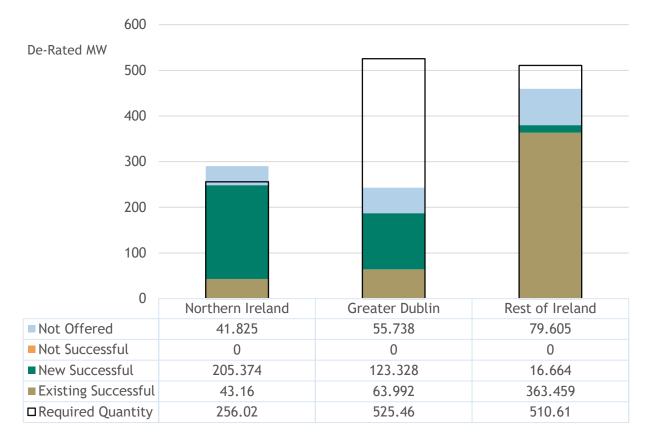


Figure 2 - Summary of auction by locational area

A total of 638.809 MW of De-rated New Capacity was successful in the auction. This comprised of gas turbines, demand side units, steam turbines and battery storage.

The approved Locational Capacity Constraints Required Quantities set in the Capacity Auction, for Northern Ireland, Ireland, and Dublin were not satisfied.

The required quantity values in the chart below are net required quantities (i.e. previously awarded capacity for this capacity year has been deducted).

Technology Class	Successful Existing (MW)	Successful New (MW)	Total Successful (MW)
Demand Side Unit	10.209	17.41	27.619
Gas Turbine	78.3	327.956	406.256
Hydro	0.086	0	0.086
Battery Storage	3.923	0	3.923
Steam Turbine	200.925	0	65.332
Grand Total	293.443	345.366	638.809

Table 7 - Breakdown of successful capacity by Technology Class

Table 8 provides a breakdown of the capacity (MW) by technology class that were qualified for the auction, and what percentage of that capacity were offered into the auction. 78% of the total qualified capacity offered into the auction.

Table 8 – MW Breakdown of qualified capacity and successful capacity by Technology Class

Technology Class	Qualified	Offered	Successful	% Qualified/offered
Demand Side Unit	83.389	27.619	27.619	33%
Gas Turbine	481.992	406.256	406.256	84%
Hydro	0.086	0.086	0.086	100%
Interconnector	13.35	0	0	0%
Battery Storage	36.235	3.923	3.929	11%
Steam Turbine	200.925	200.925	200.925	100%
Grand Total	815.977	638.809	638.809	78%

Table 9 is similar to Table 8 but instead provides a table containing the number of individual projects associated with each technology class offered into the auction. Table shows that 70% of all qualified Gas Turbine projects offered into the auction, whereas only 46% of qualified Battery Storage projects offered into the auction.

Technology Class	Qualified	Offered	Successful	% Qualified/offered
Demand Side Unit	15	10	10	67%
Gas Turbine	9	8	8	89 %
Hydro	1	1	1	100%
Interconnector	2	0	0	0%
Battery Storage	6	2	2	33%
Steam Turbine	1	1	1	100%
Grand Total	34	22	22	65%

Table 10 provides a summary of the Awarded New Capacity by both Technology Class and Location that was successful in the auction.

Table 10 - Breakdown of New Capacity (MW) by Locational Area and Technology Class

Technology Class	Northern Ireland	Ireland (excluding Dublin)	Dublin	Total
Demand Side Unit	0.746	16.664	0	17.41
Gas Turbine	204.628	0	123.328	327.956
Grand Total	205.374	16.664	123.328	345.366

5. Appendix A

Full provision of the Final Qualification Decisions information per Section F.9.5.1 (c) of the CMC can be found via the following Excel report:

• Final Qualification Decisions

The Provisional Capacity Auction Results can be accessed via the following Excel report:

• Provisional Capacity Auction Results