Department for Energy Security & Net Zero

Capacity Market

Statutory Five-year Review 2019 – 2024

(referred to as the “Ten-year Review”)

December 2024

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Executive Summary

The Capacity Market (CM) was introduced in 2014 as part of the Electricity Market Reform (EMR) programme. The primary objective of the CM is to ensure the security of Great Britain's (GB) electricity supply by providing incentives for capacity to be on the electricity system and deliver that capacity when needed during System Stress Events, for example during cold, still periods with high demand and low wind generation.

The regulations and rules of the CM requires that the Government conduct a review every five years. The legislation sets out in detail what this review must consider. The review must consider the regulations pertinent to the capacity market, and in particular report on whether the objectives of the CM and its implementing legislation remain appropriate, the extent to which those objectives are being met, and whether the objectives can be achieved in the future in a less burdensome way.

To carry out a robust assessment of the CM, government commissioned an independent impact evaluation of the scheme which was published in October 2023[1]. The evaluation, conducted by Technopolis Ltd, found that the CM has broadly delivered against its stated objectives weathering several shocks to the energy system since its introduction including unexpected electricity usage patterns during the disruptions of the COVID-19 pandemic and rising energy costs associated with Russia's invasion of Ukraine. It concluded that the rationale for a mechanism to ensure the security of electricity supply is increasing in relevance and there is broad support for the continued use of the CM scheme, albeit with areas of improvement to strengthen the efficiency.

To validate the findings of the evaluation the government also published a Call for Evidence (CfE) in 2023, which received 35 responses. The responses were broadly supportive of the CM and echoed the view of improvements. The findings from the evaluation and CfE issued in 2023[2] have been used to support this Ten-Year Review.

In this review we further explore the initial questions posed in the evaluation and Call for Evidence and address the findings and responses. In summary, this Ten-Year Review has found that the CM has been effective in meeting its objectives as set out in the Energy Act 2013.

In April 2022 the Government set out its vision for improving energy security over the medium and longer term in the British Energy Security Strategy (BESS).[3] The BESS announced the Review of Electricity Market Arrangements (REMA), a major review into Britain's electricity market design intending to radically enhance energy security and to help deliver the Government's world-leading climate targets.

REMA aims to assess, identify, and implement options for reform of the current electricity market and trading arrangements required for an electricity system of the future. REMA aims to consider

[1] https://www.gov.uk/government/publications/evaluation-of-the-capacity-market-scheme
[2] https://www.gov.uk/government/consultations/capacity-market-2023-phase-2-proposals-and-10-year-review
[3] https://www.gov.uk/government/publications/british-energy-security-strategy/british-energy-security-strategy

options for reforming the electricity markets and policies to promote investment in and operation of electricity generation assets, including the CM.

Given the wider policy context, the Ten-Year Review of the CM particularly focuses on the objectives as per the regulations to meet the five-yearly statutory requirements. It does not aim to comment on or pre-empt the outcomes of the broader policy reviews.

Introduction

The Capacity Market (CM) was introduced in 2014 as part of the Electricity Market Reform (EMR) programme. The primary objective of the CM is to ensure the security of Great Britain's (GB) electricity supply by providing incentives for capacity to be on the electricity system and deliver that capacity when needed during System Stress Events, for example during cold, still periods with high demand and low wind generation.

The CM works by allowing eligible capacity providers to bid into a competitive auction to provide capacity. Successful capacity providers are awarded a capacity agreement and receive steady payments to ensure enough capacity is in place to meet demand at times of system stress. These capacity payments incentivise the necessary investment to maintain and refurbish existing capacity, and to finance new capacity where necessary. Capacity providers face penalties if they fail to deliver capacity when requested during a System Stress Event.

The CM is technology neutral, therefore it does not seek to procure allocated volumes of capacity from specific types of technology. All types of proven technology can participate, including generation, Demand Side Response (DSR) and interconnectors – except for capacity in receipt of support from other specific policy measures – provided they can demonstrate sufficient technical performance to contribute to security of supply, and provided they comply with the CM's emissions limits.[4]

Capacity auctions are held one (T-1) and four (T-4) years ahead of the Delivery Year when capacity must be provided, giving investors certainty over part of the future revenues they will receive. Existing generating capacity competes against new and refurbishing capacity, with the auction procuring the mix of capacity which provides best value for consumers.

Background

The regulations and rules of the CM requires that the Government conduct a review every five years. The legislation sets out in detail what this review must consider. The review must consider the regulations pertinent to the capacity market, and in particular report on whether the objectives of the CM and its implementing legislation remain appropriate, the extent to which those objectives are being met, and whether the objectives can be achieved in the future in a less burdensome way.

The first Five-year Review of the CM was conducted in 2019[5] and as well as the statutory review requirements listed above also considered two additional aims; to assess whether the CM is still needed and to discuss potential changes.

[4] https://www.gov.uk/government/publications/carbon-emissions-limits-in-the-capacity-market
[5] https://www.gov.uk/government/publications/capacity-market-5-year-review-2014-to-2019

For this second Five-year Review (referred to as the "Ten-year Review") the Department has taken a backwards-looking approach and will not offer views on potential improvements to the CM, for several reasons:

1. In April 2022 the Government set out its vision for improving energy security over the medium and longer term in the British Energy Security Strategy (BESS).[6] The BESS announced the Review of Electricity Market Arrangements (REMA), a major review into Britain's electricity market design intending to radically enhance energy security and to help deliver the Government's world-leading climate targets. As REMA is currently considering the future of the CM as part of wider policy considerations, we do not consider it prudent to duplicate that work within the Ten-year Review.

2. There have been multiple CM consultations and evaluations published between 2019 – 2024, listed below, as these publications set out the latest policy thinking focused on improving the CM we consider it redundant to restate these proposals in the Ten-year review.

    - March 2019: A response to the August 2018 Call for Evidence on scheme functionality and efficacy.
    - July 2019: The first five-year review of the CM
    - February 2020: A consultation on future improvements to the CM
    - April 2020: A consultation on coronavirus easements
    - March 2021: A consultation on incremental and technical improvements to the CM.
    - July 2021: A call for evidence published seeking views on proposals to better align the CM with the government's net zero targets and improve delivery assurance across the scheme,
    - June 2022: A consultation on the rules amendments to improve auction liquidity for the 2023 auctions.
    - July 2022: A Call for Evidence on improving delivery assurance and early actions to better align the scheme with Net Zero.
    - January 2023: A consultation on proposals to better align the CM with the government's Net Zero targets and to improve delivery assurance across the scheme.
    - October 2023: A policy update setting out the second phase of proposals to drive forwards net zero goals and improve security of supply. As part of this package, a Call for Evidence to inform the 10-year review of the CM was also published.
    - April 2024: A consultation to support rule amendments on auction liquidity. A response to this consultation was subsequently published in July 2024.
    - October 2024: Both a policy update outlining government's intent to implement remaining Phase 2 changes and a consultation and Call for Evidence published, on proposals to maintain security of supply and enable flexible capacity to decarbonise.

[6] https://www.gov.uk/government/publications/british-energy-security-strategy/british-energy-security-strategy

3. Lastly, the annual cycle of the capacity auctions has facilitated incremental learnings and improvements to be made. For example, the National Energy System Operator (NESO) also carries out extensive analysis each year on security of supply in GB through the development of their Electricity Capacity Reports[7] (ECRs). NESO analysis and recommendations contained within the ECR is scrutinised by the DESNZ independent Panel of Technical Experts, culminating in an annual report detailing their recommendations.

Aims

The Government has conducted this review of the CM as it is ten years since the legislation introducing the CM – the Energy Act 2013[8] and associated secondary legislation and Rules – was passed. As per legislation, a review of the CM must take place every five years, the first of which took place in 2019.[9]

The aim of the review is to consider and review the regulations and subset of rules with a particular focus on the whether objectives remain appropriate,

1. The objectives of the CM and its implementing legislation remain appropriate;
2. The extent to which those objectives are being met; and
3. Whether the objectives can be achieved in the future in a less burdensome way.

Legislative Review Requirements

The CM was created as part of the Government's policy of EMR through the Energy Act 2013[10] ("the Act"), the Electricity Capacity Regulations 2014[11] ("the Regulations"), Electricity Capacity (Supplier Payment etc.) Regulations 2014[12] ("the Supplier Payment Regulations"), and the Capacity Market Rules 2014[13] ("the Rules"). The Regulations, the Supplier Regulations, and the Rules require the Government to conduct reviews of the CM every five years.

