

# Report

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## Annual Report on the Operation of the Capacity Market in 2022/23

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### Overview:

The Electricity Capacity Regulations 2014 (as amended) (“Regulations”) require Ofgem to provide the Secretary of State for Department for Energy Security and Net Zero (“Secretary of State”) with an annual report on the operation of the Capacity Market.

As per Regulation 83(5), annual reports must be published within six months following the completion of each T-4 Auction and, if no T-4 Auction is held, by no later than six months after the end of that Capacity Year.

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## Executive summary

The eighth report on the operation of the Capacity Market (CM), covers the Capacity Market Delivery Year (“Delivery Year”) 1 October 2022 to 30 September 2023 (to date). Two CM Auctions (the “Auctions”) were scheduled in this period: 2022/23 T-1 Auction (Delivery Year 2023/24) and 2022/23 T-4 Auction (Delivery Year 2026/27). The report describes Auction outcomes, including Prequalification processes and observations.

### Prequalification

#### Prequalification outcomes

The Electricity Market Reform Delivery Body (“Delivery Body”) received a total of 847 Prequalification Applications for the 2022/23 T-4 Auction, totalling 50.3GW of De-rated Capacity. The final number of prequalified CMUs for the T-4 Auction was 654, totalling 48.0GW of De-rated Capacity.<sup>1</sup>

The 2022/23 T-1 Auction saw a total of 394 Prequalification Applications submitted by CMUs totalling 7.0GW of De-rated Capacity. The final number of prequalified CMUs for the T-1 Auction was 355, totalling 6.8GW of De-rated Capacity.<sup>2</sup>

#### Dispute outcomes

The Delivery Body received 122 requests for a reconsidered decision (“Tier 1 dispute”) for the 2022/23 T-4 Auction and 87 for the 2022/23 T-1 Auction. Tier 1 disputes for the 2022/23 T-4 and T-1 Auction had a success rate of approximately 91% and 98% respectively. A total of 5 CMUs submitted an Appeal to the Authority (“Tier 2 dispute”) for the T-4 Auction, and no CMUs entered a Tier 2 dispute for the T-1 Auction. Ofgem upheld the Prequalification decision made by the Delivery Body for all 5 CMUs submitting Tier 2 disputes in the T-4 Auction.<sup>3 4</sup>

### Auction results

The 2022/23 T-4 Auction cleared at a price of £63.00/kW/year and a total of approximately 43.0 GW of De-rated Capacity were awarded Capacity Agreements. Gas CMUs gained the

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<sup>1</sup> CMR 2022 T-4 Auction (published 21 June 2023)

<sup>2</sup> CMR 2022 T-1 Auction (published 21 June 2023)

<sup>3</sup> Data provided by the Delivery Body and Ofgem

<sup>4</sup> [Ofgem's determinations on Tier 2 Capacity Market disputes, 2022/23 Delivery Year | Ofgem](#)

most De-rated Capacity in the Auction at approximately 29.0GW which was over half (68%) of the total De-rated Capacity procured in the Auction. This was followed by Interconnector CMUs at 16% totalling approximately 6.9GW of De-rated Capacity.<sup>5</sup>

The 2022/23 T-1 Auction cleared at a price of £60.00/kW/year and a total of approximately 5.8 GW of De-rated Capacity were awarded Capacity Agreements. The majority of De-rated Capacity awarded agreements was from Gas CMUs totalling approximately 2.6GW (45%). This was followed by Nuclear CMUs totalling approximately 1.4GW (24%) of De-rated Capacity.<sup>6</sup>

### **Renewable participation**

These Auctions saw renewable technologies being able to participate for the fourth time. A total of 100MW of Onshore Wind, Offshore Wind and Solar De-rated Capacity entered prequalification for the 2022/23 T-4 Auction, of this 82MW prequalified and 78 MW secured a Capacity Agreement.

A total of 123MW of Onshore Wind, Offshore Wind and Solar De-rated Capacity entered prequalification for the 2022/23 T-1 Auction, of this all 123MW prequalified and 72 MW secured a Capacity Agreement.

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<sup>5</sup> [T-4 DY 26-27 Final Auction Results Report](#)

<sup>6</sup> [T-1 DY 23-24 Final Auction Results Report](#)

## 1. Background

### Purpose of the report

- 1.1. This report covers the operation in the CM in the Delivery Year 2022/23 (as of August 2023). This report includes a factual presentation of the Prequalification process and the outcomes of two Auctions: 2022/23 T-1 Auction and 2022/23 T-4 Auction.
- 1.2. The report is one of two Ofgem is required to provide to the Secretary of State after each T-4 Auction, under Regulation 83(1)(a) of the Electricity Capacity Regulations 2014 (the “Regulations”).<sup>7</sup> The second report is on the performance of the National Grid Electricity System Operator’s (“NGESO”) functions as the Delivery Body for the Capacity Market. This is now included in the end of Business Plan 1 review of the Electricity System Operator’s Performance.

### Scope of the report

- 1.3. The report outlines the Prequalification process and outcomes, and reports on the outcomes of two Auctions: 2022/23 T-1 Auction and 2022/23 T-4 Auction.
- 1.4. It includes:
  - analysis of participation outcomes and bidding behaviour;
  - an update of delivery against milestones of Capacity Agreements won in earlier Auctions; and
  - an overview of Satisfactory Performance Days (“SPDs”) data from the 2022/23 Delivery Year.
- 1.5. The Secretary of State may instruct up to report on any particular matter as part of this report. No such instruction was received in relation to this report.

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<sup>7</sup> [The Electricity Capacity Regulations 2014.](#)

## Background to the Capacity Market

### Overview of the CM

- 1.6. The CM was introduced in 2014 to maintain sufficient levels of Capacity to ensure security of electricity supply.
- 1.7. The CM provides revenue in the form of Capacity Payments to potential Capacity Providers. In return, participants must commit to delivering electricity at times of system stress and face penalties if they fail to do so.
- 1.8. Capacity Payments are determined via competitive Auctions, held four years (T-4 Auction) and one year (T-1 Auction) before each delivery period. The T-1 Auctions are used to 'top-up' the target Capacity for the Delivery Year and spread the risk. Prospective Capacity Providers must meet certain eligibility requirements and prequalify before they can participate in the CM Auctions.
- 1.9. CM Auctions are technology neutral. Therefore, generators, Demand Side Response ('DSR')<sup>8</sup>, interconnectors, and renewables not receiving subsidies, e.g. Contracts for Difference, may all participate.

## Overview of the prequalification process

### A high-level summary of the prequalification process

- 1.10. To participate in a CM Auction, a CMU must prequalify by meeting the requirements set out in the CM Rules (the "Rules") and Regulations.<sup>9</sup> The Prequalification process is run by the Delivery Body, who review Applications submitted by CMUs and determine whether they are eligible.

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<sup>8</sup> Demand Side Response is provided by customers who lower or shift their electricity use at peak times, which may be done by those customers utilising backup generation.

<sup>9</sup> [The Electricity Capacity Regulations 2014](#) and [the Capacity Market Rules](#).



- 1.11. Unsuccessful Applicants can ask the Delivery Body to review its initial decision (a 'Tier 1 appeal'). Following an unsuccessful Tier 1 appeal, an Applicant may submit an appeal to the Authority (a 'Tier 2 appeal').

### **Classification of CMUs**

- 1.12. CMUs are classified as follows: generators and interconnectors that are currently operational ('Existing'), generators investing in an existing asset ('Refurbishing') and new generators and interconnectors ('New Build'). DSR may also participate. They may have completed a DSR Test ('Proven DSR') or not ('Unproven DSR').
- 1.13. Existing CMUs and all DSR CMUs are eligible for agreements that last for one year. Refurbishing and New Build CMUs are eligible to receive agreements up to 3 and 15 years respectively in the T-4 Auctions.

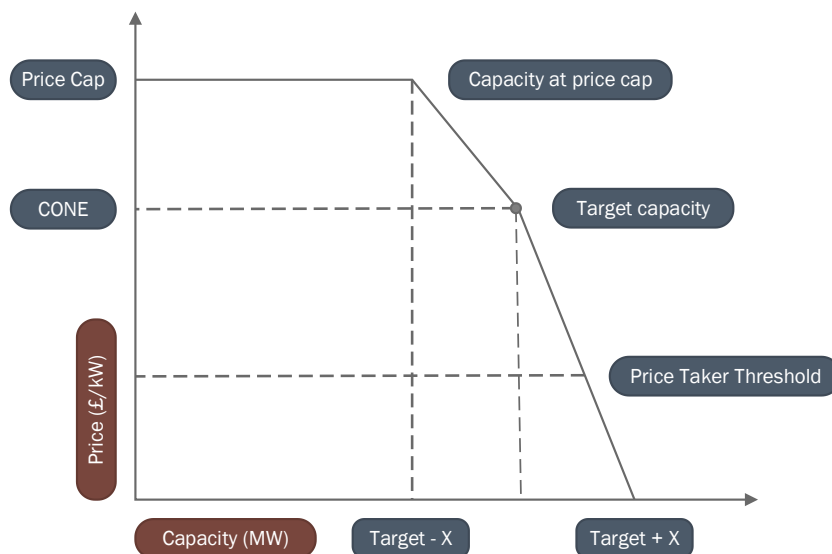
## **Overview of the Auction process**

### **Overarching Auction design**

- 1.14. The CM Auctions have a descending clock format, with bidders exiting the Auction when the price drops below the level at which they are willing to take on a Capacity Obligation. There are multiple 'rounds', starting at a price cap and reducing incrementally.
- 1.15. Existing CMUs are by default 'Price Takers', which means they can only place bids below a certain threshold (£25/kW/year). In order to Bid above this threshold, they must become 'Price Makers' by submitting a Price Maker Memorandum, outlining why they may need to Bid above the threshold. All other CMUs are Price Makers and can Bid up to the Auction Price Cap (£75/kW/year).
- 1.16. As well as placing Bids to exit the Auction, Refurbishing and New Build CMUs may place a Bid at the price at which they would like to switch from a 3-year or 15-year agreement to a one-year agreement. Refurbishing CMUs can also specify a price at which they would like to switch to a 'Pre-refurbishing' state, where they would instead receive an Existing CMU contract for one year, with no obligation to invest in the asset.

- 1.17. The Auction continues until the total Capacity offered by remaining participants falls below the demanded Capacity at that price (the 'Clearing Round'). CMUs still in the Auction will receive a Capacity Agreement at this price.
- 1.18. The demand curve for the Auction, as shown in Figure 1 below, is sloped downwards, reflecting the benefit in securing more Capacity when the price is low. A variability from the target ("X") defines the slope of the curve.
- 1.19. As established by the demand curve parameters, the Auction price cap is set at £75/kW/year and the price floor is £0/kW/year. In addition to these parameters, net-CONE (net Cost of New Entry) represents gross CONE less expected energy and ancillary services revenues. The demand curve design mitigates exercises of market power, in addition to the design, price thresholds are established for participants classifying as Existing Generation CMUs.

**Figure 1: Capacity Market Auction Demand Curve**



## Historical overview: Auction timelines

### T-4 Auctions

- 1.20. Since 2014, there have been eight Capacity Market T-4 Auctions and one T-3 Auction. The T-4 Auction in 2018/19 was suspended and a T-3 Auctions was scheduled in its place for delivery of capacity in 2022/23.

**Table 1: Capacity Market T-4/T-3 Auctions**

Delivery Year	Auction Conclusion / Cleared	Clearing Price
2018/19	02-Jan-15	£19.40/kW/year
2019/20	10-Dec-15	£18.00/kW/year
2020/21	08-Dec-16	£22.50/kW/year
2021/22	08-Feb-18	£8.40/kW/year
2022/23	Suspended <sup>10</sup> (Rescheduled as T-3 Auction Jan 30 & 31, 2020)	N/A
2022/23	T-3 Auction concluded 31-Jan-20	£6.44/kW/year
2023/24	06-Mar-20	£15.97/kW/year
2024/25	10-Mar-21	£18.00/kW/year
2025/26	22-Feb-22	£30.59/kW/year
2026/27	21-Feb-23	£63.00/kW/year

### T-1 Auctions

1.21. There have been six Capacity Market T-1 Auctions. The T-1 Auction in 2018 was postponed and rather than holding the Auction in January 2019 as previously scheduled, it was held June 2019 for delivery of Capacity in 2020/21.

**Table 2: T-1 Auctions**

Delivery Year	Auction Conclusion / Cleared	Clearing Price
2018/19	01-Feb-18	£6.00/kW/year
2019/20	12-Jun-19	£0.77/kW/year
2020/21	07-Feb-20	£1.00/kW/year
2021/22	02-Mar-21	£45.00/kW/year
2022/23	15-Feb-22	£75.00/kW/year
2023/24	14-Feb-23	£60.00/kW/year

<sup>10</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/864748/T-3\\_2020\\_for\\_delivery\\_2021\\_22\\_Auction\\_Monitor\\_Report\\_Final\\_v1.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/864748/T-3_2020_for_delivery_2021_22_Auction_Monitor_Report_Final_v1.pdf)

**Transitional arrangement (TA) Auctions**

1.22. The TA Auctions involved two additional Auctions designed to encourage growth in specific categories of Capacity, to enable them to participate in the main CM in future.<sup>11</sup> TA Auctions offered targeted support to Demand Side Response (DSR), to encourage enterprise, and increase levels of participation in the two years preceding full Capacity market delivery in 2018 to 2019.<sup>12</sup>

**Table 3: Transitional Arrangement (TA) Auctions**

Delivery Year	Auction Conclusion / Cleared	Clearing Price
2016/17	27-Jan-16	£27.50/kW/year
2017/18	22-Mar-17	£45.00/kW/year

**Early Auction**

1.23. An additional one-year ahead CM Auction was introduced by the Department for Business, Energy & Industrial Strategy (BEIS)<sup>13</sup> in 2017 as an Early Auction. This was held in January 2017 to procure Capacity for delivery in 2017/18.<sup>14</sup>

**Table 4: Early Auction**

Delivery Year	Auction Conclusion / Cleared	Clearing Price
2017/18	03-Feb-17	£6.95/kW/year

<sup>11</sup> [Evaluation of the Transitional Arrangements - Phase 1 Full Report.pdf \(publishing.service.gov.uk\)](#)

<sup>12</sup> [Transitional arrangements auction - GOV.UK \(www.gov.uk\)](#)

<sup>13</sup> BEIS existed until 2023 when it was split to form the Department for Business and Trade (DBT), the Department for Energy Security and Net Zero (DESNZ) and the Department for Science, Innovation and Technology (DSIT). DESNZ is focused on the energy portfolio from the former BEIS.

<sup>14</sup> [Transitional arrangements auction - GOV.UK \(www.gov.uk\)](#)

## 2. Renewable Participation

- 2.1. Following the 2019 CM Rule amendment consultation,<sup>15</sup> DESNZ allowed additional renewable Capacity to participate in CM Auctions. The decision maintained the exclusion from the CM of those receiving support under a Contract for Difference, Renewables Obligation, or Feed-in-Tariff. However, it stated that new build renewable technologies not in receipt of such subsidies could now participate. Given that such technologies could benefit from other low-carbon support which constitute state subsidies, formerly State aid<sup>16</sup>, changes were made to the Rules to take account of this.
- 2.2. Rules 6.6 & 8.3.8 & Regulation 49A were amended to account for low-carbon support, creating a channel to take account of existing subsidies in payments made to renewable CMUs. The rules require non-dispatchable generating technology to declare support received under relevant subsidy schemes.
- 2.3. Appropriate De-rating Factors are applied as contribution to meet the reliability standard is limited by intermittency and non-dispatchability. The values for the two Auctions that occurred during the 2022/23 Delivery Year can be found in Table 5.

**Table 5: De-rating Factors for 2022/23 T-1 and T-4 Auctions**

Generation Type	2022/23 T-1 Auction <sup>17</sup>	2022/23 T-4 Auction <sup>18</sup>
Onshore Wind	8.40%	7.03%
Offshore Wind	11.52%	8.69%
Solar	5.08%	6.35%

<sup>15</sup> Section 1-3

[Proposals for further amendments to the Capacity Market: response to consultation \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

<sup>16</sup> State aid is any advantage granted by public authorities through state resources on a selective basis to any organisations that could potentially distort competition and trade in the European Union (EU). Subsidy control replaced state aid from 1 January 2021, after the UK left the EU on 31 December 2020.

<sup>17</sup> [2023 T-1 and T-4 Capacity Market Auction Guidelines](#)

<sup>18</sup> [2023 T-1 and T-4 Capacity Market Auction Guidelines](#)

2.4. Table 6 shows the Capacity that applied for prequalification for these two Auctions before de-rating was applied. All data in Table 6 and 7 is taken from the Capacity Market Register (“CMR”) that was published on the 21 June 2023.

**Table 6: Intermittent generation Capacity for 2022/23 T-1 and T-4 Auctions**

<b>Generation Type</b>	<b>2022/23 T-1 Auction</b>	<b>2022/23 T-4 Auction</b>
Onshore Wind	415MW	414MW
Offshore Wind	717MW	573MW
Solar	93MW	495MW

2.5. Table 7 shows the De-rated Capacity that prequalified for these two Auctions.

**Table 7: Intermittent generation Capacity for 2022/23 T-1 and T-4 Auctions**

<b>Generation Type</b>	<b>2022/23 T-1 Auction</b>	<b>2022/23 T-4 Auction</b>
Onshore Wind	34MW	23MW
Offshore Wind	81MW	48MW
Solar	7MW	12MW

2.6. Table 8 shows the De-rated Capacity that was awarded Capacity Agreements for these two Auctions. All data are from the Auction Results data published on the Delivery Body’s EMR Portal.