The five-yearly review requirements in the Regulations and the Rules are set out below:

The Energy Act 2013

The Act is the primary legislation which provides the powers for secondary legislation to be made to establish the CM. Part 2 of the Act sets out the provisions for EMR. Section 66, which

[7] https://www.emrdeliverybody.com/CM/Capacity.aspx
[8] http://www.legislation.gov.uk/ukpga/2013/32/contents/enacted
[9] https://www.gov.uk/government/publications/capacity-market-5-year-review-2014-to-2019
[10] http://www.legislation.gov.uk/ukpga/2013/32/contents/enacted
[11] http://www.legislation.gov.uk/uksi/2014/2043/contents/made
[12] https://www.legislation.gov.uk/ukdsi/2014/9780111123119
[13] https://www.ofgem.gov.uk/publications-and-updates/publication-consolidated-capacity-market-rules-2018

contains the requirement for a review as reasonably practical of each element of EMR, including the CM, states:

(1) As soon as reasonably practicable after the end of the period of 5 years beginning with the day on which this Act is passed [18 December 2013], the Secretary of State must conduct a review of the provisions of… [Chapter 3 of Part 2 of the Act (capacity market)]; …

(2) The Secretary of State must set out the conclusions of the review in a report.

(3) The report must, in particular—

a) set out the objectives of the provisions of each Chapter subject to review,

b) assess the extent to which those objectives have been achieved, and

c) assess whether those objectives remain appropriate and, if so, the extent to which those objectives could be achieved in a way that imposes less regulation.

(4) The Secretary of State must lay the report before Parliament.

The Electricity Capacity Regulations 2014

The Regulations, together with the Supplier Payment Regulations and the Rules, are the secondary legislation implementing the Capacity Market. The Regulations provide detail on the functions and powers of the Secretary of State and the CM delivery partners as well as the overall implementation of the scheme by the CM's delivery partners.

Regulation 81 sets out the requirement for the Secretary of State to review the Regulations and the Supplier Payment Regulations. summary, the report must review and consider the regulations and rules set out above and in particular focus on the objectives of the CM, assess the extent to which those objectives are achieved and assess whether those objectives remain appropriate and if so, whether they can be achieved in a less burdensome way.

The text of Regulation 81 is included below.

(1) The Secretary of State must from time to time —

(a) carry out a review of —

(i) these Regulations and the Supplier Payment Regulations;

(b) set out the conclusions in a report; and

(c) publish the report.

(2) The report must in particular —

(a) set out the objectives intended to be achieved by these Regulations and the Supplier Payment Regulations;

(b) assess the extent to which those objectives are achieved; and

(c) assess whether those objectives remain appropriate and, if so, the extent to which they could be achieved in a less burdensome way.

(3) The first report under this regulation must be published before the end of the period of five years beginning with the date on which these Regulations come into force.

(4) Reports under this regulation are, after the first report, to be published at intervals not exceeding five years.

(5) In carrying out the review under paragraph (1)(a), the Secretary of State must take account of any reports published by the Authority under regulation 82 or provided to the Secretary of State under regulation 83.

The Electricity Capacity (Supplier Payment) Regulations 2014

The Supplier Payment Regulations make provision about payments to be made by and to electricity suppliers and capacity providers in relation to the CM. In particular, they impose an obligation on electricity suppliers to pay a supplier charge to fund capacity payments payable to capacity providers under the Regulations, and a Settlements Costs Levy to fund the cost of the Settlement Body administering those payments. The Supplier Payment Regulations also confer functions on the Settlement Body in relation to the calculation, determination, and administration of such payments.

The Capacity Market Rules 2014

The Rules supplement the Regulations and Supplier Payment Regulations by setting out the technical and operational details for the implementation of the CM. The Rules are amended from time to time. DESNZ and Ofgem are responsible for updating the contents of the Rules. The Secretary of State may also make changes to the Rules, typically to align the Rules with changes made to the Regulations. Ofgem carry out an annual review of the Rules and publish annual reports on the operation of the CM.[14]

Rule 15.1.1 sets out a requirement for the Secretary of State to carry out a review of the Rules once every five years, set out the conclusions of the review in a report and publish the report alongside the report for parliament. In summary, the report must set out the objectives of the Rules, assess the extent to which those objectives are achieved and assess whether those objectives remain appropriate and if so, can they be achieved in a less burdensome way. The text of Rules 15.1 to 15.3 is set out below.

15.1.1 The Secretary of State must from time to time:

(a) carry out a review of the following provisions of the Rules, namely:

(i) any rules that confer functions on the Secretary of State or the Authority; and

[14] https://www.ofgem.gov.uk/publications/annual-report-operation-capacity-market-202223

(ii) any rules made or amended by the Secretary of State after 30 June 2015; and

(b) publish a report setting out the conclusions of the review.

15.1.2 The report must in particular:

(a) set out the objectives intended to be achieved by the rules reviewed under this Rule 15.1;

(b) assess the extent to which those objectives are achieved; and

(c) assess whether those objectives remain appropriate and, if so, the extent to which they could be achieved in a less burdensome way.

15.1.3 The first report under this Rule 15.1 must be published with the report by the Secretary of State under Regulation 81.

15.1.4 Reports under this Rule 15.1 are, after the first report, to be published at intervals not exceeding five years.

This review requirement applies to rules that confer functions on the Secretary of State or the Authority (Ofgem), and any rules made or amended by the Secretary of State since 30 June 2015, and can be found in Annex B.

As both the Rules and the Regulations contain a requirement to carry out a five-yearly review and publish a report, in 2019 the government published one single Five-year Review of the Capacity Market[15] (the 'Five-year Review') to meet both requirements and avoid duplication of overlapping content. This next full review of the CM, the Ten-year Review of the Capacity Market, similarly takes the form of one single document to meet both requirements.

Data sources and Call for Evidence

The government commissioned an independent process and impact evaluation of the CM scheme published in October 2023. Conducted by Technopolis Ltd. The Technopolis report[16] presents the findings which have been used to support the Ten-year Review of the CM.

The Technopolis evaluation aimed to:

(1) determine whether and how the CM has historically met its objectives;

(2) provide evidence on the potential need for future market intervention to ensure the security of supply and how it compares to the current scheme design; and

[15] https://www.gov.uk/government/publications/capacity-market-5-year-review-2014-to-2019
[16] https://assets.publishing.service.gov.uk/media/6528f9342548ca000dddf234/capacity-market-evaluation-final-report-technopolis.pdf

(3) provide learning about how the individual components of the scheme could be included in any future market interventions.

The evaluation assessed whether the objectives of the CM and its implementing legislation remain appropriate; the extent to which those objectives are being met; and whether the objectives can be achieved in the future in a way that imposes less regulation.

The key findings of the independent Technopolis report were that,

“The Capacity Market has broadly delivered against its stated objectives and has weathered several shocks to the energy system since its introduction including unexpected electricity usage patterns during the disruptions of the COVID-19 pandemic and rising energy costs associated with Russia’s invasion of Ukraine.”

The evaluation found that the rationale for a mechanism to ensure the security of electricity supply is increasing in relevance and there is broad support for the continued use of the Capacity Market scheme.

The Capacity Market is functioning as expected though there remain significant areas of improvement to strengthen the efficacy of the scheme’s impacts on investment and to improve the experience for scheme participants.”[17]

To further validate the findings of the Technopolis report government published the evaluation in full alongside a Call for Evidence for the Ten-year Review in October 2023. The Call for Evidence received 35 responses in total, a summary evaluation of which can be found at Annex A.

Key messages throughout the Call for Evidence were that a large majority of respondents believed that the CM has achieved its intended objectives and that they remain appropriate. Furthermore, respondents agreed that the delivery assurance mechanism within the CM were appropriate and maintained its intended objective for Security of Supply. Respondents also provided various suggestions on how to improve processes of participation in the CM. In addition to help the CM adapt and reflect an evolving complex energy market that also aligns with our net zero ambitions.

Together, the Call for Evidence responses, recent auction data, engagement, information and feedback from delivery partners and stakeholders along with the independent Technopolis report provide the bulk of data that underpin the findings of the Ten-year Review.

Data Sources for figures and tables used within this document are provided in associated footnotes.

[17] See page 5 in the above, final report and pages 47-49 for further detail.