**Table 8: Intermittent generation Capacity for 2022/23 T-1 and T-4 Auctions**

<b>Generation Type</b>	<b>2022/23 T-1 Auction</b>	<b>2022/23 T-4 Auction</b>
Onshore Wind	33MW	21MW
Offshore Wind	32MW	48MW
Solar	7MW	9MW

### 3. Prequalification and appeals process

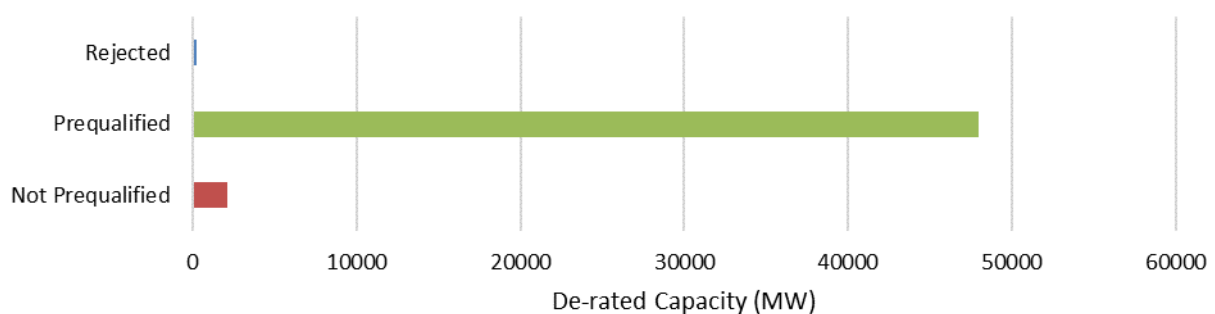
- 3.1. This section covers Prequalification results for the 2022/23 T-4 and T-1 Auctions. It will also give a summary on the appeals process for both Auctions.
- 3.2. All data, unless stated, is taken from the Capacity Market Registers (“CMR”) that were published on the 21 June 2023.

#### Prequalification outcomes for the 2022/23 T-4 Auction (Delivery Year 2026/27)

##### Applications

- 3.3. The 2022/23 T-4 Auction Prequalification commenced on 27 July 2022 and ended on 20 September 2022.<sup>19</sup> A total of 847 CMU applications were made during the prequalification window, totalling 50.3GW of De-rated Capacity.<sup>20</sup>
- 3.4. A total of 25 CMUs with 10.5GW of anticipated De-rated Capacity opted out of prequalification. 12 of the 25 CMUs (6.8GW) stated that they would be closed down, decommissioned or otherwise non-operational by the start of the Delivery Year. The other 13 CMUs (3.8GW) opted out despite their intention to be operational throughout the Delivery Year.

Figure 2: 2022/23 T-4 Auction Prequalification Decisions



<sup>19</sup> [2022 T-1 and T-4 Capacity Market Auction Guidelines](#)

<sup>20</sup> Volume includes total De-rated and post-refurbishing De-rated Capacity amounts for all Prequalification decisions (rejected, conditionally prequalified, prequalified, not prequalified). These are illustrated in Figure 2.

3.5. Figure 2 above illustrates in further detail the prequalification outcomes for the 2022/23 T-4 Auction.<sup>21</sup> Of the 50.3GW of De-rated Capacity entering Prequalification, the share of capacity receiving a prequalified status totalled 95% (48.0GW), 4% received a not prequalified status (2.1GW) and 1% was rejected (0.2GW).

### **Prequalified CMUs**

3.6. 654 CMUs were successful in prequalifying, totalling 48.0GW of De-rated Capacity. This was 4.1GW more than the target level of capacity (43.9GW)<sup>22</sup> meaning there was competition going into the Auction.

3.7. Figure 3 below demonstrates that Existing Generating CMUs accounted for the largest share of De-rated Capacity that prequalified representing 68% (32.5GW) of total De-rated Capacity that prequalified. New Build Generating CMUs accounted for 15% (7.3GW) and Existing Interconnector CMUs accounted for 12% (5.8GW) of total De-rated Capacity that prequalified, whilst the remaining CMU categories accounted for 2% or less.

3.8. Figure 3 also shows that New Build Generating CMUs (37%) and Unproven DSR CMUs (14%) make up a greater proportion of the total number of CMUs compared to De-rated Capacity. This demonstrates their smaller average size compared to Existing Generating CMUs (115MW). As New Build Generating and Unproven DSR CMUs that prequalified had an average size of 30MW and 10MW, respectively.

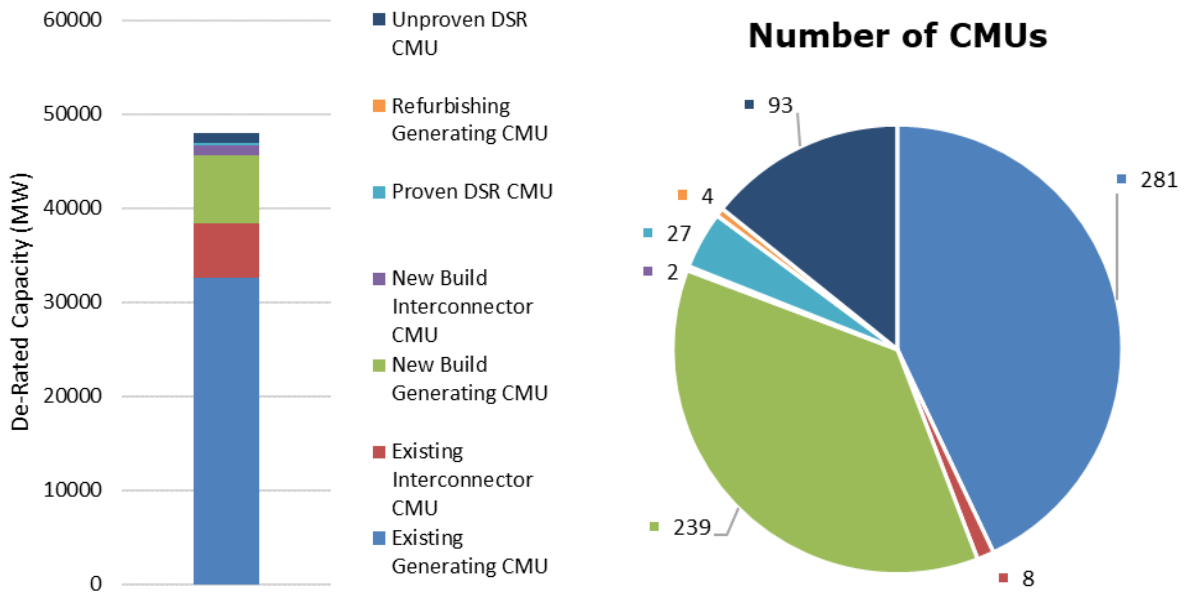
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<sup>21</sup> At Prequalification, three decisions are made at the outset: 'Prequalified,' 'Rejected,' or 'Conditionally Prequalified.' If a unit has conditional Prequalification status, it must meet the conditions of its status to become 'Prequalified.'

<sup>22</sup> [Letter from Secretary of State to ESO on 20 January 2023](#)

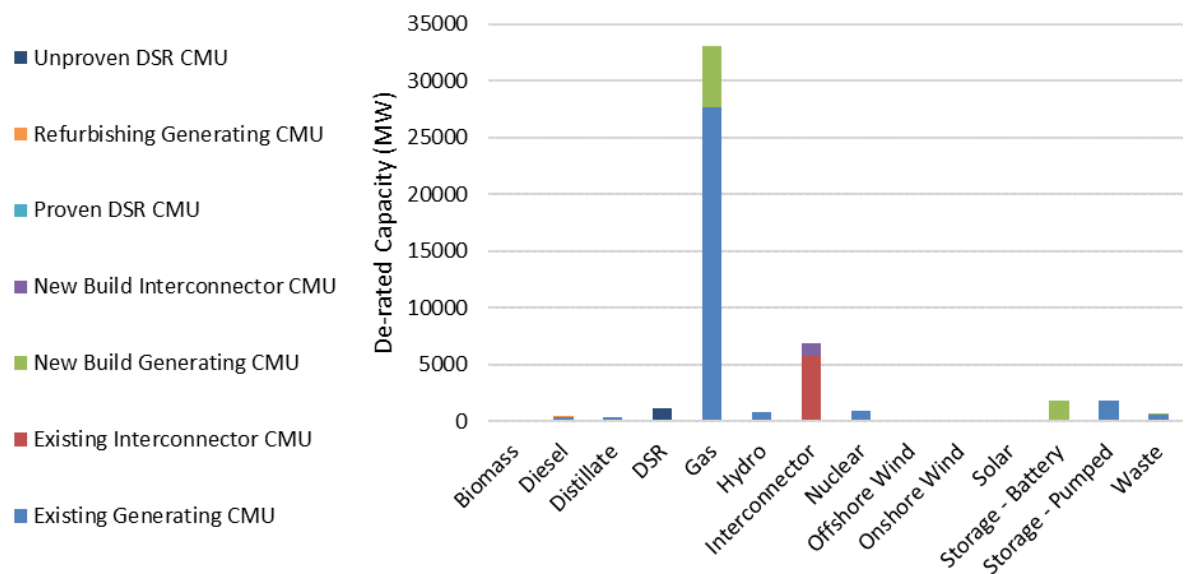


Figure 3: 2022/23 T-4 Auction Prequalified by CMU Category



3.9 Figure 4 shows that Gas CMUs accounted for a significant share of De-rated Capacity that prequalified for the Auction totalling 69% (33.0GW). From this 84% was Existing Gas CMUs (27.7GW), 16% was from New Build Gas CMUs (5.3GW). Gas CMUs were followed by Interconnector CMUs as they shared 14% (6.9GW) of the total De-rated Capacity that prequalified for the Auction.

Figure 4: 2022/23 T-4 Auction Prequalified by Primary Fuel Type and CMU Category



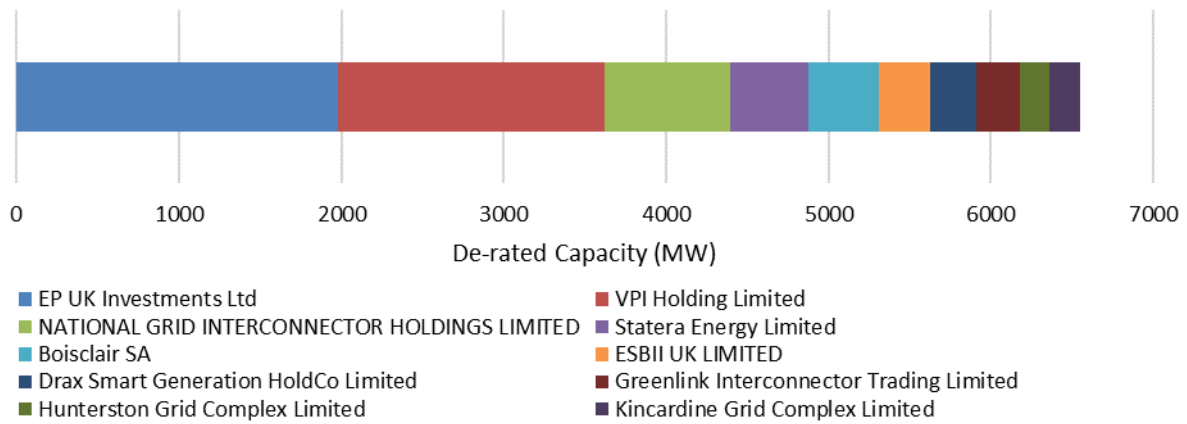
3.9. Table 9 shows the breakdown of the top ten parent companies which make up approximately 72% of total prequalified capacity. However, these top ten companies only make up 15% of the number of CMUs that prequalified. GridBeyond Limited had the most CMUs prequalify for the 2022/23 T-4 Auction with 39 CMUs.

**Table 9: Top 10 Parent Companies by Total De-rated Capacity that Prequalified for the 2022/23 T-4 Auction**

Row Labels	Sum of De-rated Capacity (MW)	Share of prequalified De-rated Capacity
RWE Generation UK Holdings Limited	6638	14%
VPI Holding Limited	4639	10%
SSE Plc	4434	9%
Uniper Holding GmbH	4273	9%
NATIONAL GRID INTERCONNECTOR HOLDINGS LIMITED	4092	9%
EP UK Investments Ltd	4083	9%
INTERGEN PROJECTS (UK) LIMITED	2387	5%
UK Transition Power Limited	1265	3%
National Grid Holdings One plc	1260	3%
SCCL Holdings Limited	1233	3%

3.10. Figure 5 below illustrates the top 10 parent companies entering as a New Build Generating CMU or New Build Interconnector CMU, receiving a prequalified status. Only EP UK Investment Ltd, VPI Holding Limited and National Grid Interconnector Holdings Limited remained in the top 10 for both total prequalified De-rated Capacity and New Build prequalified De-rated Capacity. EP UK Investment Ltd had the most New Build prequalified De-rated Capacity with 2.0GW, followed by VPI Holding Limited with 1.6GW. The remaining parent companies all prequalified less than 1GW of De-rated Capacity.

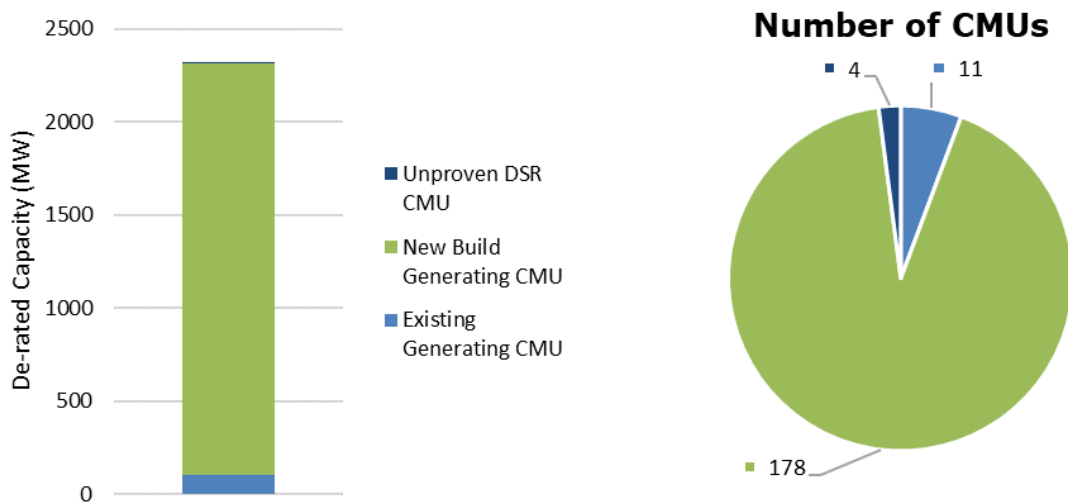
**Figure 5: 2022/23 T-4 Auction New Build Generating and New Build Interconnector CMUs Prequalified by Parent Company**



**Unsuccessful CMUs**

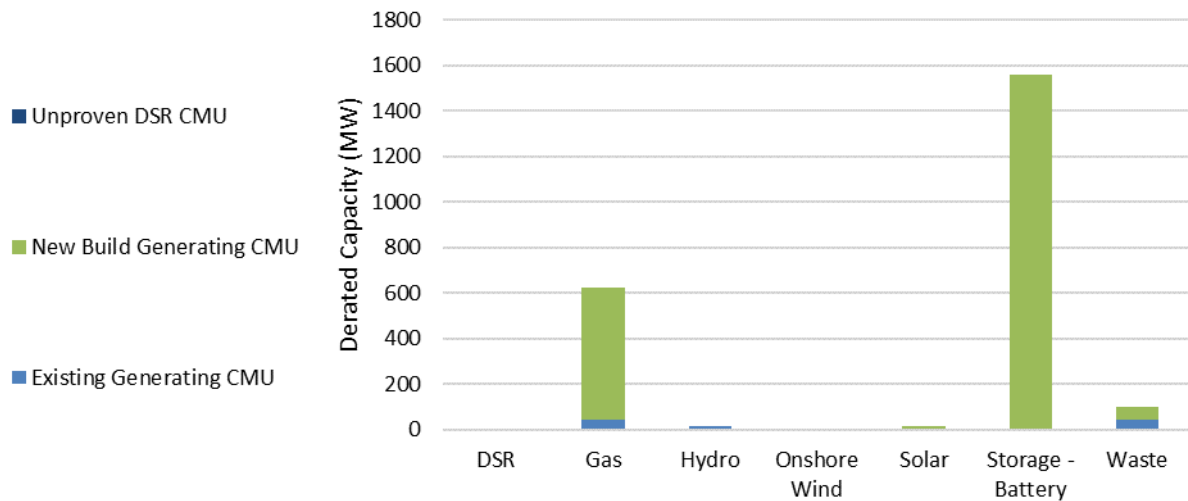
3.11. A total of 193 CMUs, amounting to 2.3GW of De-rated Capacity, failed to prequalify. Figure 6 shows that the majority of these (178 CMUs) were New Build Generating CMUs which totalled 2.2GW. This was followed by 11 Existing Generating CMUs totalling 100 MW and 9 Unproven DSR CMUs totalling 4 MW.

**Figure 6: 2022/23 T-4 Auction Unsuccessful in Prequalification by CMU Category**



3.12. Figure 7 shows that Battery Storage CMUs accounted for a significant share of De-rated Capacity that was unsuccessful in prequalification totalling 67% (1.6GW). This was followed by Gas CMUs as they made up 27% (621 MW) of the unsuccessful prequalification De-rated Capacity.