Ofgem's Ten-year Review of the Capacity Market Rules

The Ten-year Review is supported by a separate review conducted by Ofgem of those areas of the CM design that are covered in the CM Rules.[18] Ofgem have determined the detailed content and process of this review, building on the annual reviews that Ofgem has undertaken to date and have published this on the 5 December 2024[19].

The Appropriateness of CM Objectives

The CM is a complex security of supply scheme delivered within an intricate wider energy ecosystem that has evolved since the first Five-year Review of the CM in 2019, which found that the CM objectives remained appropriate and had met its objectives. The last five years have seen significant shifts in the GB and global energy markets and therefore the CM regulations and rules have needed to be adjusted to allow the scheme to continue to meet its objectives.

Objectives

The objectives of the CM, as set out in its original impact assessment,[20] are:

- Security of Supply: to incentivise sufficient investment in capacity to ensure security of electricity supply;
- Cost-effectiveness: to implement changes at minimum cost to consumers; and
- Avoid unintended consequences: to minimise design risks and complement the decarbonisation agenda.

Appropriateness of existing objectives

The Government believes that the objectives of the CM and its implementing legislation remain appropriate. The Technopolis Report and the Call for Evidence support this position, though both advocate for a review of how the CM aligns with decarbonising the power sector. The need to complement decarbonisation is already captured in the third objective of the CM, although responses to the Call for Evidence suggested that to meet the UK's legally binding Net Zero target for 2050 a more explicit objective for the CM may be required. Changes to better align the CM to decarbonisation objectives are being considered as part of the department's work on the Clean Power 2030 Action Plan and REMA. Government is further considering the evolving system needs, such as the implications of a growing proportion of intermittent generation and new demand profiles, and what aspects need to be addressed to ensure future security of supply.

[18] See Regulations 81(5) which states "In carrying out the review under paragraph (1)(a), the Secretary of State must take account of any reports published by the Authority under regulation 82 or provided to the Secretary of State under regulation 83".

[19] https://www.ofgem.gov.uk/sites/default/files/2024-12/Ofgem_10_Year_Review_of_the_Capacity_Market_Rules.pdf.

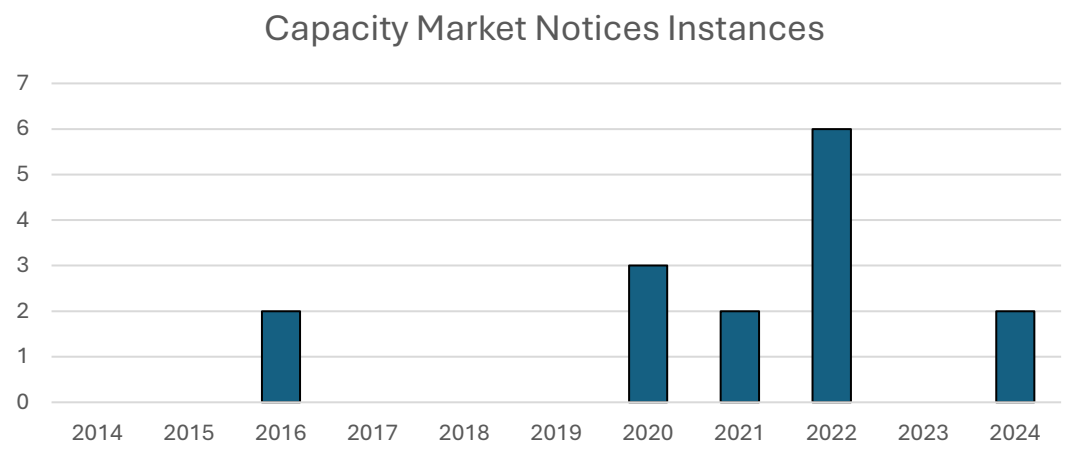
[20] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/354677/CM_-_revised_IA_and_front_page__September_2014__pdf_-_Adobe_Acrobat.pdf

The extent to which the Capacity Market is meeting its objectives, and whether the objectives can be achieved in the future in a less burdensome way.

Security of Supply

The first objective of the CM is to incentivise sufficient investment in capacity to ensure security of electricity supply. Overall, the performance of the CM against this objective has been very strong. The auctions have secured most of GB electricity capacity needs out to 2027/28 with the remaining capacity needed for each Delivery Year secured through "top up" auctions held one year before. Since the inception of the CM there have been no System Stress Events declared. Further, the low instances of Capacity Market Notices (CMNs) (13 since 2019) and non-zero Loss of Load Probability (LOLP), support this conclusion.

Figure 1: Capacity Market Notices Instances[21]



Of the thirteen CMNs that have been issued, six occurred in 2022 alone. The global easing of COVID-19 restrictions in late 2021 contributed to a surge in wholesale gas prices, which in turn caused a significant increase in wholesale electricity prices. This trend was exacerbated in February 2022 when Russia illegally invaded Ukraine, which led to higher gas and power prices across Europe and increased concerns about energy security for winter 2022/23 and beyond. During this time, electricity generators struggled to meet margin calls generated by volatile energy prices.

The government took swift action to bolster electricity security of supply, including pre-emptively procuring the maximum amount of available capacity in the CM's 2022/23 T-1 auction held in February 2022 in response to the wider range of uncertainties for energy security.

[21] National Grid ESO. Available online: https://gbcmn.nationalgrideso.com/

Cost Effectiveness

The second objective of the CM is to ensure the most efficient level of capacity is secured at minimum cost to consumers. We have considered performance against this objective under three themes:

• Procuring the right amount of capacity

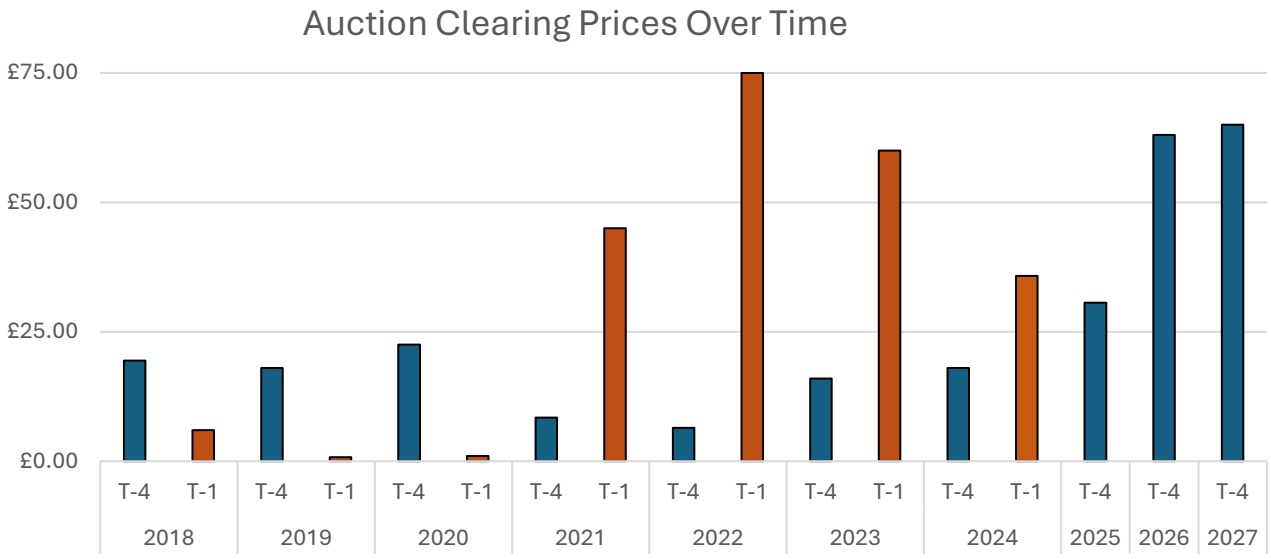
• Auction design

• Liquidity and competition

Procuring the right amount of capacity

The CM is designed to ensure that there is adequate capacity available to maintain the GB Reliability Standard, set at 3 hours Loss of Load Expectation (LOLE).

Figure 2: Auction Clearing Prices Over Time[22]



Since its introduction, the CM has ensured a Loss of Load Expectation (LOLE) below the Reliability Standard[23]. LOLE is set at 3 hours and represents the number of hours per year in which, over the long term, it is statistically expected that supply will not meet demand, after system warnings and balancing contracts have been exhausted. This is not equivalent to the same number of hours of blackouts because usually a loss of load can be managed without a significant impact on consumers.