**Figure 7: 2022/23 T-4 Auction Unsuccessful in Prequalification by Primary Fuel Type and CMU Category**



## Prequalification outcomes for the 2022/23 T-1 Auction (Delivery Year 2023/24)

### Applications

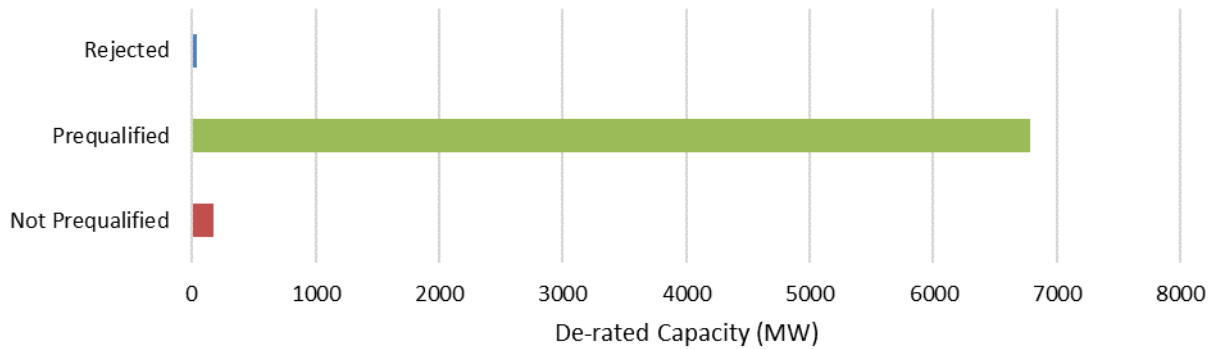
3.13. The 2022/23 T-1 Auction Prequalification commenced on 27 July 2022 and ended on 20 September 2022.<sup>23</sup> A total of 394 CMU applications were made during the prequalification window, totalling 7.0GW of De-rated Capacity.

3.14. A total of 8 CMUs with 4.1GW of anticipated De-rated Capacity opted out of prequalification. 5 of the 8 CMUs (3.6GW) stated that they would be closed down, decommissioned or otherwise non-operational by the start of the Delivery Year. The other 3 CMUs (534MW) opted out despite their intention to be operational throughout the Delivery Year.

<sup>23</sup> [2022 T-1 and T-4 Capacity Market Auction Guidelines](#)

3.15. Figure 8 below illustrates in further detail the Prequalification outcomes for the 2022/23 T-1 Auction. Of the 7.0GW of De-rated Capacity entering Prequalification, the share of Capacity receiving a prequalified status totalled 97% (6.8GW), 1% was rejected (38MW) and 3% received a not prequalified status (179MW).

**Figure 8: 2022/23 T-1 Auction Prequalification Decisions**



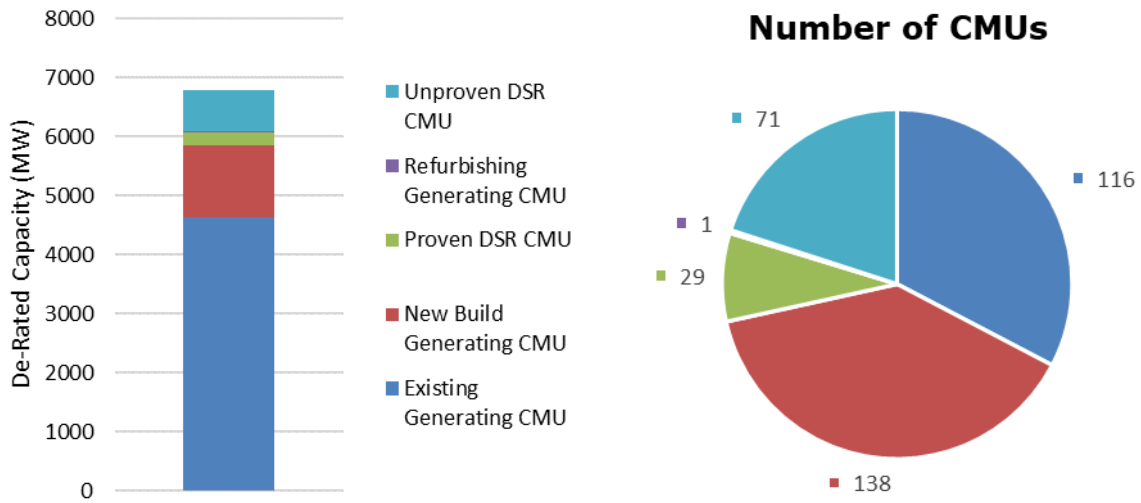
### Prequalified CMUs

3.16. 355 CMUs were successful in prequalifying, totalling 6.8GW of De-rated Capacity. This was 1GW more than the target level of Capacity (5.8GW)<sup>24</sup> meaning there was competition going into the Auction.

3.17. Figure 9 below demonstrates that Existing Generating CMUs accounted for the largest share of De-rated Capacity that prequalified representing 68% (4.6GW) of total De-rated Capacity that prequalified. New Build Generating CMUs accounted for 18% (1.2GW) and Unproven DSR CMUs accounted for 10% (689MW) of total De-rated Capacity that prequalified, whilst the remaining CMU categories account for 3% or less.

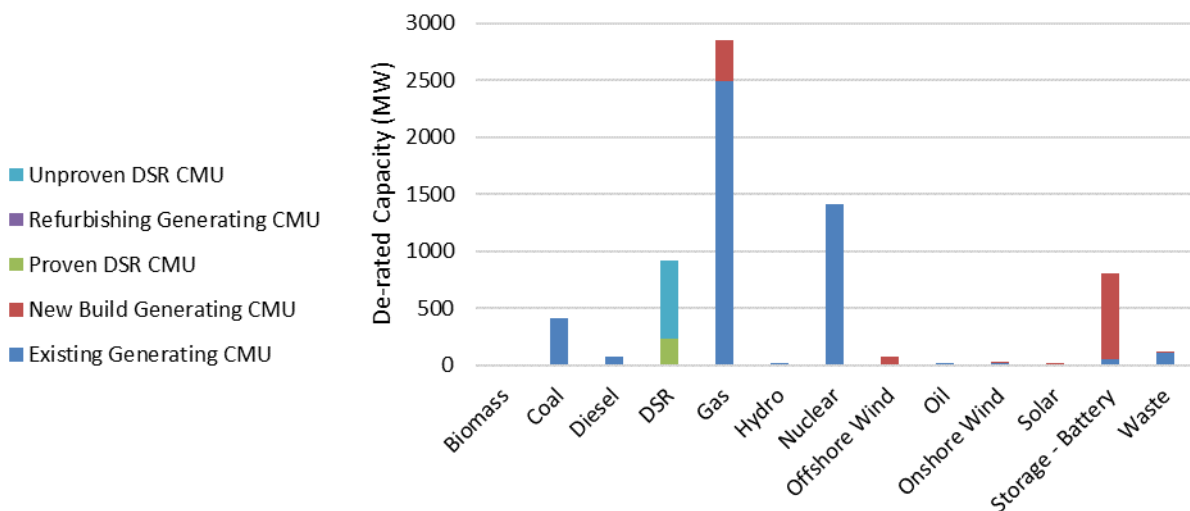
<sup>24</sup> [Letter from Secretary of State to ESO on 20 January 2023](#)

Figure 9: 2022/23 T-1 Auction Prequalified by CMU Category



3.18. Figure 10 also shows that New Build Generating CMUs (39%) and Unproven DSR CMUs (20%) make up a greater proportion of the total number of CMUs compared to De-rated Capacity. This demonstrates their smaller average size compared to Existing Generation (39MW). As New Build Generating and Unproven DSR CMUs that prequalified had an average size of 8MW and 9MW, respectively.

Figure 10: 2022/23 T-1 Auction Prequalified by Primary Fuel Type and CMU Category



3.19. Figure 10 shows that Gas CMUs accounted for a significant share of De-rated Capacity that prequalified for the Auction totalling 42% (2.9GW). From this 87% was Existing Gas CMUs (2.5GW), 13% was from New Build Gas CMUs (361MW). Gas CMUs were followed by Nuclear CMUs as they accounted for 21% (1.4GW) of the total De-rated Capacity that prequalified for the Auction.

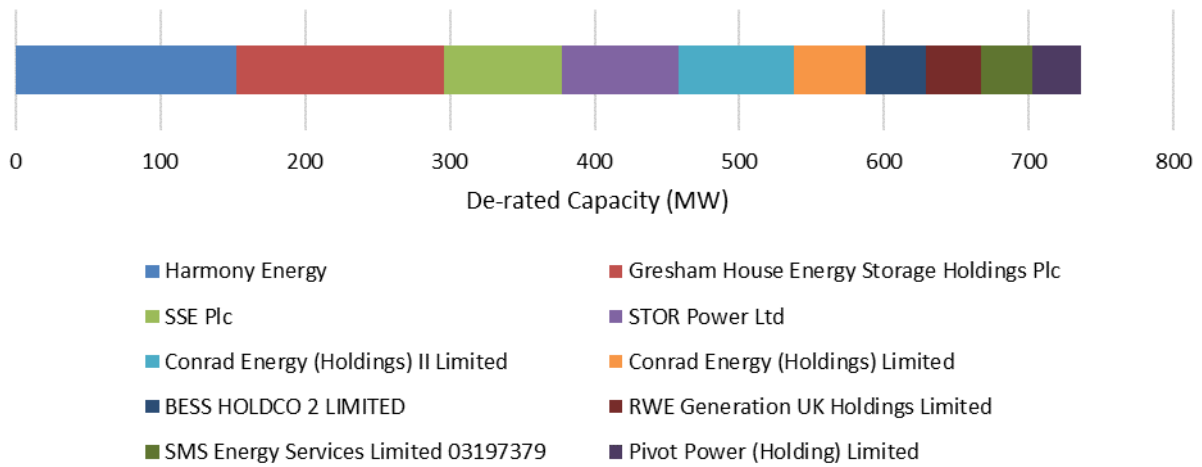
3.20. Table 10 shows the breakdown of the top ten parent companies which make up approximately 76% of total prequalified capacity. However, these top ten companies only make up 38% of the number of CMUs that prequalified. ENEL X INTERNATIONAL S.R.L. had the most CMUs prequalify for the 2022/23 T-1 Auction with 55 CMUs.

**Table 10: Top 10 Parent Companies by Total De-rated Capacity that Prequalified for the 2022/23 T-1 Auction**

Row Labels	Sum of De-rated Capacity	Share of prequalified De-rated Capacity
SSE Plc	1568.485	23%
EDF Energy Holdings Limited	1411.753	21%
ENEL X INTERNATIONAL S.R.L.	610.134	9%
Uniper Holding GmbH	450.585	7%
ESBII UK LIMITED	371.754	5%
GridBeyond Limited	192.966	3%
Harmony Energy	167.85	2%
Gresham House Energy Storage Holdings Plc	143.875	2%
E.ON	128.17	2%
Octopus Energy Group Limited	98.313	1%

3.21. Figure 11 below illustrates the top 10 parent companies entering as a New Build Generating CMU, receiving a prequalified status. Only Harmony Energy, Gresham House Energy Storage Holdings Plc and SSE Plc remained in the top 10 for both total prequalified De-rated Capacity and New Build prequalified De-rated Capacity. Harmony Energy had the most New Build prequalified De-rated Capacity with 152MW, followed by Gresham House Energy Storage Holdings Plc with 143MW. The remaining parent companies all prequalified less than 100MW of De-rated Capacity.

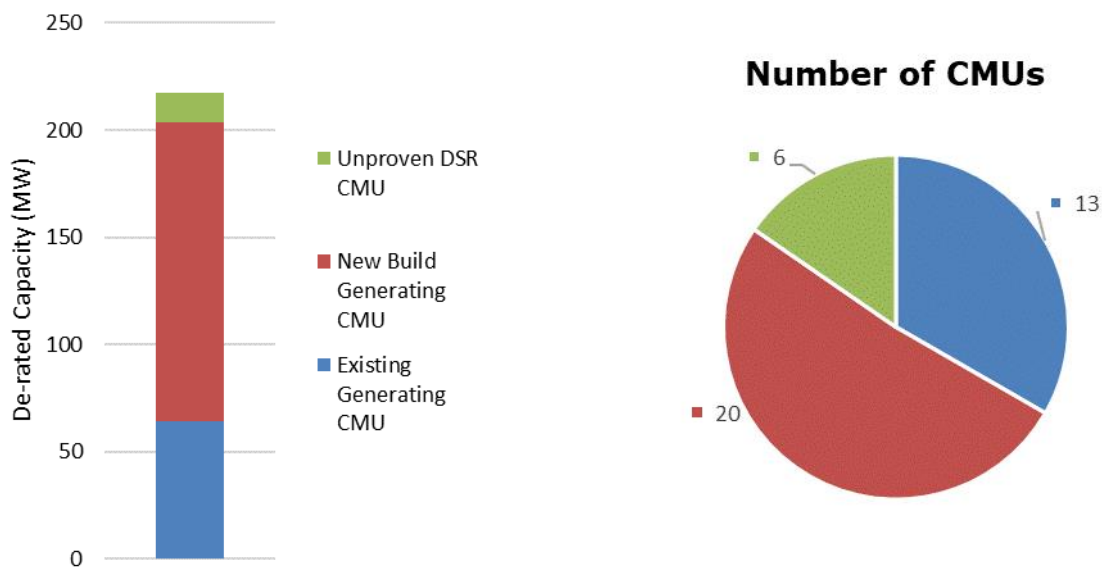
**Figure 11: 2022/23 T-1 Auction New Build Generating CMUs Prequalified by Parent Company**



**Unsuccessful CMUs**

3.22. A total of 39 CMUs, amounting to 217 MW of De-rated Capacity, failed to prequalify. Figure 12 shows that the majority of these (20 CMUs) were New Build Generating CMUs which totalled 139MW. This was followed by 13 Existing Generating CMUs totalling 63MW and 6 Unproven DSR CMUs totalling 13MW.

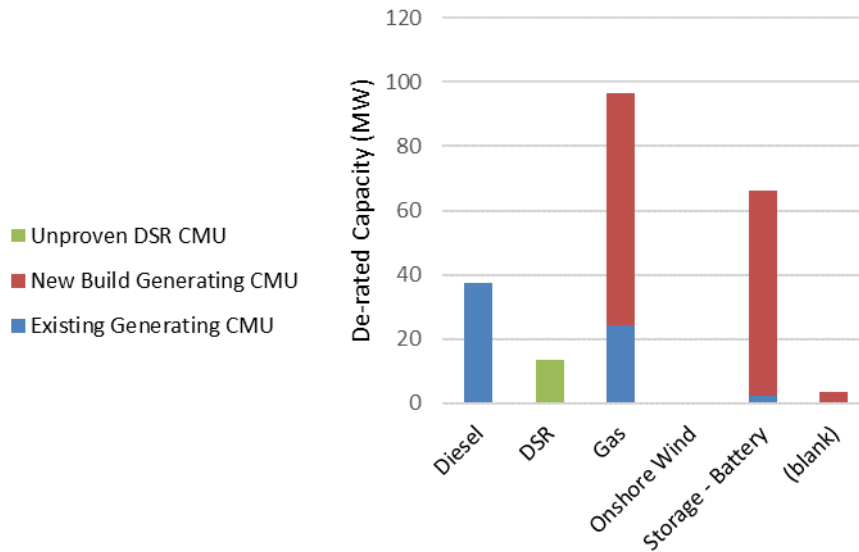
**Figure 12: 2022/23 T-1 Auction Unsuccessful in Prequalification by CMU Category**





3.23. Figure 13 shows that Gas CMUs accounted for a significant share of De-rated Capacity that was unsuccessful in prequalification totalling 44% (96 MW). This was followed by Battery Storage CMUs as they made up 31% (66 MW) of the unsuccessful prequalification De-rated Capacity.

**Figure 13: 2022/23 T-1 Auction Unsuccessful in Prequalification by Primary Fuel Type and CMU Category<sup>25</sup>**

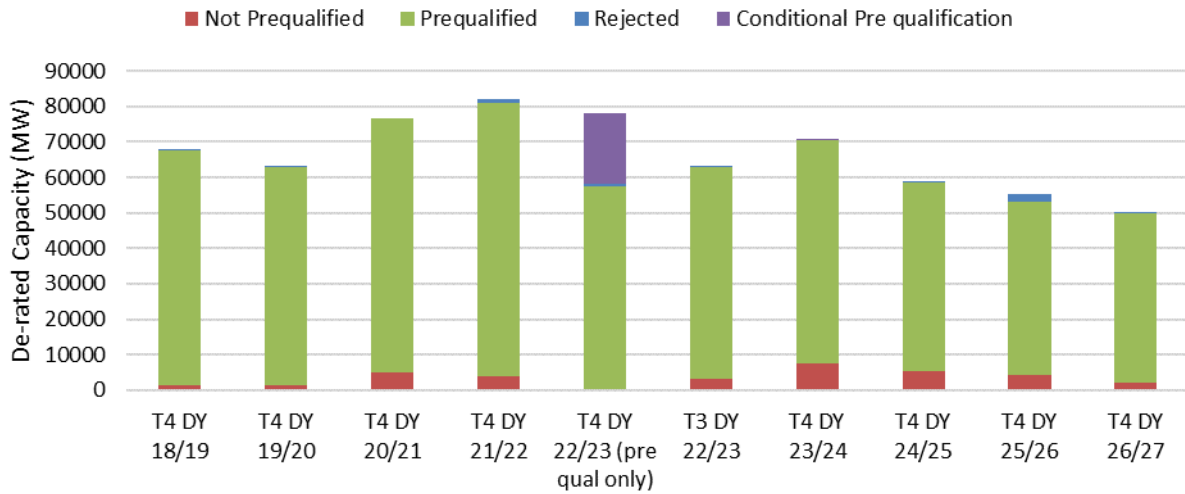


## Overview of previous prequalification results for T-4 & T-3 Auctions and T-1 Auctions

3.24. Figure 14 below illustrates the T-4 and T-3 Auctions prequalification results over a nine-year period. The 2017/18 T-4 Auction (Delivery Year 2021/22) had the most De-rated Capacity apply for Prequalification. However there has been a big decrease as the 2022/23 T-4 Auction (Delivery Year 2026/27) had approximately 39% less De-rated Capacity apply than in the 2017/18 T-4 Auction.

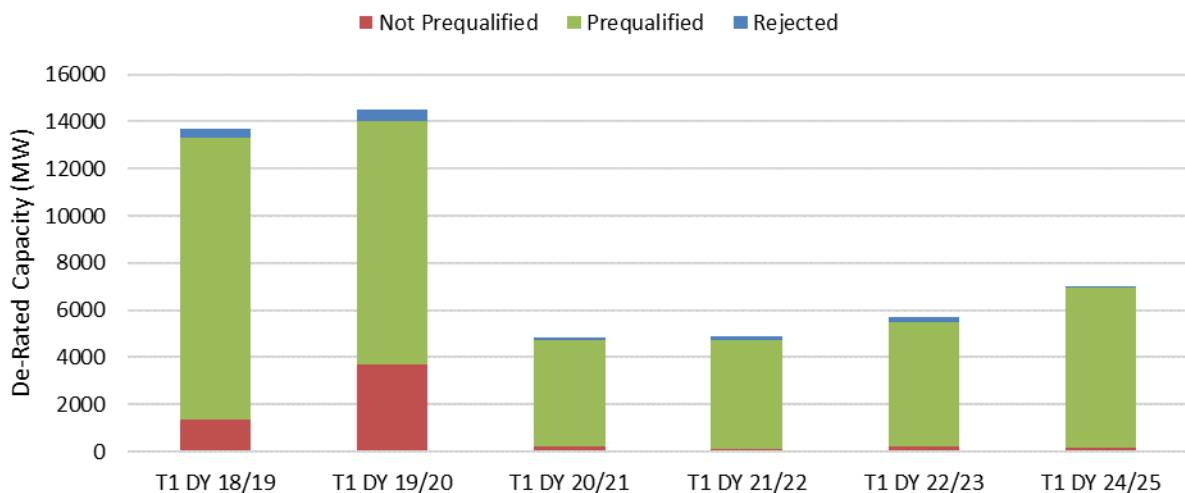
<sup>25</sup> The category with no primary fuel type (blank) is a result of no primary fuel type being selected by the Capacity Provider when submitting their application for prequalification.

Figure 14: Historical Overview of the T-4 and T-3 Prequalification Decisions



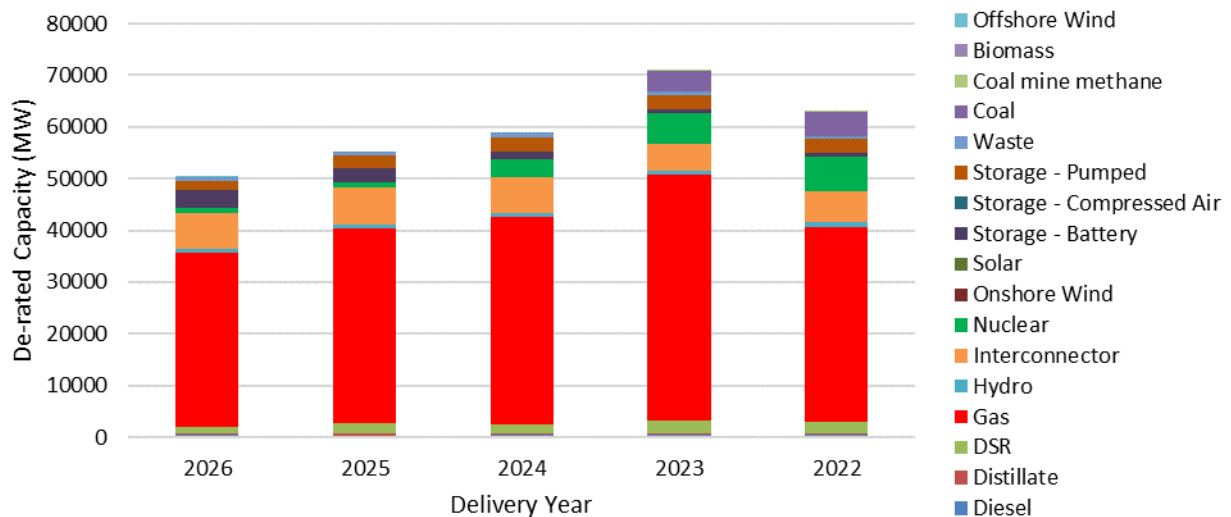
3.25. Figure 15 shows the T-1 Auctions prequalification results since the first Auction in 2017/18 (Delivery Year 2018/19). The 2018/19 T-1 Auction (Delivery Year 2019/20) had the most De-rated Capacity apply for Prequalification (14.5GW). Participation dropped in the 2019/20 T-1 Auction (Delivery Year 2020/21) as only 4.8GMW of De-rated Capacity (67% decrease) applied. This has risen steadily since with the 2022/23 T-1 Auction (Delivery Year 2024/25) as 7.0GW of De-rated Capacity applied.

Figure 15: Historical Overview of the T-1 Prequalification Decisions



3.26. Figure 16 shows CMUs entering Prequalification for the T-4 Auctions over the previous 5 years by Primary Fuel Type. This shows a large decrease in De-rated Capacity by Nuclear (green), Gas (red) and Coal (purple) entering Prequalification for the T-4 Auctions. Gas De-rated Capacity has decreased by 29% (48 GW to 34 GW) since the 2019/20 T-4 Auction (Delivery Year 2023/24). Whilst Nuclear De-rated Capacity has decreased by 86% (7GW to 1GW) since the 2019/20 T-3 Auction (Delivery Year 2022/23). Coal is no longer able to participate in the T-4 Auctions due to CM emissions limits, which apply from 1 October 2024 for Capacity in operation before July 2019.<sup>26</sup> Therefore the approx. 4-5 GW of Coal that previously took part in the T-4 Auctions in 2019/20 is no longer able to gain CM agreements. These three types of plant have caused a significant decrease in volume of De-rated Capacity entering Prequalification for the T-4 Auction and have not been replaced by the same levels of De-rated Capacity. New categories such as Onshore Wind, Offshore Wind and Solar only enter small volumes, whilst Hydro and Pumped Storage CMUs have remained at the levels they were at 5 years ago. Battery Storage CMUs have seen the biggest increase in De-rated Capacity entering prequalification as this has increased by 358% (0.8GW to 3.4GW) since the 2019/20 T-3 Auction (Delivery Year 2022/23).

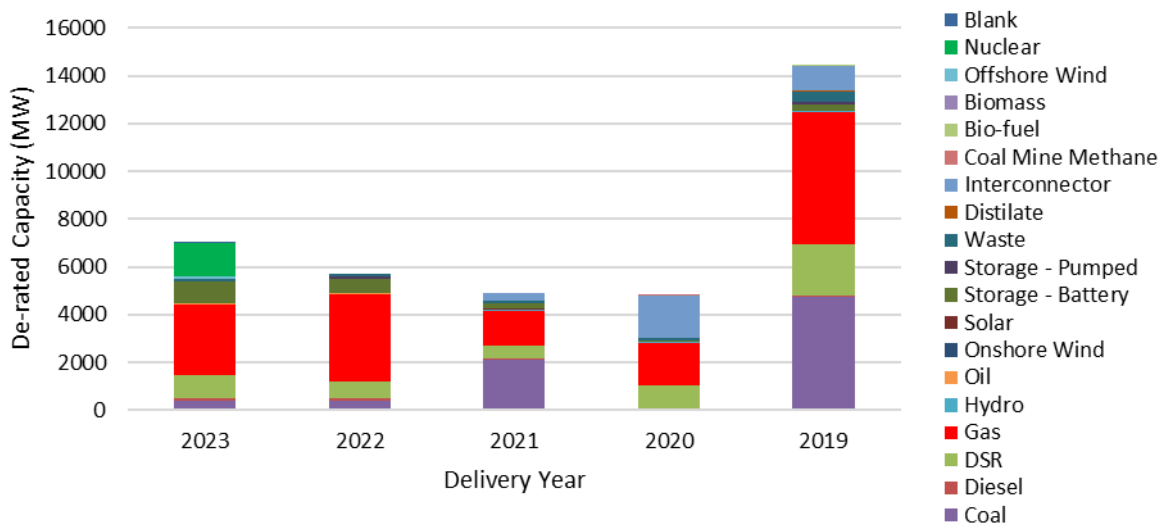
**Figure 16: Primary Fuel Types Entering Prequalification for T-4 Auctions over the last 5 years**



<sup>26</sup> [CM Rules](#) – Rule 3.4.11(b)

3.27. Figure 17 shows CMUs entering Prequalification for the T-1 Auctions over the previous 5 years by Primary Fuel Type. There is a large decrease in Gas (red) and Coal (purple) CMUs entering Prequalification for the T-1 Auctions. Coal has decreased by 91% and Gas has decreased by 47%. These volumes of De-rated Capacity have not been replaced by any category as Hydro, Onshore Wind, Solar and Storage still enter relatively small volumes. This year however did see an increase in Nuclear (green) as 1.4GW of De-rated Capacity entered Prequalification for this year’s T-1 Auction.

**Figure 17: Primary Fuel Types Entering Prequalification for T-1 Auctions over the last 5 years**



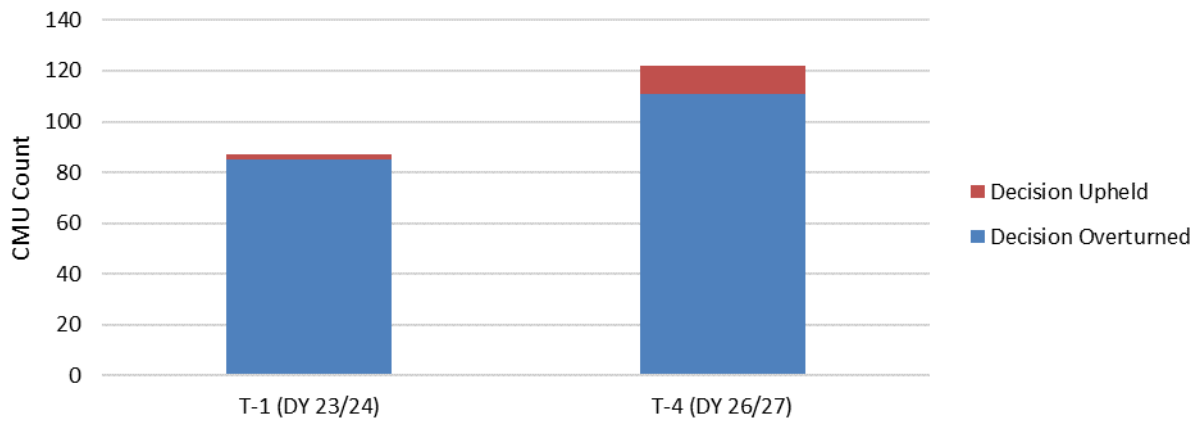
## Appeals process review

3.28. The Delivery Body received 122 appeals for reconsideration for the 2022/23 T-4 Auction and 87 for the 2022/23 T-1 Auction.

3.29. Appeals submitted to the Delivery Body for reconsideration for the 2022/23 T-4 Auction had a success rate of 91%, meaning their non-qualification decision was overturned and the applicants were able to qualify. Whilst the 2022/23 T-1 Auction had a 98% success rate.<sup>27</sup>

<sup>27</sup> Data provided by the Delivery Body to Ofgem on 21 March 2023

**Figure 18: Outcome of Appeals to Reconsider a Prequalification Decision Submitted to the Delivery Body for the 2022/23 CM Auctions**



3.30. The five most common reasons for Applicants failing Prequalification for the 2020/21 T-4 Auction were:<sup>28</sup>

- Exhibit ZB – missing
- Incorrect content for method to calculate connection capacity
- Exhibit ZA - missing or incorrect
- Metering assessment not deferred, line diagrams not provided
- Exhibit C - missing content

3.31. The five most common reasons for Applicants failing Prequalification for the 2022/23 T-1 Auction were:<sup>29</sup>

- Exhibit ZB – missing
- Estimated capacity provided, N/A for existing generating CMU
- Exhibit ZA - missing, or exemption unspecified

<sup>28</sup> Data provided by the Delivery Body to Ofgem on 21 March 2023

<sup>29</sup> Data provided by the Delivery Body to Ofgem on 21 March 2023

- Exhibit ZA - printed names missing or incorrect
- Exhibit ZA - signatures missing or incorrect

3.32. A total of 5 CMUs submitted appeals to the Authority for the T-4 Auction, and no CMUs entered an appeal to the Authority for T-1 Auction. All 5 CMUs that submitted appeals for the T-4 Auction had their decision by the Delivery Body upheld by the Authority.

3.33. These 5 CMUs were grouped into 2 appeals, the subject of these disputes was due to:

- An incomplete Fossil Fuel Emission Declaration (Exhibit ZA)
- Missing information to comply with Rule 4.4.4(e)

## 4. Auction results

### Auction outcomes for the 2022/23 T-4 Auction (Delivery Year 2026/27)

#### Auction parameters: clearing price and volume

- 4.1. The 2022/23 T-4 Auction price cap was £75/kW/year. The price decrement per round was £5/kW/year, resulting in a maximum of 15 rounds for the Auction. The T-4 Auction concluded in the 3<sup>rd</sup> Round at a clearing price of £63.00/kW/year.<sup>30</sup>
- 4.2. Of the 48.0GW that prequalified 46.0GW took part in the Auction with approximately 43.0GW of Capacity being awarded a Capacity Agreement through the Auction. This is slightly less than the target capacity of 43.9GW.<sup>31</sup>

#### Results by CMU category

- 4.3. As demonstrated in Figure 19, a significant share of cleared volumes was from Existing Generating CMUs (74%). This was followed by Existing Interconnector CMUs which shared 14%. The remaining CMU categories each contributed less than 8% of total volumes clearing the 2022/23 T-4 Auction, collectively representing less than 13% of cleared De-rated Capacity.
- 4.4. Existing Generating CMUs offered a total of 32.5GW in the Auction, of this 31.8GW cleared equating to an 98% success rate in obtaining Capacity Agreements. New Build Generating CMUs offered a total of 5.7GW and saw 61% secure Capacity Agreements (3.5GW).
- 4.5. New Build and Existing Interconnector CMUs together represented 15% of total Capacity entering the Auction. Both these CMU types had 100% of its offered Capacity secure Capacity Agreements.

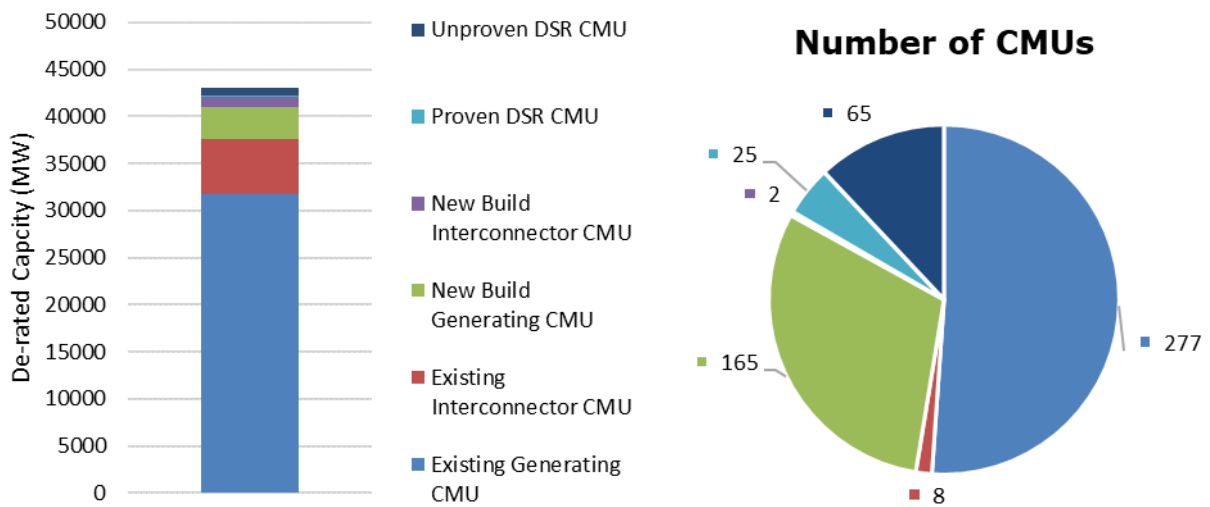
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<sup>30</sup> [T-4 DY 26-27 Final Auction Results Report](#)

<sup>31</sup> [Update to the Capacity Market Auction Parameters 2023, letter from BEIS to NG ESO, January 2023 \(publishing.service.gov.uk\)](#)

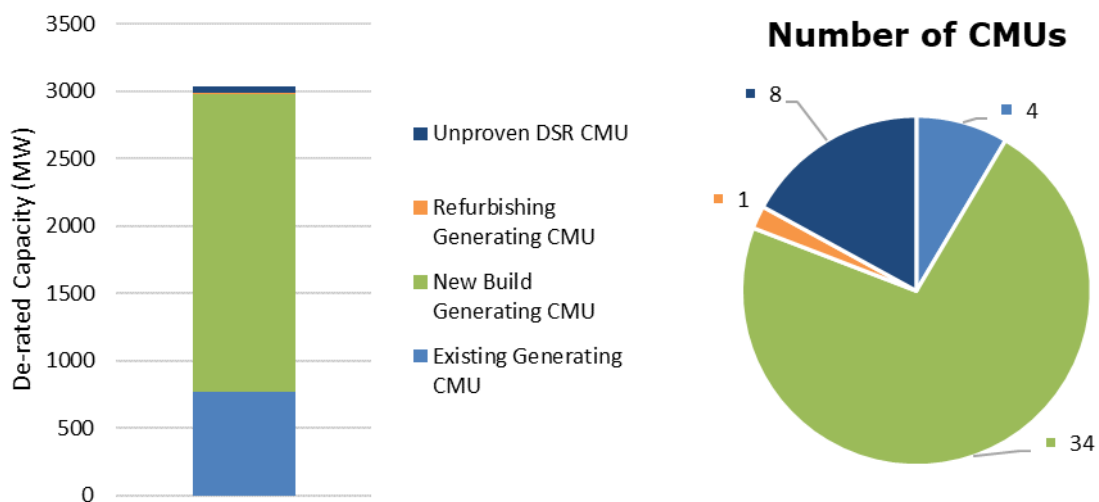
- 4.6. Proven and Unproven DSR CMUs accounted for 2% of total volumes offered in the Auction, together clearing 925MW of De-rated Capacity. Proven DSR CMUs saw 100% of its offered volumes clear and Unproven DSR CMUs saw 95% clear.
- 4.7. Lastly only 11MW of De-rated Capacity from Refurbished Generating CMUs entered the Auction with 0% of this clearing.