To ensure the Reliability Standard is met, the NESO models how much capacity is needed in a range of scenarios considering weather, plant reliability, consumer behaviour, international market conditions, and other factors to make a recommendation for the CM auction targets each year. NESO publishes the projected value of LOLE for the forthcoming winter in their annual

[22] Graph produced by DESNZ using data from the Capacity Market Registers.
[23] https://assets.publishing.service.gov.uk/media/5a7c52eaed915d338141e0ce/emr_consultation_annex_c.pdf

Winter Outlook Report, accounting for the capacity agreements awarded in the relevant auctions. These LOLE forecasts (set out in Table 3) have been under 0.5 hours for the past five Delivery Years, which demonstrates that the scheme has been effective in securing sufficient capacity.

Figure 3: Loss of Load Expectation 2018-2023[24]

	Delivery Years (Oct – Sept)					
	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
LOLE (hours per year)	0.001	0.1	0.1	0.3	0.2	0.1

To ensure LOLE is within the Reliability Standard, NESO considers a range of credible scenarios and uncertainties to identify the optimal target for CM auctions, as outlined in their annual Electricity Capacity Report (ECR).[25] NESO uses a Least Worst Regret cost-optimisation methodology to determine the Capacity Target to minimise cost implications of the decision across all modelled scenarios. This involves considering each potential de-rated capacity choice that meets 3 hours LOLE/year and assessing the costs of the other potential outcomes under that capacity choice to find maximum regret cost for that potential choice. The maximum regret cost is then calculated as the highest of cost difference arising from over or under securing capacity in each of the potential outcomes. The outcome of the Least Worst Regret option is the potential de-rated capacity level with the minimum of the maximum regret costs. This means that despite targeting 3 hours/year LOLE in any specific modelled scenario, the actual target and auction outcome might result in LOLE different from 3 hours as the final target minimises the worst outcome across modelled scenarios.

NESO's modelling is published in the annual ECR which is reviewed by the DESNZ independent Panel of Technical Experts (PTE)[26]. The PTE provide their views on the ECR in an independent report[27]. As well as scrutinising and quality assuring the specific target recommendations, in their report the PTE make suggestions for improving the methodology and evidence-base in the future and have a specific focus on considering any risk that conflicts of interest arising from NESO's position as system operator that might influence the analysis. NESO's recommendations in conjunction with the views of the PTE are considered by the Secretary of State when taking the decision on the final capacity auction parameters.

The Government aims to ensure that an amount of capacity is secured through the CM which minimises overall costs to the consumer. The target setting process is robust and transparent, noting the importance of the independent PTE in this regard. Additionally, the T-1 set-aside is fundamental in helping to mitigate the risk of over-procurement and risks to security of electricity supply. The Government retains the flexibility to change the proportion of set-aside from one

[24] National Grid ESO, 2023, Winter Outlook Report, https://www.nationalgrideso.com/document/289136/download
[25] Available at: https://emrdeliverybody.nationalenergyso.com/IG/s/article/Electricity-Capacity-Report-ECR
[26] https://www.gov.uk/government/publications/electricity-system-operator-electricity-capacity-report-2024-findings-of-the-panel-of-technical-experts
[27] https://emrdeliverybody.nationalgrideso.com/IG/s/article/2024-25-CM-Auction-Guidelines-and-Parameters

year to the next as part of the auction parameter setting process. In the past, Government has utilised this flexibility to balance the risks of structural over-procurement, which could impose unnecessary consumer costs, against the need to mitigate all plausible risks of delivery failure across the full range of technology types on which we now rely.

To ensure system adequacy and meeting the Reliability Standard, the CM has been successful in procuring around 19GW of new build capacity. Over the last five T-4 auctions for DY 2023/24 to DY 2027/28, there has been a consistent amount of new build generating capacity securing agreements, with the 2026/27 DY showing a large increase. Gas powerplants and battery storage systems are the largest proportion of new build capacity secured via the CM. The CM has also incentivised 3.7GW of refurbished generation over the last six T-4 auctions. The deployment of a range of technologies through the CM, including flexible technologies, has also helped to minimise the whole costs of our electricity system.

Figure 4: Capacity securing agreements in T-4 and T-3 auctions by category of CMU (in de-rated GW)[28]

Capacity type	2022 T-3	2023 T-4	2024 T-4	2025 T-4	2026 T-4	2027 T-4
Existing Generating CMU	35.4	33.9	30.5	32.3	31.8	33.2
New build Generating CMU	0.3	1.6	1.7	1.7	3.4	1.7
Refurbishing Generating CMU	1.4	1.5	0.7	0.2	0.0	0.2
DSR CMU	0.5	1.1	1.1	1.0	0.9	1.1
Existing Interconnector CMU	4.7	5.3	6.1	7.0	6.6	6.6
New Build Interconnector CMU	1.2	0.0	0.7	0.0	0.3	0.0

[28] Figures produced by DESNZ using data from the Capacity Market Registers and Auction Reports. Interconnector figures have been adjusted to better account for new build categorisation across multiple years.

Figure 5: Capacity securing agreements in T-1 auctions by category of CMU (in de-rated GW)[29]

Capacity type	2019 T-1	2020 T-1	2021 T-1	2022 T-1	2023 T-1	2024 T-1
Existing Generating CMU	1.8	0.0	1.3	3.1	4.6	6.2
New build Generating CMU	0.6	0.1	0.2	1.3	0.7	0.7
Refurbishing Generating CMU	0.0	0.0	0.0	0.0	0.0	0.0
DSR CMU	0.2	0.1	0.2	0.5	0.4	0.7
Existing Interconnector CMU	0.3	0.8	0.3	0.0	0.0	0.0
New Build Interconnector CMU	0.68	0.0	0.0	0.0	0.0	0.0

Auction Design

The capacity auctions use a “descending clock,” pay as clear format, consisting of multiple rounds of bidding. The auction starts at the price cap (currently set at (£75/kW/year). In each bidding round, the price (£/kW/year) reduces. Bidders submit exit bids to retract a CMU from the capacity auction at a particular price. As the price descends and exit bids are submitted, the total remaining capacity decreases. The auction ends when a price is reached at which the total remaining capacity is equal to the capacity demanded – the ‘clearing price.’ Successful CMUs (those that have not submitted exit bids above the clearing price) are awarded a capacity agreement which provides a right to capacity payments at the clearing price. The auctions are managed by the Delivery Body (NESO) and conducted via a web-based auction system.

This is more cost-effective and less distortive than a ‘pay-as-bid’ model, as participants are incentivised to bid the true economic cost of providing capacity rather than guessing the marginal price in an attempt drive up revenues. The pay-as-clear approach encourages true economic cost bidding because participants with low-running costs are incentive to bid at their running cost to secure an agreement, as they will receive the same price and attempting to be the unit that clears the auction could lead to the unit not receiving an agreement as all through the Net

[29] Figures produced by DESNZ using data from the Capacity Market Registers and Auction Reports.

Welfare Algorithm. This model has been adopted in many capacity markets schemes outside of GB as the most transparent and cost-effective design.

In the Ten-year Review Call for Evidence,[30] there was general agreement that the CM has supported investment in significant amounts of capacity and that it has met the objective of delivering security of supply. Most CM users have indicated that the competitive nature of the auctions allowed the CM to secure capacity in a cost-effective way. Some respondents believed that the auctions were designed in a way to favour existing capacity and were more successful at prolonging the life of existing generators, compared to bringing new capacity into the market. Additionally, some respondents believe the CM was not designed to incentivise low-carbon technologies, as it is designed to be a technology-neutral competitive process. REMA are considering the optimal design for future Capacity Market auctions.