**Figure 19: 2022/23 T-4 Auction Cleared De-rated Capacity by CMU Category**



- 4.8. Figure 20 illustrates the proportion of CMU Capacity failing to secure Capacity Agreements by CMU category. A total of approximately 3.0GW of Capacity did not win Capacity Agreements. 73% of this is attributed to New Build Generating CMUs, 25% to Existing Generating CMUs and 2% Unproven DSR and Refurbishing Generating CMUs.

**Figure 20: 2022/23 T-4 Auction Exited De-rated Capacity by CMU Category**



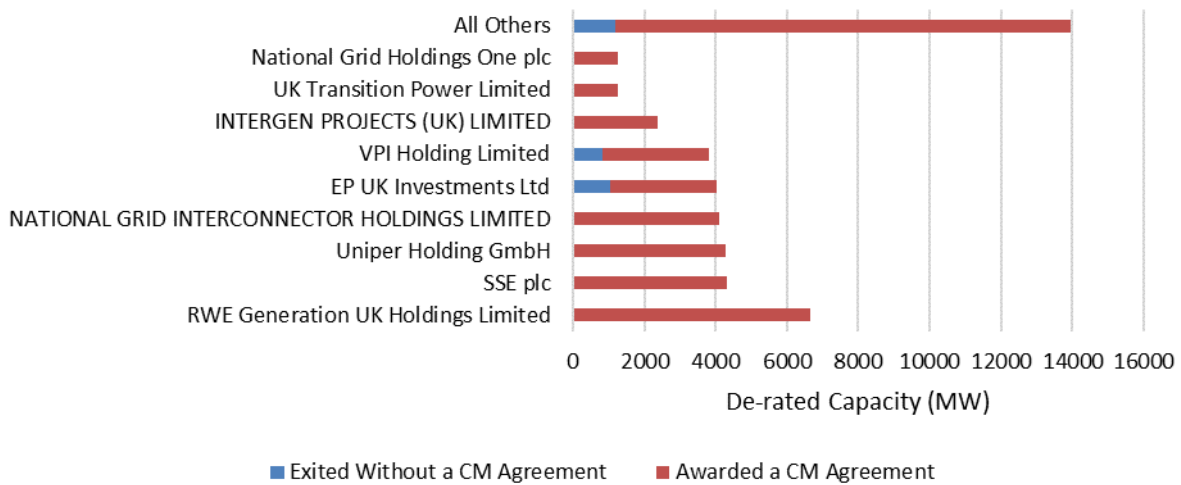


**Results by company**

4.9. Figure 21 illustrates the top 10 companies by total volume of De-rated Capacity entered in the Auction. RWE Generation UK Holdings Limited represented 14% of total volumes offered in the Auction and saw 100% of its offered volumes secure a Capacity Agreement.

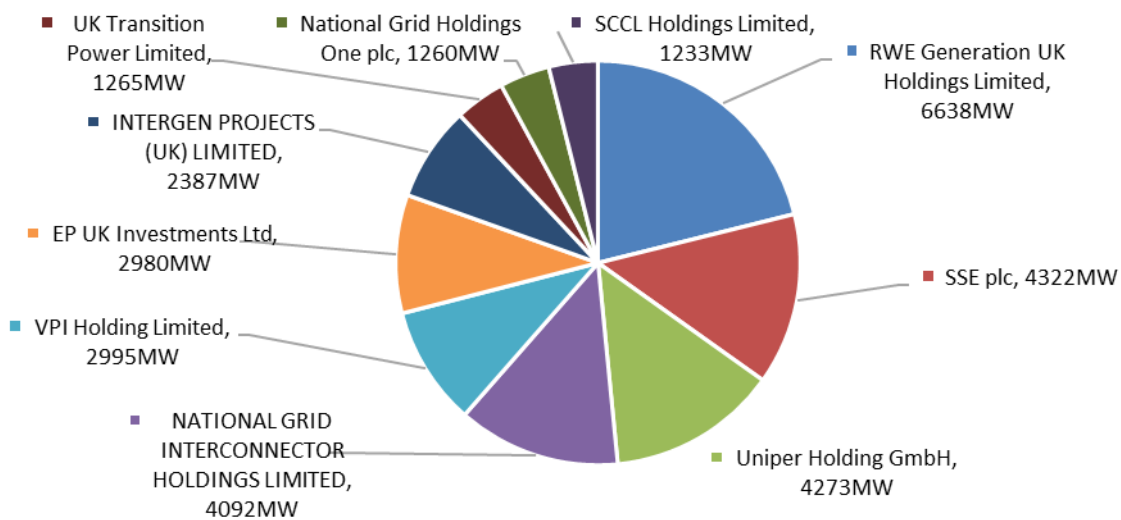
4.10. Out of the top 10 companies, RWE Generation UK Holdings Limited, SSE plc, Uniper Holding GmbH, National Grid Interconnector Holdings Limited, Intergen Projects (UK) Limited, UK Transition Power Limited and National Grid Holdings One plc gained Capacity Agreements for 100% of their capacity that entered the Auction. Of the Top 10 only EP UK Investments and VPI Holding Limited had Capacity that exited the Auction as they had 74% and 78% of their capacity gaining agreements respectively.

**Figure 21: 2022/23 T-4 Auction Results of Top 10 Parent Companies by De-rated Capacity Entered**



4.11. Figure 22 below illustrates the top 10 parent companies by largest cleared volumes. RWE Generation Limited represented 15% of total cleared volumes (6.6GW), SSE plc (4.3GW), Uniper Holding GmbH (4.3GW) and National Grid Interconnector Holdings Limited (4.1GW) all accounted for approximately 10% each. The remaining companies each accounted for less than 7% of total cleared volumes.

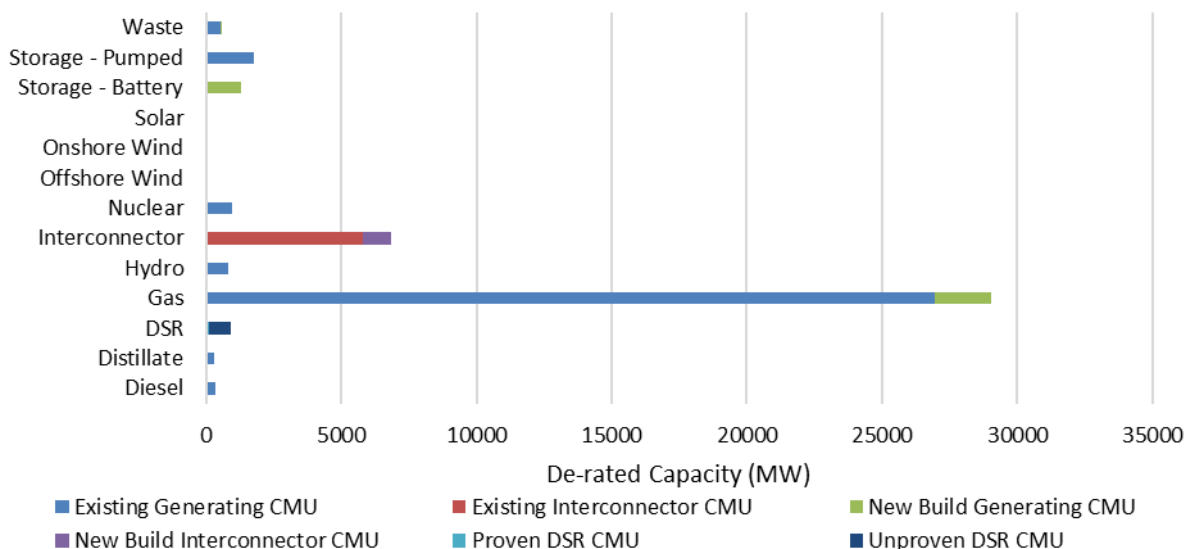
**Figure 22: 2022/23 T-4 Auction Results for Cleared De-rated Capacity by Parent Company**



**Results by fuel and technology type**

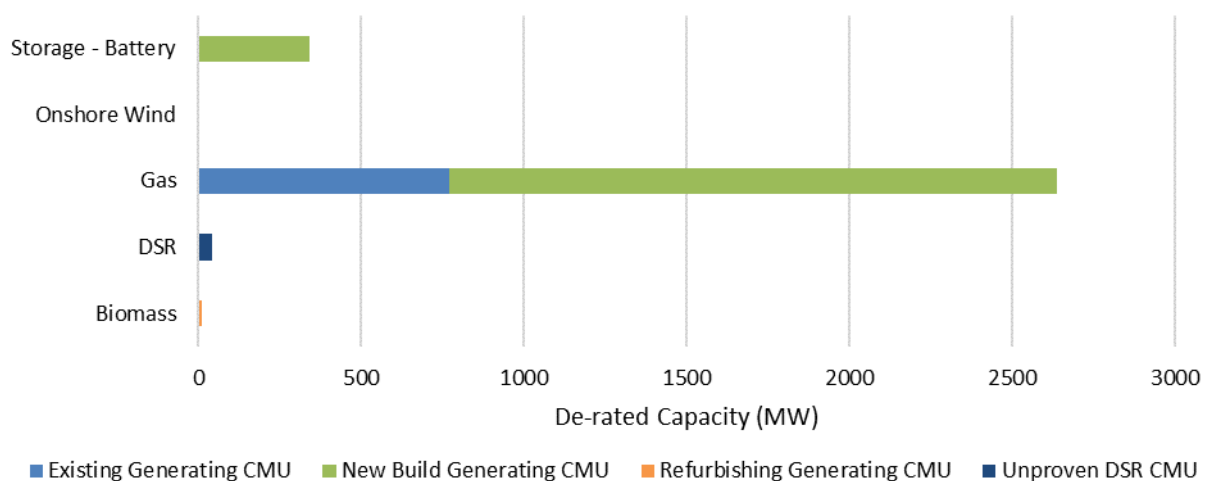
4.12. Figure 23 illustrates that more than half (68%) of the De-rated Capacity acquired through the 2022/23 T-4 Auction was gained by Gas CMUs, totalling 29.0GW. The vast majority (93%) from Existing Gas CMUs. Interconnector Capacity accounted for 16% of cleared volumes totalling 6.9GW. This was followed by Pumped Storage at 1.8GW (4%), Battery Storage at 1.3GW (3%), Nuclear at 1.0GW (2%), DSR at 925MW (2%) and Hydro at 814MW (2%). The remaining fuel type categories accounted for 1% or less of total De-rated Capacity cleared in the Auction, totalling 1.3GW.

**Figure 23: 2022/23 T-4 Auction Results for Cleared De-rated Capacity by Primary Fuel Type and CMU Category**



4.13. Figure 24 below focuses on the Capacity that exited the Auction without an agreement. Gas accounted for a significant portion of Capacity exiting the Auction (87%), totalling 2.6GW. Of this 1.8GW of this was New Build Gas CMUs (71%), whilst the remaining 769MW was Existing Gas CMUs (29%). Gas was followed by Battery Storage CMUs at 340MW (11%), DSR at 43MW (1%), Biomass at 11MW (0.38%) and Onshore Wind at 0.6MW (0.02%).

**Figure 24: 2022/23 T-4 Auction Results for Exited De-rated Capacity by Primary Fuel Type and CMU Category**

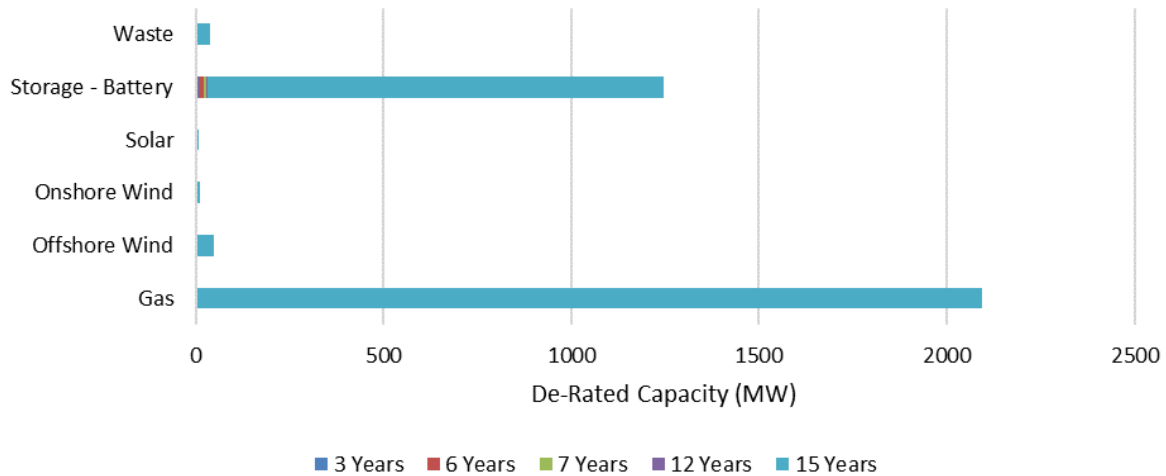


### Length of agreement

4.14. 92% (39.6GW) of the De-rated Capacity that won Capacity Agreements in the 2022/23 T-4 Auction were one-year agreements. The remaining 8% (approximately 3.4GW) were made up of 3 years (8MW), 6 Years (14MW), 7 Years (8MW), 12 years (2MW) and 15 years (3.4GW).

4.15. Figure 25 below shows that the multi-year contracts were made up mainly from Gas CMUs (2.1GW), with 100% being 15-year contracts. This was followed by Battery Storage CMUs (1.2GW) where 97% were 15-year contracts. While Offshore Wind (48MW), Waste CMUs (39MW), Onshore Wind CMUs (12MW) and Solar CMUs (8MW) made up the remaining multi-year contracts.

Figure 25: 2022/23 T-4 Auction Results by Multi-Year Contracts



## Auction outcomes for the 2022/23 T-1 Auction (Delivery Year 2023/24)

### Auction parameters: clearing price and volume

4.16. The 2022/23 T-1 Auction price cap was £75/kW/year. The price decrement per round was £5/kW/year, resulting in a maximum of 15 rounds for the Auction. The T-1 Auction concluded in the 3<sup>rd</sup> Round at a clearing price of £60.00/kW/year.<sup>32</sup>

4.17. Of the 6.8 GW that prequalified, 6.1 GW took part in the Auction with approximately 5.8 GW being awarded a Capacity Agreement through the Auction. This is the same as the target capacity of 5.8 GW.<sup>33</sup>

### Results by CMU category

4.18. As demonstrated in Figure 26 below, a significant share of cleared volumes was from Existing Generating CMUs (80%). This was followed by New Build Generating CMUs which shared 13%. The remaining CMU categories each contributed less than 5% of

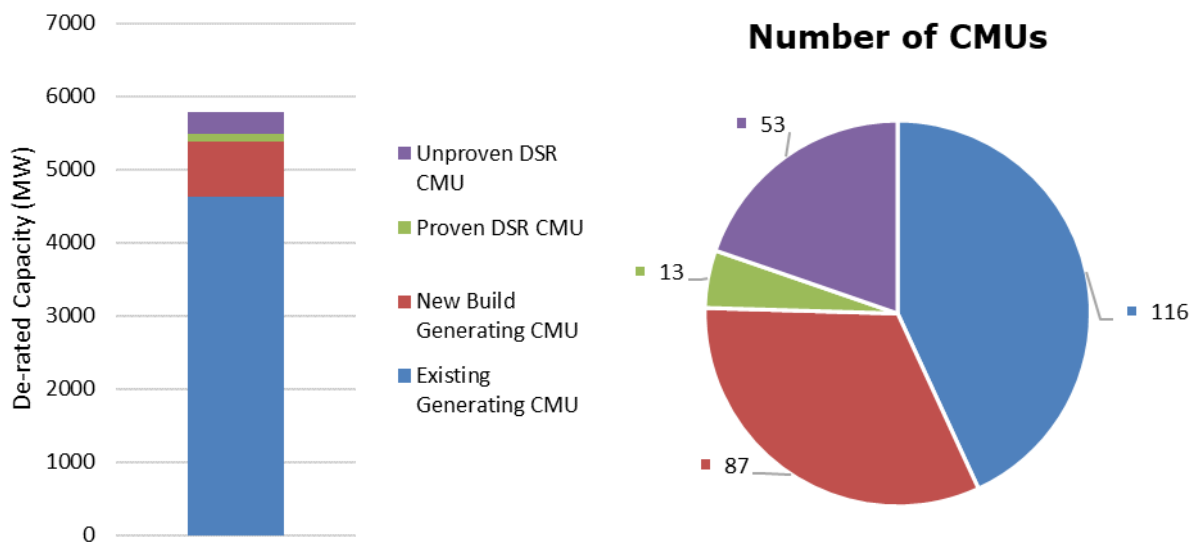
<sup>32</sup> [T-1 DY 23-24 Final Auction Results Report](#)

<sup>33</sup> [Update to the Capacity Market Auction Parameters 2023, letter from BEIS to NG ESO, January 2023 \(publishing.service.gov.uk\)](#)

total volumes clearing the 2022/23 T-1 Auction, and each category representing less than 14% of total De-rated Capacity cleared in the Auction.

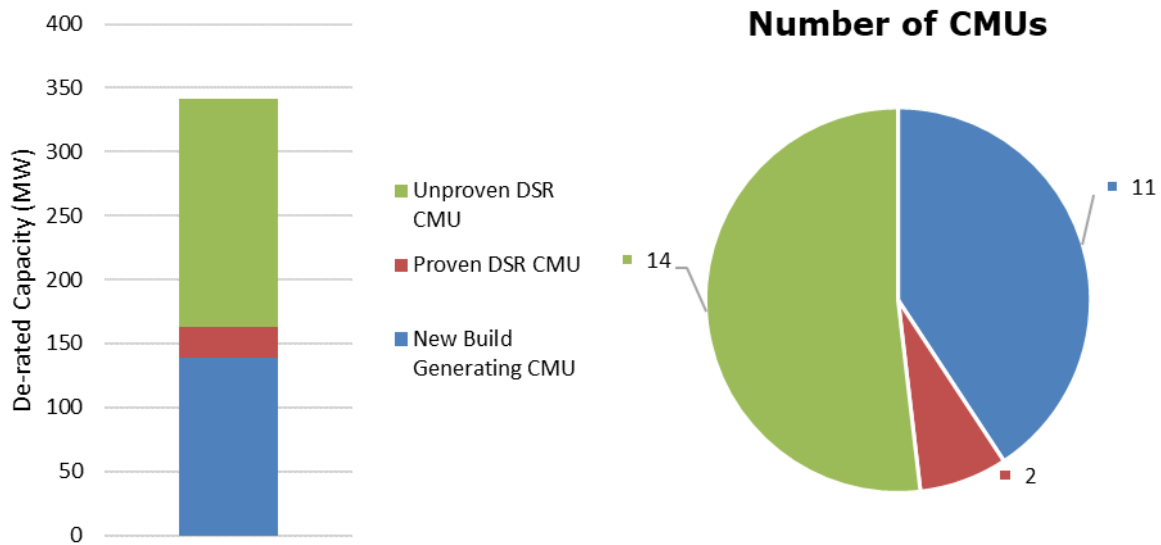
- 4.19. Existing Generating CMUs offered a total of 4.6GW in the Auction, of this 4.6GW cleared equating to an 100% success rate in obtaining Capacity Agreements. New Build Generating CMUs offered a total of 883MW and saw 84% secure Capacity Agreements (744MW).
- 4.20. Proven and Unproven DSR CMUs accounted for 10% of total volumes offered in the Auction, together clearing 404MW of De-rated Capacity. Proven DSR CMUs saw 81% of its offered volumes clear and Unproven DSR CMUs saw 63% clear.

**Figure 26: 2022/23 T-1 Auction Cleared De-rated Capacity by CMU Category**



- 4.21. Figure 27 below illustrates the proportion of CMU Capacity failing to secure Capacity Agreements by CMU category. A total of approximately 341MW of Capacity did not win Capacity Agreements. 52% of this is attributed to Unproven DSR CMUs, 41% to New Build Generating CMUs and 7% Proven DSR CMUs.

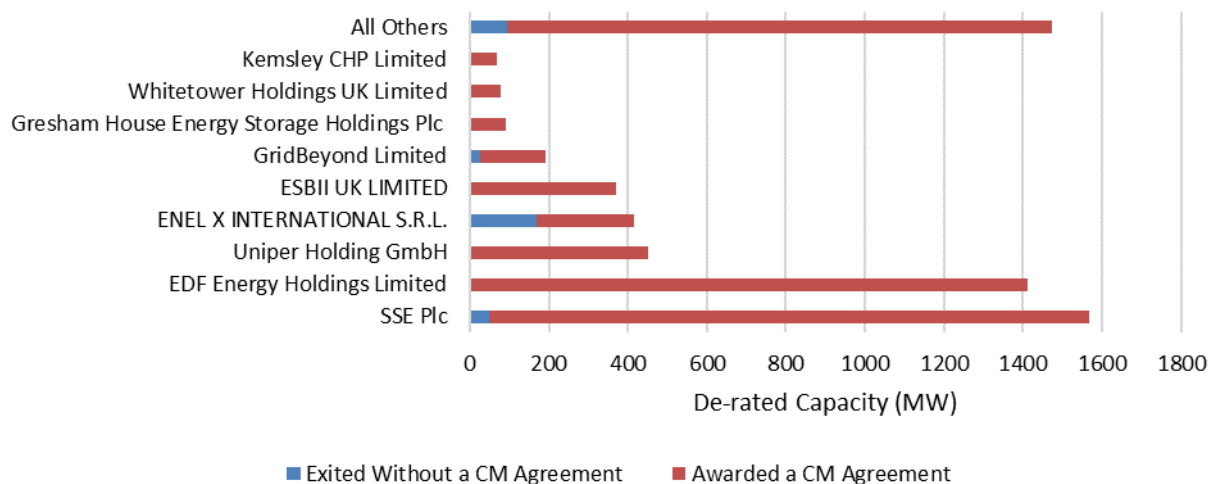
Figure 27: 2022/23 T-1 Auction Exited De-rated Capacity by CMU Category



**Results by company**

4.22. Figure 28 below illustrates the top 10 companies by total volume of De-rated Capacity entered in the Auction. SSE Plc represented 26% of total volumes offered in the Auction and saw 97% of its offered volumes secure a Capacity Agreement.

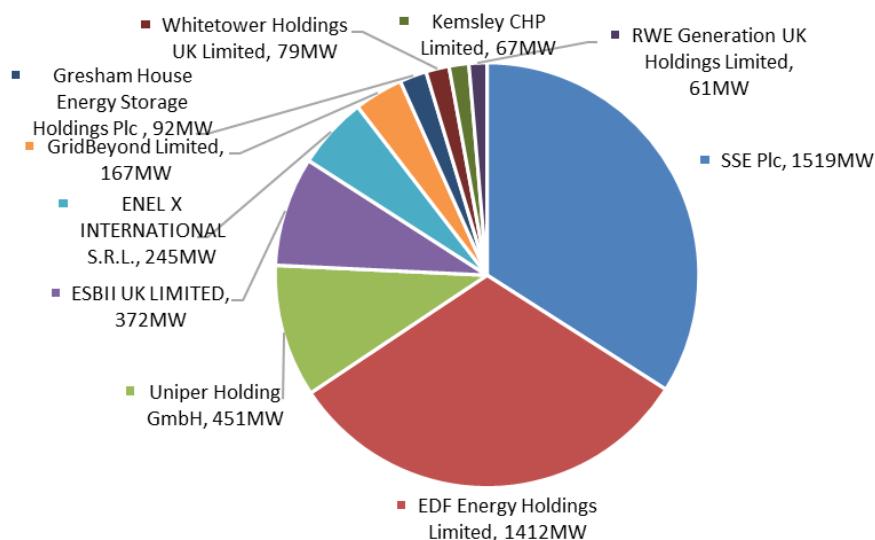
Figure 28: 2022/23 T-1 Auction Results by Top 10 Parent Companies by De-rated Capacity Entered



4.23. Out of the top 10 companies, EDF Energy Holdings Limited, Uniper Holding GmbH, ESBI UK LIMITED, Gresham House Energy Storage Holdings Plc, Whitetower Holdings UK Limited and Kemsley CHP Limited gained Capacity Agreements for 100% of their capacity that entered the Auction. Of the Top 10 only SSE Plc, ENEL X INTERNATIONAL S.R.L. and GridBeyond Limited had Capacity that exited the Auction as they had 97%, 59% and 86% of their capacity gaining agreements respectively.

4.24. Figure 29 below illustrates the top 10 parent companies by largest cleared volumes. SSE Plc represented 26% of total cleared volumes (1.5GW), EDF Energy Holdings Limited accounted for 24% (1.4GW), Uniper Holding GmbH accounted for 8% (451MW) and ESBI UK LIMITED accounted for 6% (372MW). The remaining companies each accounted for less than 4% of total cleared volumes.

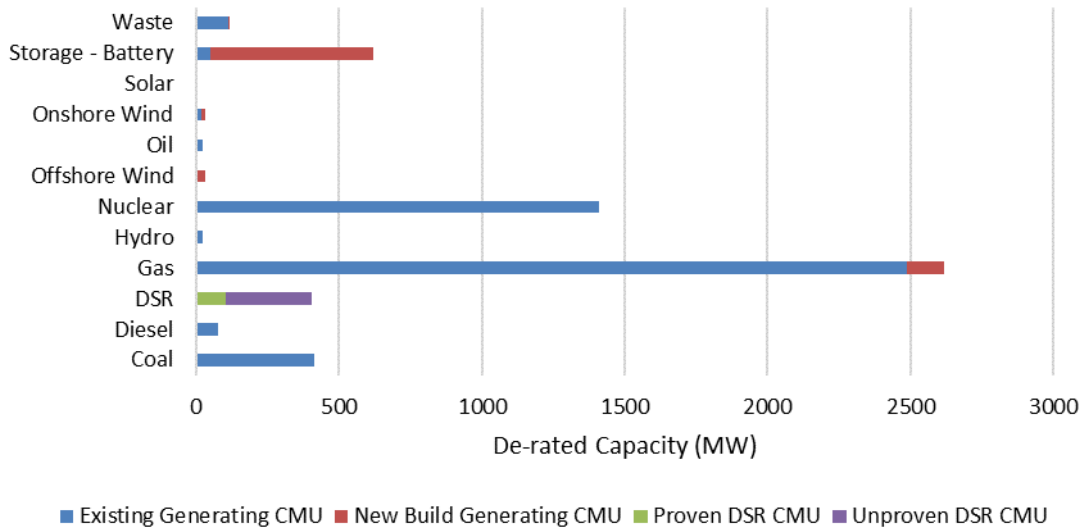
**Figure 29: 2022/23 T-1 Auction Results for Cleared De-rated Capacity by Parent Company**



**Results by fuel and technology type**

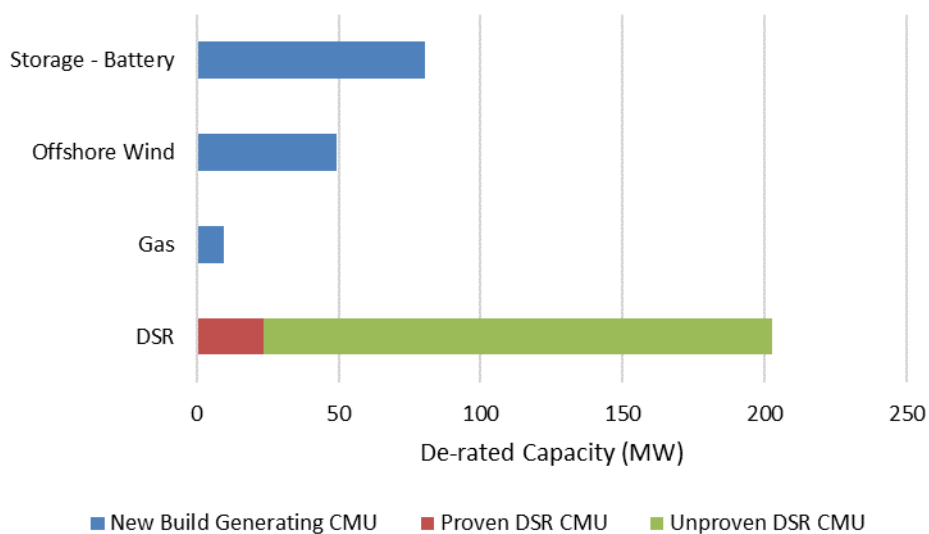
4.25. Figure 30 below illustrates that almost half (45%) of the De-rated Capacity acquired through the 2022/23 T-1 Auction was gained by Gas CMUs, totalling 2.6GW. The vast majority (95%) from Existing Gas CMUs. Nuclear Capacity accounted for 24% of cleared volumes totalling 1.4GW. This was followed by Battery Storage at 621MW (11%), Coal at 412MW (7%) and DSR at 404MW (7%), and Waste at 114MW (2%). The remaining fuel type categories accounted for 1% or less of total De-rated Capacity cleared in the Auction, totalling 198MW.

**Figure 30: 2022/23 T-1 Auction Results for Cleared De-rated Capacity by Primary Fuel Type and CMU Category**



4.26. Figure 31 below focuses on the Capacity that exited the Auction without an agreement. DSR accounted for a significant portion of Capacity exiting the Auction (59%), totalling 202MW. Of this 178MW was Unproven DSR CMUs (88%), whilst the remaining 23MW was Proven DSR CMUs (12%). This was followed by Battery Storage CMUs at 80MW (23%), Offshore Wind at 49MW (14%) and Gas at 0.9MW (3%).

**Figure 31: 2022/23 T-1 Auction Results for Exited De-rated Capacity by Primary Fuel Type and CMU Category**



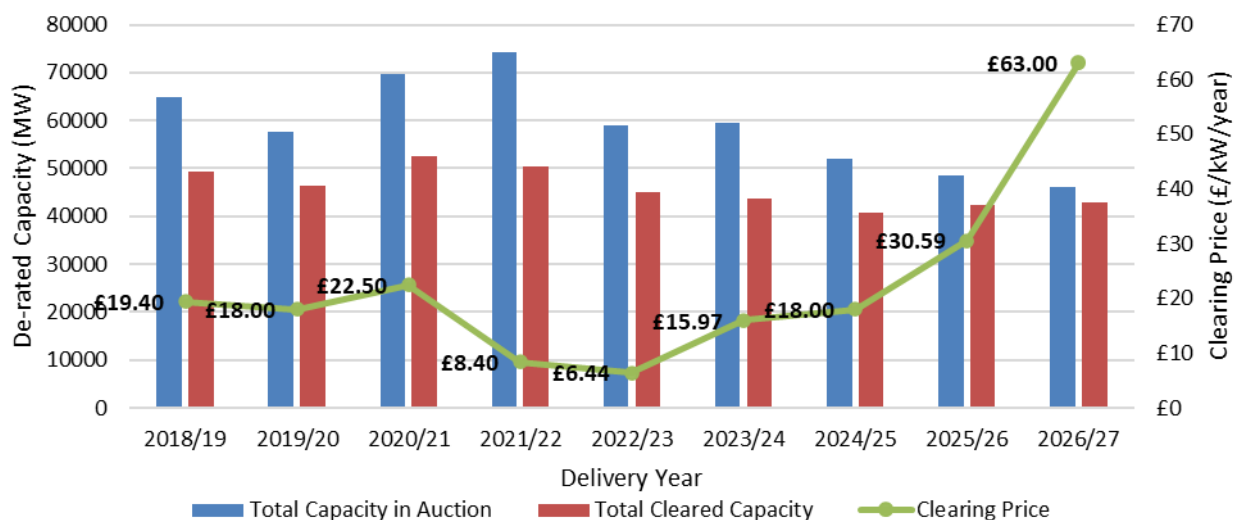


## Further observations

### Price volatility

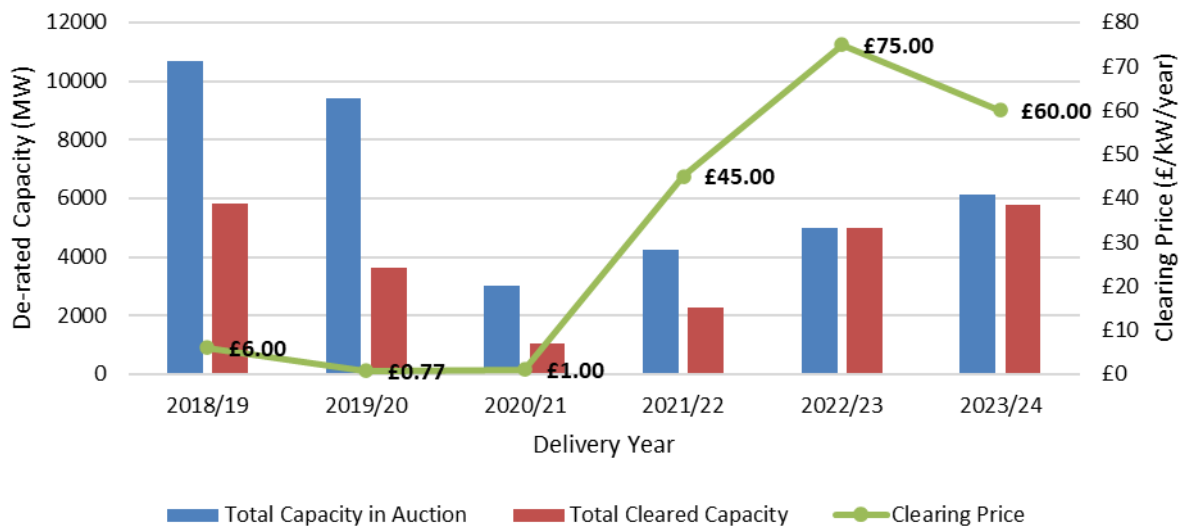
4.27. Figure 32 below shows the correlation between the difference in volume entering the T-4 Auctions and T-3 Auction and clearing volume with the clearing price. It is evident that if the volume entering the Auction is much greater than the clearing volume the clearing price is likely to be smaller as we can see from the T-4 Auction in 2017 (Delivery Year 2021/22). Whilst the opposite is true as the lower liquidity in the T-4 Auction for this year resulted in the highest T-4 clearing price that has been witnessed.