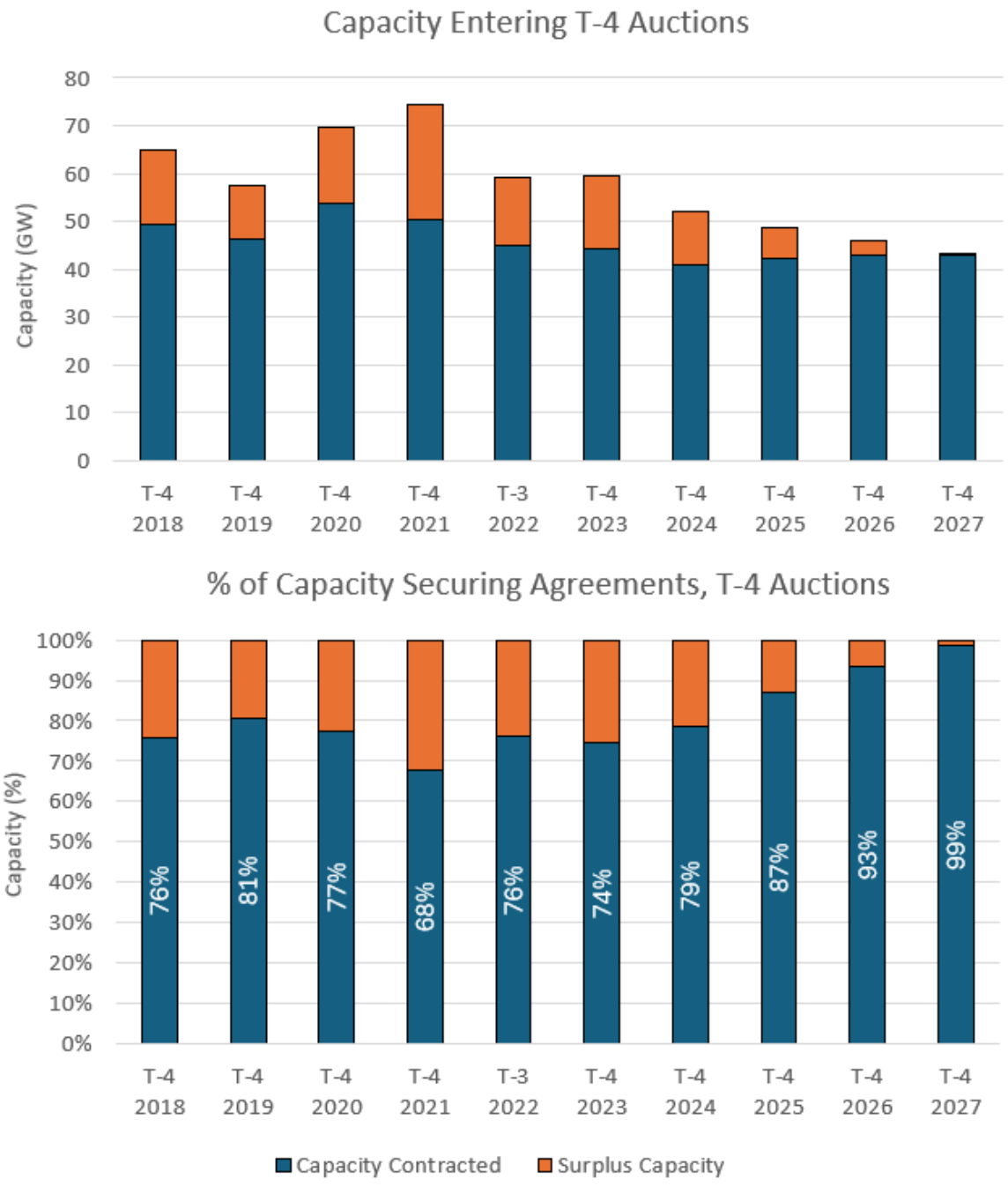
Liquidity and competition

Auction liquidity and competitive auctions are important to ensure that electricity security of supply can be achieved at best value to GB consumers. Over time we have seen a reduction in auction liquidity (see Figure 6), in particular for T-4 auctions held from 2022 onwards, in contrast to the high liquidity observed in early auctions. The T-4 auction held in 2022 represented the first year in which the T-4 auction target exceeded the level of existing capacity entered into the auction and therefore new build capacity was required to meet the central auction target. In the last two T-4 auctions, over 90% of capacity entering the auction won an agreement, with almost all capacity that entered the most recent T-4 auction held in 2024 winning an agreement.

Most respondents to the Ten-year Review Call for Evidence commented that there was an increased lack of liquidity in the auctions. Multiple respondents commented that the qualification process was still too bureaucratic and required simplification to lower the barrier to entry. We understand the concerns raised by respondents and will work closely with the Delivery Body to ensure that the prequalification process is accessible whist being robust to maintain the continued integrity of the scheme. The Delivery Body have made improvements to their process, such as allowing the evergreening of some aspects of prequalification artefacts. As discussed in the “Simplification” chapter, we will continue to work with our delivery partners and industry to simplify the rules wherever possible.

[30] https://assets.publishing.service.gov.uk/media/65296ec4697260000dccf811/capacity-market-phase-2-10-year-review-consultation.pdf

Figure 6: T-4 Auction Entered Capacity and Proportion of Auction Securing Agreement[31]



Regarding competition, there has been a general improvement in auction concentration over time although the most recent T-1 diverged from this trend.

A common measure of market concentration that is used to determine competitiveness is the Herfindahl-Hirschman Index (HHI). The Competition and Markets Authority regard a market as concentrated if the HHI is above 1,000, and highly concentrated if it is above 2,000.

The previous Five-year Review calculated an HHI of 923 and 1,281 for the T-4 and T-1 auctions respectively that were held in 2017. In the 2024 auctions, the HHI of the T-4 auction had

[31] Graph produced by DESNZ using data from the Capacity Market Registers.

decreased to 662 whilst the T-1 auction saw an increase in concentration with a score of 1,356. By comparison, the 2023 T-1 auction held a year before had an HHI index of 1,154 which was lower than the 2017 calculated score.

In the 2017 T-4 auction, the top five parent companies held about 58% of the capacity awarded and the top eight parent companies held about 72%. In 2024, the capacity share of the top five and top eight parent companies was 50% and 64%, respectively.

The 2017 T-1 auction remained more concentrated than the T-4 auction, with the top eight parent companies previously holding 80% of the capacity awarded and in 2024 holding 78% of the capacity contracted.

These figures show that concentration has increased over time, however, this does not necessarily determine competitiveness, as demonstrated by the lower clearing price in the T-1 2024 auction compared to T-1 2023 (£35.79/kW/year versus £60/kW/year respectively). It does suggest there is a risk of larger companies exercising market power and that economic factors – which vary by technology type - are likely to have a greater influence on generators' bidding strategies.

Avoiding unintended consequences

The third and final objective of the CM is to minimise design risks and complement the decarbonisation agenda.

Simplification

Many respondents to the Call for Evidence noted that whilst the CM was broadly achieving its objectives around security of supply, the rules were overly complicated, could be ambiguous and made the process of engaging with the CM more difficult than it needed to be.

As to whether the objectives can be achieved in the future in a way that imposes less regulation, Government agrees that the CM process should be as simple and easy to access as possible and appreciate that entering the capacity auctions is not a zero-cost decision due to the process required to prequalify into the auctions. There have been improvements to the prequalification process, such as adding some evergreening capabilities, and enabling Applicants to amend clerical errors in their applications.

Government is committed to simplifying and improving the rules and regulations governing the CM as much as possible. We are using feedback from industry and working closely with delivery partners to consider where changes can be made.

Participants within the CM were also mostly positive about the introduction of the Ofgem led Capacity Market Advisory Group (CMAG) as a body to discuss CM Rule simplifications and changes, where the change does not impact the policy intentions of the CM Rules.

Conclusion

The CM was established with specific objectives: ensuring security of supply, cost-effectiveness and avoiding unintended consequences. Evaluating the CM against its original objectives reveals its strengths and areas for improvement, ultimately demonstrating that while it meets many of its original objectives, ongoing adjustments are essential to enhance its effectiveness and align with Governments' broader strategy to ensure energy security and move towards net zero emissions.

Security of Supply

One of the primary goals of the CM is to guarantee that electricity supply meets demand, particularly during peak times. The CM has successfully incentivised investment in various generation technologies, including gas-fired power plants and renewable energy sources, to maintain reliable supply. By providing payments to capacity providers, the CM encourages these entities to remain operational and be available when demand peaks. This mechanism has effectively reduced the risk of supply shortages and blackouts, especially as the UK transitions to net zero.

Cost-Effectiveness

Cost-effectiveness is another foundation of the CM's design. The CM aims to provide a mechanism that minimises costs for consumers while ensuring adequate capacity. The T-1 and T-4 auctions, has improved market efficiency and transparency, allowing for better forecasts of capacity needs and minimising unnecessary expenditures.

Nevertheless, the cost-effectiveness of the CM is challenged by the increasing integration of renewables and the associated need for flexible generation and grid management solutions. As more intermittent sources come online, the costs associated with balancing the grid and ensuring reliability may rise. Therefore, while the CM has been successful in maintaining cost-effectiveness to date, the evolving energy landscape will require ongoing analysis and potential policy changes to address these challenges.

Avoiding Unintended Consequences

The CM was designed to mitigate unintended consequences, such as market distortions that could arise from a poorly structured capacity mechanism. It has largely succeeded in this respect by fostering competition among different technologies and ensuring that capacity providers are incentivised based on their availability and performance. The system has also incorporated measures to prevent market manipulation and ensure fair access to all participants.

However, there is a view that the rules are overly complicated, could be ambiguous and made the process of engaging with the CM more difficult than it needed to be. Government is committed to simplifying and improving the rules and regulations governing the CM as much as possible. We are using feedback from industry and working closely with delivery partners to consider where changes can be made.

Overall, the CM has succeeded in its original objectives of ensuring security of supply, maintaining cost-effectiveness, and avoiding unintended consequences. However, as the

energy landscape evolves, the CM must adapt to address new challenges and align with Government's Net Zero goals. By focusing on flexible, sustainable technologies, integrating environmental considerations, the Capacity Market can continue to fulfil its purpose and contribute to a resilient and sustainable energy future for the UK.

Wider Considerations

Subsidy Advice Unit report on the CM

In line with requirements under the UK Subsidy Control Act 2022, the government referred the CM to the SAU for a subsidy control principles assessment, within the Competition & Markets Authority on 15 February 2024. The referral covered the scheme and proposed amendments, including removal of the assimilated 10-year approval requirement via The Electricity Capacity Mechanism (Amendment) Regulations 2024 (see below). The SAU published its advisory report[32] on 5 April 2024, which was broadly positive.

The Electricity Capacity Mechanism (Amendment) Regulations 2024

The CM was established in 2014 and has been successful in ensuring that GB has adequate electricity capacity to meet demand. It was originally approved for a period of ten years by the EU Commission, in line with State Aid rules. The EU Electricity Regulation required capacity mechanisms (such as the CM) to be approved, and only permitted an approval to last 10 years, however it was envisaged by Government that the CM would be retained for as long as necessary to ensure security of supply. Following EU Exit, the ten-year approval requirement became incorporated in domestic legislation. To ensure that domestic legislation is consistent with the continued operation of the CM, the government has laid secondary legislation to revoke this requirement, as well as references to the CM's temporary nature has revoked this requirement, as well as references to the CM's temporary nature, via a statutory instrument.

This statutory instrument does not amend the design or operation of the scheme but is intended to remove potential uncertainty regarding its continuation, as well as correcting errors left over from EU Exit. There are several controls embedded into the design of the CM that ensure it remains proportionate and limited to what is necessary, all of which are retained under the broader legislative framework. For example, the Secretary of State has the right to decide not to hold auctions, and there is a statutory five-year review requirement. To ensure the CM remains fit for purpose and continues to deliver on its objectives, regular amendments are made to the CM Rules and Electricity Capacity Regulations to bring forward policy changes, and public consultations are undertaken as part of this process. The government has and will continue to comply with the requirements of the new domestic subsidy control regime as part of this.

[32] https://www.gov.uk/cma-cases/referral-of-the-proposed-capacity-market-scheme-by-the-department-for-energy-security-and-net-zero

Annex A

Ten-year Review Call for Evidence: Summary of Responses

The Ten-year Review Call for Evidence ran from 13 October 2023 until 8 December 2023 and received 35 responses. Around half were from Capacity Providers and trade associations representing multiple Capacity Providers. The other responses received were from industry, other government bodies and members of the public.

Questions 1 – 5 sought views on the intended objectives of the CM and whether they remain appropriate. In total, we received 24 responses relating to this topic area, with the majority being from industry respondents that are Capacity Providers or organisations that represent them. Most responses (c.95%) agreed that the CM has achieved its intended objectives and that these objectives remain appropriate.

Questions 6 – 8 sought views regarding the security of supply of the CM mechanism. 23 responses were received in relation to this range of questions, with the majority being industry respondents that are Capacity Providers or organisations representing them. The majority of the respondents felt that the delivery assurance mechanisms within the CM were appropriate and achieved its primary objective of ensuring security of supply. Whilst positive on the mechanisms, a majority also provided a range of suggestions for further changes to help the CM adapt and reflect an evolving and complex energy market.

Questions 9 – 11 sought views regarding the cost effectiveness of the CM and assurances against gaming within the scheme. We received 19 responses in relation to this section with the majority of respondents believing that the CM helps reduce capital and investment risks by providing a predictable and stable revenue stream for CMUs. A few pointed out that the scale of impact differs by technology type.

In particular, Question 10 regarding clearing prices, scheme costs and value of lost load produced a wide range of responses. Almost 45% of respondents agreed with the statement whilst an equal number raised concerns. Respondents highlighted that a requirement of simplification and streamlining would be needed to encourage and enable participation. A common comment by those disagreeing was that the CM is multifaceted, affected by a wide range of factors such that they were not comfortable agreeing with the high-level statement being consulted on.

Questions 12 – 14 sought views regarding any unintended consequences within the CM and how it could be improved to help support the transition to Net Zero, with 24 responses received across this set of questions. Only a few respondents stated that they currently see unintended consequences or distortions which impact the CM’s effectiveness. Some respondents suggested to focus on certain technological matters within the CM. This will be reviewed and discussed further within Government.

Most respondents do not believe the CM is currently aligned with meeting the Net Zero target of 2035 although some noted that they are not convinced that the CM is the appropriate place for Net Zero policy. Most parties held an understanding that the role of the CM in supporting the transition to Net Zero is being looked at as part of REMA.

Questions 15 – 17 sought views regarding governance, roles, and responsibility for effective administration for prequalification and improvements on managing fraud and error risks within the CM. This grouping of questions received 17 responses. Some respondents believed the current arrangements do support change however, it was felt that there was scope to make the process more efficient and effective. A common theme was a need for further detailed guidance to help CMUs understand the rules and regulations. This was also reflected in the process for administration of the prequalification process, as the current process was regarded as onerous and burdensome, though a number of responses hoped that the new NESO portal will solve a lot of the known issues. Several respondents stated that they have not seen or come across any fraud or error risks, however some respondents believe clarity on roles and responsibilities for certain regulations will provide greater assurance.

Questions 18 – 19 sought views regarding secondary trading and received 16 responses. All respondents stated that further work needs to be done regarding improvements to the secondary trading regime.

Question 20 sought views on the findings of the Technopolis Evaluation and subsequent independent research. 10 responses were received with most (90%) expressing agreement and broadly supporting the findings of the research.

Questions 21 – 22 provided an opportunity for any other issues to be raised in a more free-form manner. 15 responses were received for these questions covering similar themes and issues, most notably aligning the CM with net zero, and that any fundamental reform of the CM should be considered in the round as part of REMA and not in this Ten-year Review.

Government is grateful to all those that took the time and effort to respond to the call for evidence, the views expressed in which have been considered to help inform the Ten-year Review.

Annex B

As part of the Ten-year Review we are required by Rule 15.1 to, review the regulations and publish a report that particularly focuses on the objectives of the Regulations, assess the extent to which those objectives are achieved and assess whether those objectives remain appropriate and if so, can they be achieved in a less burdensome way. This requirement was to consider Rules made or amended by the Secretary of State or the Authority (Ofgem) from 2015 onwards. The rules made or amended prior 2020, were reviewed in the first Five-year Review (2014-2019).

We have reviewed the Rules made or amended for the calendar years 2020 - 2024 and provided a brief headline summary for each year below. This assessment has been conducted proportionately, taking into consideration that the Rules provide further technical detail to implement the Regulations.

Our assessment has found that the objectives of the Rules reviewed have been achieved to a satisfactory extent. We did not identify any changes which could be made to these rules to achieve the objectives of the Rules in a less burdensome way.

We also believe that the objectives of the Rules remain appropriate. We believe that the objectives of the Rules should remain the same as the CM.

Our assessment has found that the objectives of the Rules reviewed have been achieved to a satisfactory extent. We did not identify any changes which could be made to these rules to achieve the objectives of the Rules in a less burdensome way.

Summary of Capacity Market Rules made or amended by the Secretary of State 2020

On 15 November 2018, a judgment of the General Court of the Court of Justice of the European Union ("the CJEU judgment") annulled the European Commission's original 2014 State aid approval of Great Britain's CM. This meant the CM entered a 'standstill period' which prevented capacity agreements being awarded and capacity payments being made. Following a renewed investigation of the scheme under State aid rules, the European Commission's decision of 24 October 2019 again granted State aid approval to the CM ("the State aid decision").