**Figure 32: Historical Overview of T-4 and T-3 Auctions Participation, Clearing Volume and Clearing Price**



4.28. Figure 33 below shows that as the volume entering for T-1 Auction decreases and the clearing volume increases the clearing price increases. We especially see this for the 2021/22 T-1 Auction (Delivery Year 2022/23) as all Capacity entering the Auction was cleared, thus the Auction cleared at the price cap. This year liquidity was also quite low but there was enough capacity in the Auction for the target and thus it cleared slightly lower than the previous year.

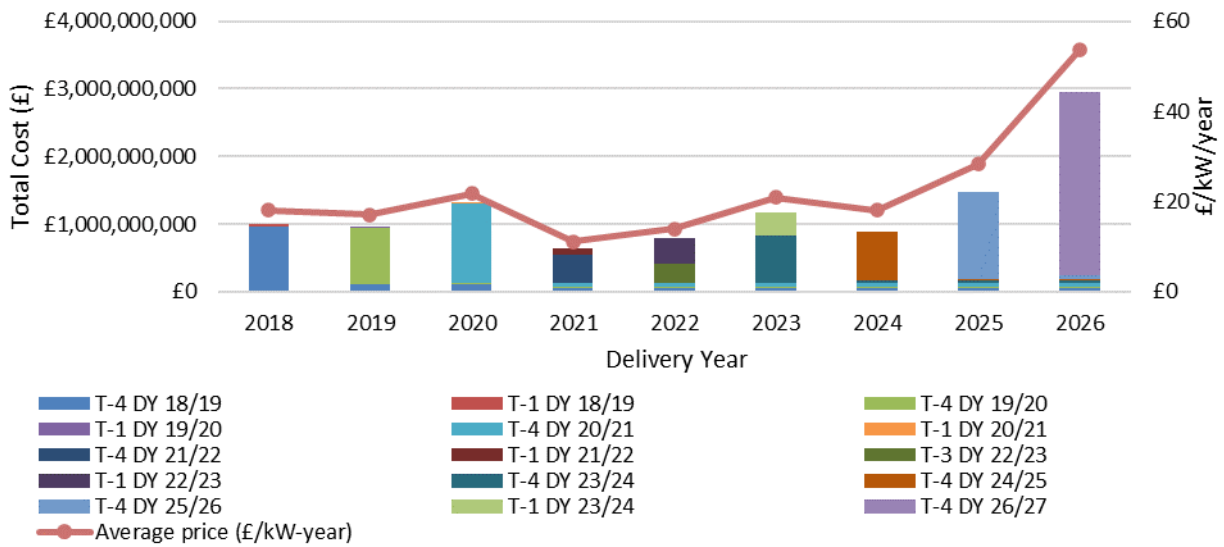
**Figure 33: Historical Overview of T-1 Auctions Participation, Clearing Volume and Clearing Price**



**Total cost from Capacity Market Auctions for Delivery Years 2018/19 to 2025/26**

- 4.29. Figure 34 below illustrates the total costs from CM Auctions for the Delivery Years 2018/19 to 2026/27 alongside the average price per kilowatt for that year.
- 4.30. The most expensive Delivery Year since 2018/19 is 2026/27 (£2,955,799,744). This is due to the high clearing price of the T-4 Auction (£63/kW/year) which resulted in the Auction cost to be £2,709,060,165. It should also be noted that the T-1 Auction for 2026/27 is still to be run so it is likely that the cost of this Delivery Year will increase further.
- 4.31. The least expensive Delivery Year since 2018/19 is the 2021/22 (£649,128,918). This is the cheapest due to the T-4 Auction for this Delivery Year securing 50.4 GW for a £8.4/kW/year. Therefore, even though the DB secured 2.3 GW in the T-1 Auction for £45/kW the low clearing price of the T-4 Auction kept the cost for this Delivery Year very low.

Figure 34: Total CM Auction Costs for Delivery Years 2018/19 to 2025/26<sup>34</sup>



<sup>34</sup> [2014 Final Auction Results T-4 \(DY 18/19\)](#), [2015 Final Auction Results T-4 \(DY 19/20\)](#), [2016 Final Auction Results T-4 \(DY 20/21\)](#), [2017 Final Auction Results T-4 \(DY 21/22\)](#), [2019 Final Auction Results T-3 \(DY22/23\)](#), [2019 Final Auction Results T-4 \(DY 23/24\)](#), [2020 Final Auction Results T-4 \(DY 24/25\)](#), [2021 Final Auction Results \(DY 25/26\)](#), [2022 Final Auction Results T-4 \(DY 26/27\)](#) [2017 Final Auction Results T-1 \(DY 18/19\)](#), [2018 Final Auction Results T-1 \(DY 19/20\)](#), [2019 Final Auction Results T-1 \(DY 20/21\)](#), [2020 Final Auction Results T-1 \(DY 21/22\)](#), [2021 Final Auction Results T-1 \(DY 22/23\)](#), [2022 Final Auction Results T-1 \(DY 23/24\)](#)

## 5. Bidding behaviour

5.1. This section provides an overview of the bidding behaviour of participants in the 2022/23 T-4 and 2022/34 T-1 Auction.

### Background

5.2. CMUs have the option to submit an Exit Bid to indicate the minimum price at which it would seek a Capacity Market agreement. Alternatively, CMUs that do not place an Exit Bid automatically remain in the Auction and will be awarded an agreement at the market clearing price.

### Capacity Auction bidding rules

5.3. In each round, the following actions are available to Auction participants:

- **Exit Bid** – all CMUs have the option to specify the price at which they exit the Auction.<sup>35</sup>
- **Proxy Exit Bid** – CMUs have the ability to submit Proxy Exit Bids at or below the Price Taker Threshold at any point during the Auction. Submitted Proxy Exit Bids become active & take effect in a later round.<sup>36</sup>
- **Duration Bid** – specifies the duration of the Capacity Agreement that a Bidder requires at any particular price.
- **Duration Bid Amendment (DBA)** – New Build and Refurbishing CMUs that qualify for longer agreements can specify the price at which they want to reduce

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<sup>35</sup> Participants may amend or delete any Exit Bids or Duration Bid Amendments that have not yet been realised.

<https://www.emrdeliverybody.com/Lists/Latest%20News/Attachments/72/Auction%20Guidance%20v1.pdf>

<sup>36</sup>

<https://www.emrdeliverybody.com/Lists/Latest%20News/Attachments/72/Auction%20Guidance%20v1.pdf>

the length of their agreement, in the event the price falls below a particular level.

- **Continue as Pre-refurbishing** – Refurbishing CMUs can specify a price to switch to an Existing contract (and as a result only receive a one-year agreement).

### **Our monitoring**

5.4. We monitor bidding patterns and behaviour following the CM Auctions for several reasons, including in performance of our regulatory and competition law functions, and to monitor compliance with the CM Rules. We also monitor to inform decisions on whether to make changes to the CM Rules.

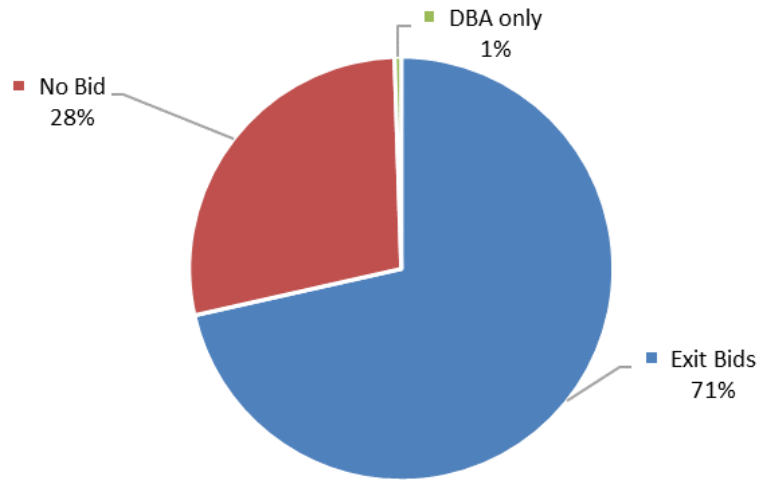
## **Summary of bidding behaviour in 2022/23 T-4 Auction (Delivery Year 2026/27)**

5.5. Figure 35 below illustrates that 71% of participants submitted Exit Bids into the T-4 CM Auction, and that approximately 28% were CMUs that did not submit an Exit Bid ('No Bidders'). The strategy of not bidding requires that CMUs remain in the T-4 Auction and receive the Capacity Market Auction clearing price, entitling them to a Capacity Agreement.<sup>37</sup>

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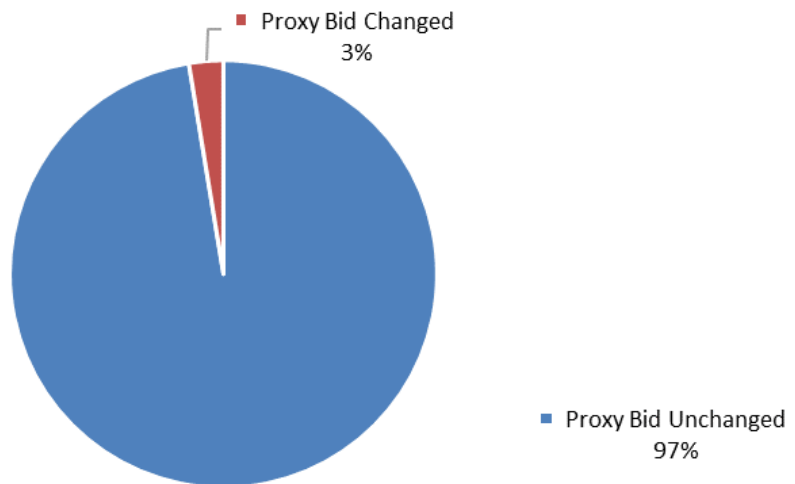
<sup>37</sup> Data provided by the Delivery Body on 21 March 2023

**Figure 35: Bidding Approaches for CMUs in the 2022/23 T-4 Auction**



5.6. The 71% of participants submitting Exit Bids includes CMUs submitting proxy and non-proxy Exit Bids. Figure 36 illustrates Proxy and Non-Proxy Exit Bid price changes by CMUs over the Auction period by comparing the first and last Proxy Exit Bid price. Of CMUs entering Proxy Exit Bids, 97% left theirs unchanged and 3% changed their Proxy Exit Bid price.<sup>38</sup>

**Figure 36: Proxy Exit Bid Price Changes by CMUs in the 2022/23 T-4 Auction**

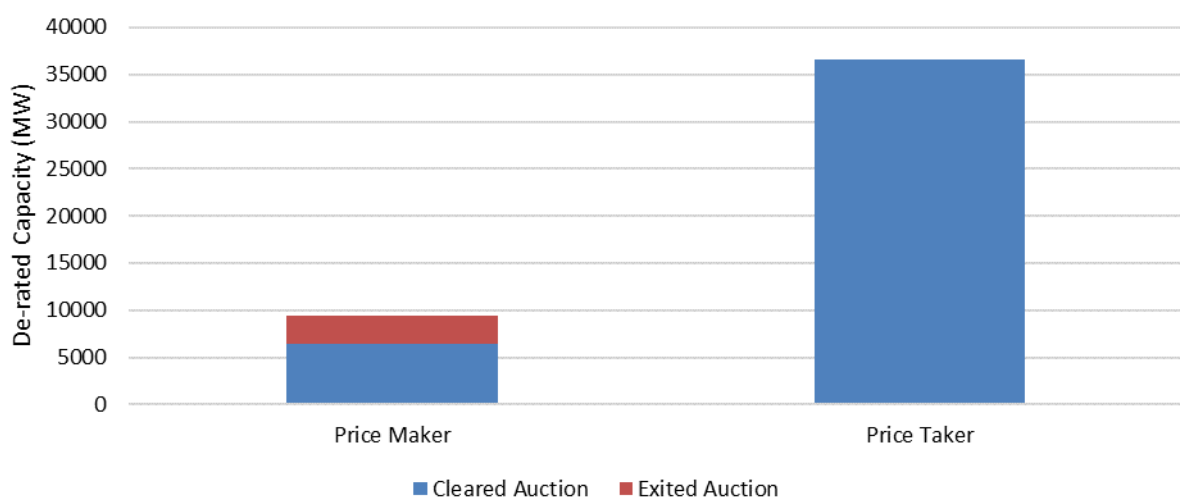


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<sup>38</sup> Data provided by the Delivery Body on 21 March 2023

5.7. Price Makers accounted for 21% of total submitted Capacity in the 2022/23 T-4 Auction, totalling approximately 9.4GW of De-rated Capacity. As illustrated in Figure 37 below, 3.0GW of capacity exited the Auction all of which were Price Maker CMUs. Price Takers accounted for 79% of total submitted Capacity offered in the Auction, totalling 36.5GW. Every CMU that was a Price Taker cleared due to the clearing price being above £25/kW/year.<sup>39</sup>

**Figure 37: Cleared and Exited Capacity by Price Makers and Price Takers in the 2022/23 T-4 Auction**



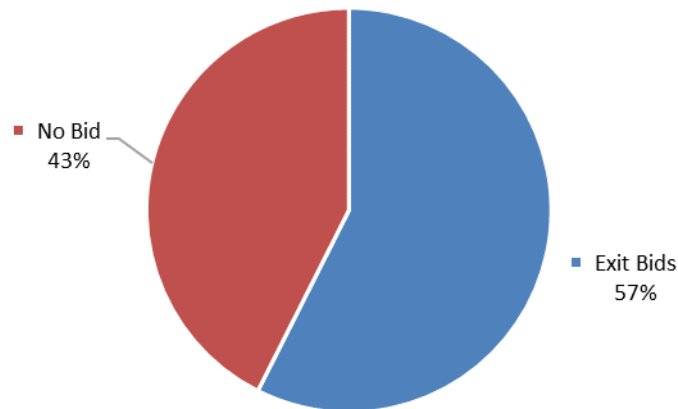
### Summary of bidding behaviour in 2022/23 T-1 Auction (Delivery Year 2023/24)

5.8. Figure 38 below illustrates that 57% of participants submitted Bids into the T-1 CM Auction, and that approximately 43% were CMUs that did not submit an Exit Bid ('No Bidders'). The strategy of not bidding requires that CMUs remain in the T-4 Auction and receive the Capacity market Auction clearing price, entitling them to a Capacity Agreement.<sup>40</sup>

<sup>39</sup> Data provided by the Delivery Body on 21 March 2023

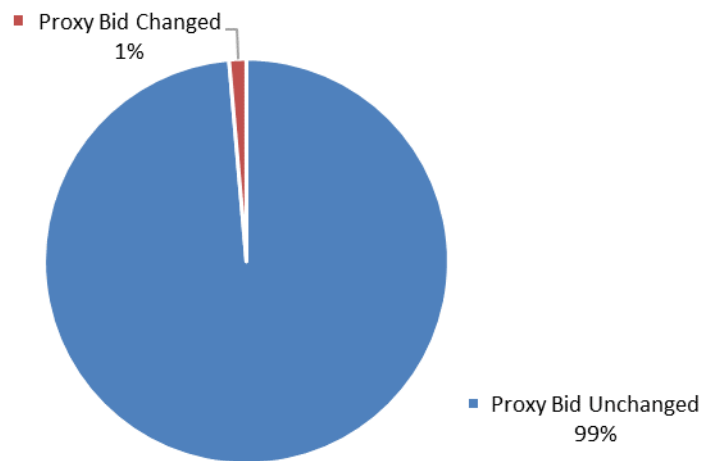
<sup>40</sup> Data provided by the Delivery Body on 21 March 2023

**Figure 38: Bidding Approaches for CMUs in the 2022/23 T-1 Auction**



5.9. This 57% includes CMUs submitting proxy and non-proxy Exit Bids. Figure 39 illustrates Proxy and Non-Proxy Exit Bid price changes by CMUs over the Auction period, comparing the first and last Proxy Exit Bid price. CMUs entering Proxy Exit Bids, 99% left theirs unchanged and 1% changed their Proxy Exit Bid price.<sup>41</sup>

**Figure 39: Proxy Exit Bids Price Changes by CMUs in the 2022/23 T-1 Auction**



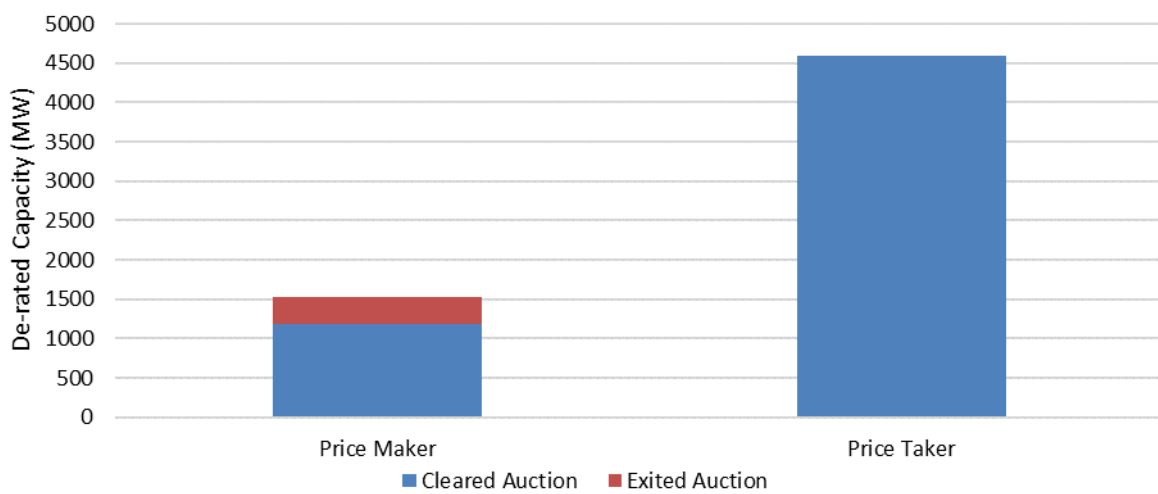
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<sup>41</sup> Data provided by the Delivery Body on 21 March 2023



5.10. Price Makers accounted for 25% of total submitted Capacity in the 2022/23 T-1 Auction, totalling approximately 1.5GW of De-rated Capacity. As illustrated in Figure 40 below, 341MW of Capacity exited the Auction all of which were Price Maker CMUs. Price Takers accounted for 75% of total submitted Capacity offered in the Auction, totalling 4.6GW. Every CMU that was a Price Taker cleared due to the clearing price being above £25/kW/year.<sup>42</sup>

**Figure 40: Cleared and Exited Capacity by Price Makers and Price Takers in the 2022/23 T-1 Auction**



<sup>42</sup> Data provided by the Delivery Body on 21 March 2023

## 6. Delivery milestones

6.1. This section provides a summary of the performance of CMUs against meeting their milestones from obtaining CM agreements to delivery, including investment, construction and testing. New Build CMUs are required to meet financial and construction milestones to participate in the relevant Delivery Year.