The Government ran a consultation[33] between 3 February and 2 March 2020 seeking views on proposals to implement five of the six commitments referenced in the State aid decision, as well as a review of the exclusion from the CM of plants with long-term contracts for providing Short Term Operating Reserve (LT STOR) and other minor improvements. Following the consultation, a series of changes were made to the Principal Regulations[34] and Capacity Market Rules[35], including implementing the five commitments and removing the exclusion of LT STOR contract holders from competing in the CM.

The EU Electricity Regulation (Regulation (EU) 2019/943)[36], which entered into force on 4 July 2019 as part of the EU's Clean Energy Package[37], introduced a requirement for capacity mechanisms to apply carbon emissions limits. This includes in relation to existing Capacity Market Units (CMUs) (those which had a commercial production start date before 4 July 2019) from July 2025 at the latest. The Government consulted between July and September 2019[38] and introduced changes to the Capacity Market Rules to introduce carbon emissions limits. These changes came into force on 30 June 2020 and prevent the most carbon intensive existing capacity (including coal) from competing in auctions for Delivery Years from 1 October 2024. All new build plant is subject to the carbon emissions limits for Delivery Years from 1 October 2020. This amendment allowed the CM to adhere to its original objectives of avoid unintended consequences; to minimise design risk and complement the decarbonisation agenda.

The Government recognised that actions taken to limit the spread of COVID-19 could affect the ability of some capacity providers to meet certain CM milestones and deadlines. In April 2020,

[33] https://www.gov.uk/government/consultations/capacity-market-proposals-for-future-improvements

[34] https://www.legislation.gov.uk/uksi/2020/697/contents/madehttps://www.legislation.gov.uk/uksi/2020/697/contents/made

[35] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/897600/The_Capacity_Market__Amendment___No._2__Rules_2020.pdf

[36] https://eur-lex.europa.eu/eli/reg/2019/943/oj

[37] https://ec.europa.eu/energy/topics/energy-strategy/clean-energy-all-europeans_en

[38] https://www.gov.uk/government/consultations/capacity-market-carbon-dioxide-emissions-limits

the Government ran a consultation[39] on proposed 'easements' to support capacity providers whilst ensuring security of supply.

The 'easements' were introduced in June and July 2020 alongside the changes made to the Principal Regulations and Capacity Market Rules implementing the commitments referenced in the State aid approval decision40. The 'easements' were applied in a time-limited manner in that they are only applicable to capacity providers that meet specified conditions and/or expire after a certain period.

This amendment allowed the CM to adhere to its original objectives of Security of Supply: to incentivise sufficient investment in capacity to ensure security of electricity supply.

Summary of Capacity Market Rules made or amended by the Secretary of State 2021

A consultation was held in March 2021 on a range of improvements to the Capacity Market which were implemented through legislation in June and July 2021[41]: Full details can be found in the consultation documents42.

- Changed certain formulae and clarifications to the legislation relating to Carbon Emissions Limits in the Capacity Market. This ensured that the formulae allow for a better reflection of certain technologies' actual carbon emissions. The amended formulae allow for a better reflection of certain technologies' actual carbon emissions and improved clarity for capacity providers. This amendment allowed the CM to adhere to its original objectives of avoid unintended consequences; to minimise design risk and complement the decarbonisation agenda.
- Provided the Capacity Market Delivery Body greater flexibility to consider information which corrects non-material errors in prequalification applications. This reduced the risk of prequalification applications being rejected due to minor, administrative errors. This amendment allowed the CM to adhere to its original objectives to remain appropriate and in a less burdensome way.
- Prevented certain secondary trades from being rendered ineffective if the transferor's Capacity Agreement is terminated. This made it easier to replace capacity which closes prematurely and at short notice, after a T-1 auction. This amendment allowed the CM to adhere to its original objectives of Security of Supply: to incentivise sufficient investment in capacity to ensure security of electricity supply.
- Extended the coronavirus easements relating to the extended long-stop date, the extended deadlines for Metering and DSR Tests for DSR Capacity Market Units, and Independent Technical Expert certificates in relation to progress reports. The easement around appeals (which applies in specific circumstances and is subject to certain conditions) was not changed and continues to be in place for Capacity Market Units that were awarded an agreement before 1 April 2020. These easements allowed management of any delays to operator's fulfilment of Capacity Market milestones, caused by the

[39] https://www.gov.uk/government/consultations/capacity-market-proposal-to-relax-the-rules-temporarily-in-response-to-covid-19
[40] https://www.gov.uk/government/consultations/capacity-market-proposals-for-future-improvements
[41] https://assets.publishing.service.gov.uk/media/60e4a3c28fa8f50c6ef84f16/capacity-market-amendment-rules-2021.pdf
[42] https://www.gov.uk/government/consultations/capacity-market-2021-proposals-for-improvements

pandemic. This amendment allowed the CM to adhere to its original objectives to remain appropriate and in a less burdensome way.

- Extended the deadline for meeting the Extended Years Criteria so that it aligns with the requirement to provide evidence of Total Project Spend and made the sanction for breaching both (a reduction in agreement length) referable to the Secretary of State. This ensures consistency across Capacity Market obligations and deadlines and enables Capacity Providers to refer matters to the Secretary of State if they believe they have sufficient grounds. This amendment allowed the CM to adhere to its original objectives to remain appropriate and in a less burdensome way.
- Allowed refurbishing plant to have the same Long-Stop Date as new build plant. This provides refurbishing plant that secure agreements in a T- 4 auction with the option of an additional 12 months to deliver their capacity if it suffers delays to works. This amendment allowed the CM to adhere to its original objectives of Security of Supply: to incentivise sufficient investment in capacity to ensure security of electricity supply.
- Disabled the net welfare algorithm for T-1 auctions that are held only to meet the 50% set-aside commitment. Under the Electricity Capacity Regulations 2014 we are committed to auctioning at least 50% of the capacity that was set aside for the T-1 auction. This ensures that when an auction is held for the sole purpose of meeting this commitment, the costs to the consumer of the auction are minimised. This amendment allowed the CM to adhere to its original objective of Cost-effectiveness: to implement changes at minimum cost to consumers.
- Maintained the minimum capacity threshold at 1MW. This ensures that the Capacity Market continues to be aligned with other electricity markets and that the costs of administration are balanced with broad market access. This amendment allowed the CM to adhere to its original objectives to remain appropriate and in a less burdensome way.
- Made several minor improvements and corrections to the legislation. These involved minor corrections to the Capacity Market Rules, primarily to address cross-references to EU law. This amendment allowed the CM to adhere to its original objectives to remain appropriate and in a less burdensome way.

Summary of Capacity Market Rules made or amended by the Secretary of State 2022

Ofgem ran a consultation between 26 November 2021 and 15 January 2022 seeking views on their minded-to position on three policy areas: Evergreen Prequalification, Capacity Market Register (“CMR”) and Applicant Notices. In this consultation, Ofgem prioritised consulting on proposals which would directly impact the functionality of the new EMR Portal for the Prequalification process. This resulted in a decision on 25 February 2022, which provided a summary of the decision to progress with the implementation of all the proposals Ofgem consulted on and subsequent Rules amendments43.

The government consulted in June 2022 on two time-limited amendments to the Capacity Market Rules to improve auction liquidity. A summary is provided below, and full details can be found in

[43] https://www.ofgem.gov.uk/publications/decision-capacity-market-rule-amendments-evergreen-cmr-and-applicant-notice

the consultation document44. The following changes were implemented through time-limited amendments to the Rules in July 2022[45] which:

- Postponed the requirement for independent verification of Fossil Fuel Emissions Declarations until the 2023 Prequalification Window. This measure mitigates the risk of Applicants failing to prequalify for the 2023 Capacity Market auctions due to a potential inability to access emissions verification services. This amendment allowed the CM to adhere to its original objectives to remain appropriate and in a less burdensome way.
- Enabled certain plants which have been mothballed for more than 24 months to prequalify for auctions. This time-limited measure helps to remove barriers to prequalification for Capacity Market auctions for mothballed plant. This amendment allowed the CM to adhere to its original objectives to remain appropriate and in a less burdensome way.

Summary of Capacity Market Rules made or amended by the Secretary of State 2023

In January 2023, the government consulted on proposals to better align the CM with the government's net zero targets and to improve delivery assurance across the scheme[46]. A summary is provided below, and full details can be found in the consultation document.