### Delivery milestones for Auctions 2018-2023

6.2. Successful New Build Generating, Refurbishing and New Build Interconnector CMUs (i.e. Prospective CMUs) must meet a number of pre-Delivery Year milestones.

6.3. New Build CMUs are required to achieve the Financial Commitment Milestone (FCM)<sup>43</sup> and Substantial Completion Milestone (SCM) by deadlines specified in the CM Rules.<sup>44</sup> A failure to do so can result in a loss of CM payments, and/or a termination of their CM agreement.<sup>45</sup>

**Table 11: Successful New Build Capacity/CMUs, Auction milestones achieved, and all terminated De-rated Capacity to date**

Auction	Successful New Build and Post Refurbished Capacity (GW)	Successful New Build and Post Refurbished CMUs	Capacity met FCM	Capacity met SCM	Total Terminated Capacity (GW)	Total Terminated CMUs
2019/20 T-3 (DY 2022/23)	3.077	39	100%	97.2%	1.6	22
2021/22 T-1 (DY 2022/23)	1.378	67	100%	95.4%	0.049	9
2019/20 T-4 (DY 2023/24)	4.366	86	100%	90.4%	0.2	20

<sup>43</sup> Financial Commitment Milestone is a requirement on the Capacity Provider to demonstrate that 10% of total project spend for that CMUs has incurred.

<sup>44</sup> Minimum Completion Requirement obligates the Capacity Provider to have an aggregate physical generating Capacity De-rated exceeding 50% of its Capacity Obligation. Substantial Completion Milestone requires the CMU to demonstrate an aggregate physical generating Capacity De-rated equal or exceeding 90% of its Capacity Obligation. A failure to achieve these milestones by a specified date may result in a loss of CM payments, or a termination of the Capacity Obligation.

<sup>45</sup> Progress towards meeting these milestones is monitored by a requirement on Prospective Capacity Provider to submit construction reports to the Delivery Body until the SCM is achieved.

2022/23 T-1 (DY2023/24)	0.748	87	55.8%	7%	N/A	N/A
2020/21 T-4 (DY 2024/25)	5.226	82	100%	58.0%	0.040	8
2021/22 T-4 (DY 2025/26)	4.912	136	77.1%	19.2%	0.1	6
2022/23 T-4 (DY 2026/27)	4.502	167	24.6%	0%	N/A	N/A

**Milestones by Auction overview**

- 6.4. For the 2019 T-3 Auction, 100% of New Build and Refurbishing Capacity met the FCM and approximately 97% have met the SCM.<sup>46</sup> 22 CMUs have been terminated to date which totals 1.6GW. 3 of these CMUs were New Build CMUs which made up 7MW of the De-rated Capacity that was terminated.<sup>47</sup>
- 6.5. For the 2021 T-1 Auction, 100% of New Build and Refurbishing Capacity met the FCM and 95% have met the SCM.<sup>48</sup> 9 CMUs have been terminated to date which totals 49MW. 5 of these CMUs were New Build CMUs which made up 39MW of the De-rated Capacity that was terminated.<sup>49</sup>
- 6.6. For the 2019 T-4 Auction, 100% of New Build and Refurbishing Capacity met the FCM and approximately 90% have met the SCM.<sup>50</sup> 20 CMUs have been terminated to date which totals 180MW. 15 of these were New Build CMUs which made up 145MW of the De-rated Capacity that was terminated.<sup>51</sup>
- 6.7. For the 2022 T-1 Auction, approximately 56% of New Build and Refurbishing Capacity have met the FCM and approximately 7% have met the SCM.<sup>52</sup> No CMUs have been terminated to date.<sup>53</sup>

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<sup>46</sup> Data provided by the Delivery Body on 21 March 2023  
<sup>47</sup> CMR 2019 T-3 Auction data (published 19 July 2023).  
<sup>48</sup> Data provided by the Delivery Body on 21 March 2023  
<sup>49</sup> CMR 2021 T-1 Auction data (published 19 July 2023)  
<sup>50</sup> Data provided by the Delivery Body on 21 March 2023  
<sup>51</sup> CMR 2019 T-4 Auction data (published 19 July 2023).  
<sup>52</sup> Data provided by the Delivery Body on 21 March 2023  
<sup>53</sup> CMR 2022 T-1 Auction data (published 19 July 2023)

- 6.8. For the 2020 T-4 Auction, 100% of New Build and Refurbishing Capacity met the FCM and approximately 58% have met the SCM.<sup>54</sup> 8 CMUs have been terminated to date which totals 40MW. 5 of these were from New Build CMUs which made up 26MW of the De-rated Capacity that was terminated.<sup>55</sup>
- 6.9. For the 2021 T-4 Auction, approximately 77% of New Build and Refurbishing Capacity met the FCM and 19% have met the SCM.<sup>56</sup> 6 CMUs have been terminated to date which totals 148MW. 5 of these were from New Build CMUs which made up 136MW of the De-rated Capacity that was terminated.<sup>57</sup>
- 6.10. For the 2022 T-4 Auction, approximately 25% of New Build and Refurbishing Capacity met the FCM and 0% have met the SCM.<sup>58</sup> No CMUs have been terminated to date.<sup>59</sup>

## Metering assessment

- 6.11. Prior to, or after, Prequalification a CMU must complete a Metering Assessment questionnaire. The questionnaire will then determine if the CMU is subject to a Meter Test. Meter Tests are conducted by EMR Settlement Limited (EMRS)<sup>60</sup> who subsequently provide a Meter Test Certificate if the CMU demonstrates it successfully met its obligation.<sup>61</sup>
- 6.12. Table 12 below shows the number of CMUs that have submitted the Metering Assessment and those with outstanding requirements. The outstanding CMUs are subject to a number of different deadlines depending on the CMU categorisation they are given at Prequalification.<sup>62</sup> All CMUs have the option to defer the Metering Assessment at Prequalification and if required, the obligation to provide a Meter Test

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<sup>54</sup> Data provided by the Delivery Body on 21 March 2023

<sup>55</sup> CMR 2020 T-4 Auction data (published 19 July 2023)

<sup>56</sup> Data provided by the Delivery Body on 21 March 2023

<sup>57</sup> CMR 2021 T-4 Auction data (published 19 July 2023)

<sup>58</sup> Data provided by the Delivery Body on 21 March 2023

<sup>59</sup> CMR 2022 T-4 Auction data (published 19 July 2023)

<sup>60</sup> Acting on behalf of the Electricity Settlements Company (the CM Settlement Body)

<sup>61</sup> [CM rules](#) - 13.3.6

<sup>62</sup> [CM rules](#) - 3.6.4, 3.10, 8.3

Certificate. Failing to meet the deadline or complete the questionnaire results in termination.<sup>63</sup>

**Table 12: Metering assessment outcomes for Delivery Years 2020/21 to 2026/27<sup>64</sup>**

Auction	Metering Assessment Submitted	Outstanding Metering Assessment
2019/20 T-3 (DY 2022/23)	373	15
2021/22 T-1 (DY 2022/23)	280	11
2019/20 T-4 (DY 2023/24)	407	91
2022/23 T-1 (DY 2023/24)	137	132
2020/21 T-4 (DY 2024/25)	336	155
2021/22 T-4 (DY 2025/26)	360	214
2022/23 T-4 (DY 2026/27)	291	251

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<sup>63</sup> [CM rules](#) - 6.10

<sup>64</sup> Data received from the Delivery Body on 21 March 2023.

## 7. Delivery Year performance

- 7.1. This section provides a progress report on Delivery Year performance for the 2022/23 Delivery Year. Specifically, this section covers the Satisfactory Performance Days (“SPD”) for the 2014/15 T-4, 2015/16 T-4, 2016-17 T-4, 2017/18 T-4, 2019/20 T-3 and 2021/22 T-1 Auctions for Delivery Year 2021/22.

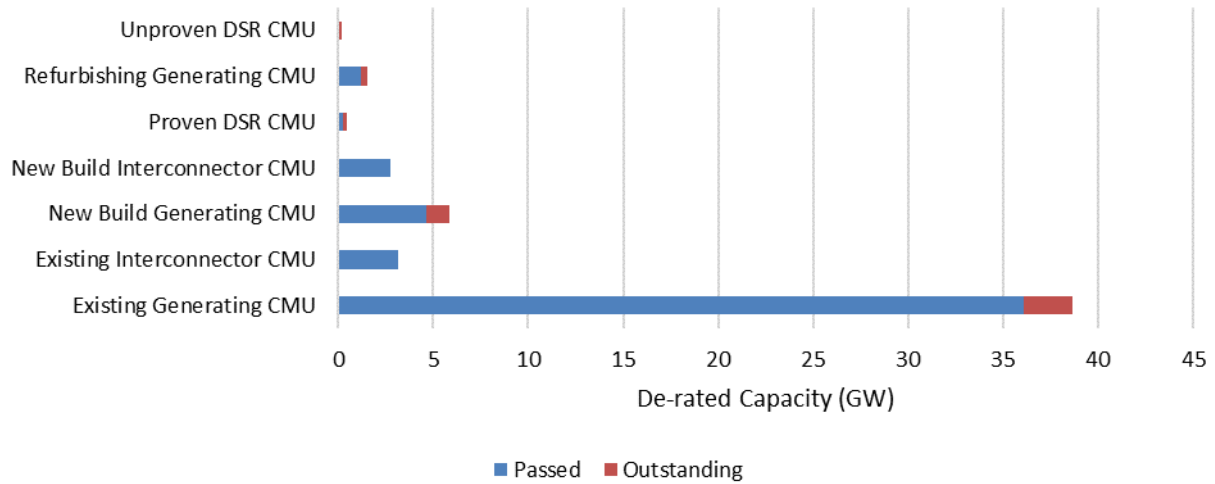
### Satisfactory performance days

- 7.2. Capacity Providers are obligated to meet capacity obligations as set in their Capacity Agreement Notice (CAN).
- 7.3. As of 21 March 2023, approximately 25% of CMUs with Capacity Agreements had an outstanding requirement to meet the SPD criteria for Delivery Year 2022/23 (Figure 41 below). The deadline for these units to pass the SPD criteria was 31/07/2023. The 25% of CMUs account for 4.4 GW. Existing Generating CMUs (2.6GW) make up 59% of the total De-rated Capacity that are still to meet the SPD criteria, followed by New Build Generating CMUs at 27% (1.2 GW) and Refurbishing Generating CMUs at 8% (342 MW). Proven DSR CMUs (181MW) with 1% and Unproven DSR CMUs at 3% (112MW). All Existing Interconnector CMUs and New Build Interconnector CMUs have passed their SPDs for Delivery Year 2022/23. In total, 92% of De-rated Capacity have so far passed the SPD criteria. <sup>65</sup>

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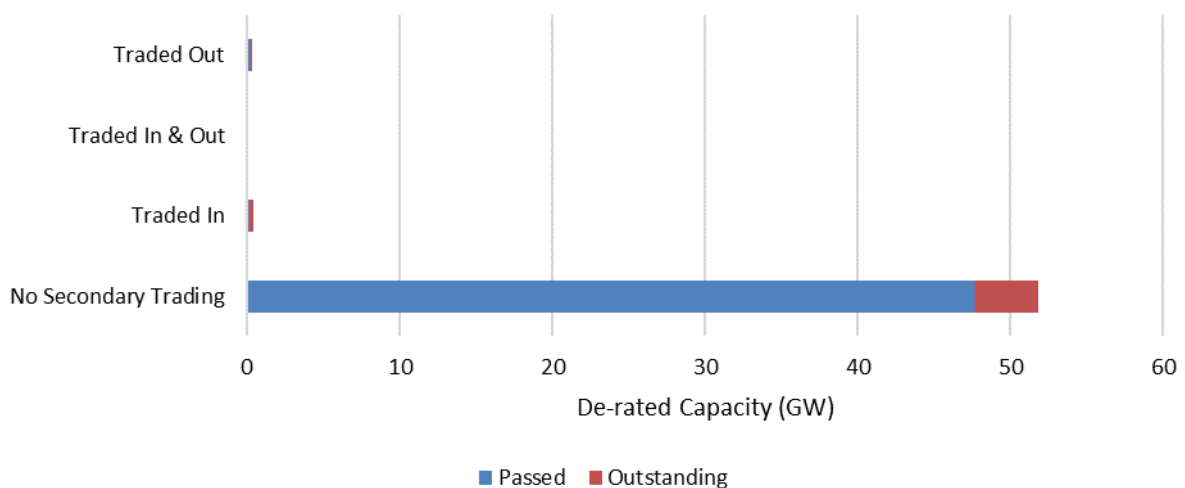
<sup>65</sup> Data provided by the Delivery Body to Ofgem on 21 March 2023

**Figure 41: Satisfactory Performance Days by CMU Category for the Delivery Year 2022/23 Not Including Secondary Trading (as of 21 March 2023)**



7.4. Figure 42 shows the view of De-rated Capacity that has passed the SPD criteria as of 21 March 2023 and if it has taken part in Secondary Trading. 99% of De-rated Capacity (51.8GW) for this Delivery Year has not taken part in Secondary Trading, 1% of De-rated Capacity (388MW) have traded in, 1% of De-rated Capacity (330MW) have traded out and less than 1% of De-rated Capacity (63MW) have traded in and out.<sup>66</sup>

**Figure 42: Satisfactory Performance Days for the Delivery Year 2022/23 for Transferee’s in Secondary Trading (as of 21 March 2023)**



<sup>66</sup> Data provided by the Delivery Body to Ofgem on 21 March 2023

## 8. Next steps

8.1. Ofgem will continue to play a key role in the CM, which includes:

- Responsibility for the CM Rules (the Rules)
- Oversight and enforcement powers over how the Delivery Body, suppliers and generators are complying with the Regulations and the Rules
- Determine disputes where participants disagree with a decision made by the Delivery Body
- Report on the effectiveness of the CM generally and on the Delivery Body's performance

8.2. The Capacity Market Advisory Group (CMAG) was established and launched in October 2022, bringing together Delivery Partners and representatives of the Capacity Market, with Elexon acting as the Secretariat. There have been eleven meetings to date discussing a range of potential Change Proposals, details of which can be found on Elexon's CMAG webpage.<sup>67</sup>

8.3. We are currently considering the next steps for a Statutory Consultation (expected in Autumn 2023) on Change Proposals currently with Ofgem for decision.

8.4. In addition, following the publication of the five year review of the Capacity Market in July 2019, we are starting to consider the upcoming ten year review. We will look to start engagement with interested stakeholders on this in late 2023.

8.5. We are planning to consider a further optimal approach for the format of the 2023/24 CM Operation Report, and we would welcome stakeholder views to get a better understanding on how this CM Operations report is used. This approach may include alternative and possibly streamlined reporting approaches. We would like to know the following from stakeholders:

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<sup>67</sup> [Homepage - Elexon CMAG](#)



- What the value of the CM Operations Report is to industry?
- Which parts of the Report are most useful?
- Are there any CM Operation areas where reporting is not currently available but could be useful?

If you have any thoughts on the above questions, please contact us by 23 October 2023 via the following address [EMR\\_CMRules@ofgem.gov.uk](mailto:EMR_CMRules@ofgem.gov.uk)