The following changes were implemented through amendments to the Rules in June 2023[47] which:

- Reformed the way in which Connection Capacity is determined, to ensure it better reflects export capability; This amendment allowed the CM to adhere to its original objectives of Security of Supply
- Extended the temporary arrangements introduced in 2022 to remove barriers to mothballed plants entering the CM; This amendment allowed the CM to adhere to its original objectives to remain appropriate and in a less burdensome way.
- Amended the timelines for calculating non-delivery penalties; This amendment allowed the CM to adhere to its original objectives to remain appropriate and in a less burdensome way.
- Clarified auction clearing mechanics; This amendment allowed the CM to adhere to its original objectives to remain appropriate and in a less burdensome way.
- Amended the definition of the CfD Transfer Notice; This amendment allowed the CM to adhere to its original objectives to remain appropriate and in a less burdensome way.
- Ended the requirement for Independent Technical Expert reports for capacity providers under certain circumstances; and

[44] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1081288/capacity_market_rules_amendments_to_improve_auction_liquidity.pdf. The associated Rules changes can be found here: https://www.gov.uk/government/publications/capacity-market-rules

[45] https://www.gov.uk/government/consultations/capacity-market-rules-amendments-to-improve-auction-liquidity

[46] https://www.gov.uk/government/consultations/capacity-market-consultation-strengthening-security-of-supply-and-alignment-with-net-zero

[47] https://assets.publishing.service.gov.uk/media/64aebd3d8bc29f000d2ccc16/capacity-market-amendment-rules-2023.pdf

- Delayed the requirement for Fossil Fuel Emissions Declaration verification from prequalification until 2024. This amendment allowed the CM to adhere to its original objectives to remain appropriate and in a less burdensome way.

Annex C

Glossary

Abbreviation/Term	Definition
Auction clearing price	The price at which the supply of capacity offered by bidders at that price is equal to the volume of capacity required to be secured in the auction.
Auction parameters	The parameters of the capacity auction, which are determined by the Secretary of State. This includes the demand curve, the auction capacity target, the price-taker threshold, the price cap, and the capital expenditure thresholds.
Capacity	An amount of electrical generating capacity or DSR capacity, usually expressed in megawatts (MW) unless stated otherwise.
Capacity Agreement	The rights and obligations accruing to a Capacity Provider under the Regulations and the Rules in relation to a CMU for one or more Delivery Years.
Capacity Auction	An auction held under Part 4 of the Regulations, as a result of which successful bidders are awarded capacity agreements.
Capacity Market Notice (CMN)	A signal issued by National Energy System Operator NESO four hours in advance that there may be less generation available than expected to meet national electricity demand on the transmission system. Rule 8.4 of the Capacity Market Rules describes the specific obligations to be met by a Capacity Provider, including where a System Stress Event occurs, and the procedures for determining when a System Stress Event has occurred and for issuing a Capacity Market Notice.

Capacity Market Rules/ CM Rules (“the Rules”)	The Capacity Market Rules provide the technical detail for implementing the operating framework set out in the Regulations.
Capacity Market Unit (CMU)	A unit of electricity generation capacity or DSR capacity that can be put forward in a capacity auction. It is the product that forms the capacity to be procured through the CM.
Capacity Obligation	An obligation awarded pursuant to a capacity auction, applying for one or more Delivery Years, to provide a determined amount of capacity when required to do so in accordance with Capacity Market Rules.
Capacity Payment	A payment to a capacity provider under the Regulations for its commitment to meet a Capacity Obligation during a Delivery Year.
Capacity Provider	A person who holds a capacity agreement or a transferred part in respect of a capacity agreement.
Delivery Body	The national electricity system operator (i.e. NESO).
Delivery Partners	Refers to Ofgem, the Settlement Body and the Delivery Body.
Delivery Year	In relation to a capacity auction, this means the year for which a 1-year Capacity Obligation is awarded, or the first year of the period for which a multi-year Capacity Obligation is awarded. Delivery Years run 1 October- 30 September of each calendar year.
Demand Side Response (DSR)	DSR is a method of reducing electricity demand. This can be achieved by either reducing demand by switching off assets (see turn-down DSR), or by starting up on-site generators to provide electricity in place of drawing it from the distribution network or transmission network (see behind the meter generation).

De-rated Capacity	The capacity that a CMU is likely to be technically available to provide at times of peak demand, which is specific to the CMU's technology type and individual characteristics.
De-rating Factor	A factor that is applied to a CMU's capacity to derive its de-rated capacity.
Electricity Market Reform (EMR)	A programme created by DESNZ (formerly BEIS/DECC) to deliver secure electricity supply and new low carbon generation. It consists of four mechanisms: Contracts for Difference, the Capacity Market, Carbon Price Support, and an Emissions Performance Standard.
Electricity Settlements Company (ESC) / Settlement Body	Referred to in the CM legislation as the "Settlement Body." A private limited company owned by the Secretary of State for the Department, established to oversee the settlement of payments to and from suppliers and capacity providers such as the supplier charge and capacity payments.
National Energy Systems Operator (NESO)	The organisation operating the national electricity transmission network for GB.
Gigawatt (GW)	A unit of capacity (1000 megawatts)
Interconnector	(i) A physical link that allows for the transmission of electricity across GB's borders; and (ii) A business which operates such equipment.
Kilowatt (kW)	A unit of capacity (1000 Watts)
Megawatt (MW)	A unit of capacity (1000 Kilowatts)
Net Zero	Refers to a point at which the amount of greenhouse gas being put into the atmosphere by human activity in the UK equals the amount of greenhouse gas that is being taken out of the atmosphere.

New build capacity / New build generator / New build generation	Generators that are to be or are being constructed.
New Build CMU	A generating CMU that is not built at the time of the relevant capacity auction.
Ofgem	A non-ministerial government department and an independent regulator, governed by the Gas and Electricity Markets Authority. Ofgem's powers and duties in relation to the CM are provided for in Chapter 3 of Part 2 of the Energy Act 2013 (c. 32), the Regulations and the Capacity Market Rules, in which it is referred to as "the Authority".
Penalty regime	The regime of financial penalties that are applied to capacity providers who do not provide their committed capacity during a System Stress Event.
Prequalification	The process set out in the Capacity Market Rules for the Delivery Body to confirm whether a CMU may bid in a capacity auction. A CMU must meet the requirements specified in the Regulations and the Capacity Market Rules to be prequalified.
Prequalification Window	For any Capacity Auction, the period specified in the Auction Guidelines within which applications for prequalification are to be made.
Review of Electricity Market Arrangements (REMA)	The Government has launched the Review of Electricity Market Arrangements (REMA) following commitment in the British Energy Security Strategy. REMA is a major review into Britain's electricity market design to radically enhance energy security and to help deliver our world-leading climate targets whilst reducing exposure to international gas markets.
Satisfactory Performance Days (SPDs)	Days within the Delivery Year in which capacity providers must demonstrate that they are able to deliver their Capacity Obligation.

Secondary Trading	Trading by capacity providers in respect of the Capacity Obligations they hold. Takes the form of obligation trading or volume reallocation.
System Stress Event (SSE)	A SSE occurs when demand for electricity outstrips supply; it is defined in Rule 8.4.1 of the Rules.
Termination	A CMU which meets the criteria for a termination event set out in Rule 6.10.1 may have its capacity agreement terminated, as per the procedure set out in Rule 6.10.2, resulting in termination fees, as set out in Rule 6.10.3.
The Electricity Capacity Regulations ("the Regulations")	This refers to the Electricity Capacity Regulations 2014, S.I. 2014/2043, the principal regulations underpinning the CM.
T-1 auction	This is the capacity auction held one year ahead of the Delivery Year, which 'tops up' any capacity secured in the relevant T-4 auction.
T-4 auction	This the capacity auction held four years ahead of the Delivery Year, which secures the large majority of capacity needed in the relevant Delivery Year.
Unabated (gas) generation	Electricity generation where carbon dioxide from burning natural gas is not captured and stored.
UK General Data Protection Regulation (UK GDPR)	The UK implementation of the General Data Protection Regulation. This refers to a series of legal protections concerning the collection and use of personal data.
Unproven Demand Side Response (DSR)	DSR that has not yet demonstrated it has the necessary metering in place or demonstrated it can deliver a specified level of capacity.
Wholesale electricity Market	The market in which generators sell electricity to suppliers.
Winter	A period from 1 October to the following 30 April.

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