Subsidy Advice Unit Report on the Capacity Market Scheme (as amended in 2025)

Referred by the Department for Energy Security and Net Zero

28 March 2025

Subsidy Advice Unit

Part of the Competition and Markets Authority

CONTENTS

1. The Referral

1.1 On 10 February 2025, DESNZ requested a report from the Subsidy Advice Unit (the SAU)[1] in relation to the capacity market scheme (the Scheme) under section 52 of the Subsidy Control Act 2022 (the Act).[2]

1.2 This report evaluates DESNZ's assessment of compliance (the Assessment) of the Scheme with the requirements of Chapters 1 and 2 of Part 2 of the Act.[3] It is based on the information and evidence included in the Assessment.

1.3 This report is provided as non-binding advice to DESNZ. It does not consider whether the Scheme should be implemented, or directly assess whether it complies with the subsidy control requirements.

Summary

1.4 The Assessment uses the four-step structure described in the Statutory Guidance for the United Kingdom Subsidy Control Regime (the Statutory Guidance) and as reflected in the SAU's Guidance on the operation of the subsidy control functions of the Subsidy Advice Unit (the SAU Guidance).

1.5 In our view, DESNZ has considered in detail the compliance of the Scheme with the subsidy control and energy and environment principles. We consider in particular that the Assessment:

(a) references supporting evidence clearly and makes good use of both older and more recent evidence;

(b) openly engages with the risks from certain design choices and how these are mitigated;

(c) explains well how the planned modifications to the Scheme impact the overall assessment; and

(d) includes relevant information and explanation that address some of the shortcomings identified in the SAU's report on the capacity market scheme, as amended in 2024 (the 2024 SAU Report).[4]

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[1] The SAU is part of the Competition and Markets Authority
[2] Referral of the modified Capacity Market scheme by the Department for Energy Security and Net Zero - GOV.UK
[3] Chapter 1 of Part 2 of the Act requires a public authority to consider the subsidy control principles and energy and environment principles before deciding to give a subsidy. The public authority must not award the subsidy unless it is of the view that it is consistent with those principles. Chapter 2 of Part 2 of the Act prohibits the giving of certain kinds of subsidies and, in relation to certain other categories of subsidy creates a number of requirements with which public authorities must comply.
[4] The 2024 SAU Report. For further information on the modifications made in 2024 see paragraphs 1.7-1.9 of the 2024 SAU Report

1.6 However, we consider that the Assessment should ensure that it includes a full analysis of the likely continued impact of the Scheme on competition and investment, including looking at the impact that the Scheme has had to date. It should also clarify how the capacity market impacts competition in the balancing mechanism[5] and wholesale market.

1.7 We discuss these areas below, along with other issues, for consideration by DESNZ in finalising its assessment.

The referred Scheme

1.8 The Scheme was introduced in 2014 as part of Electricity Market Reform,[6] an overarching programme to deliver secure electricity supply and new low carbon generation. The Scheme is a key mechanism for securing sufficient electricity supplies in Great Britain (GB) to meet future peak demand. It gives eligible capacity providers a steady payment in exchange for making their capacity available when demand is at risk of outstripping supply.

1.9 In 2024, DESNZ removed the ten-year time limit for the Scheme (among other modifications), enabling its continued operation beyond December 2024. The SAU evaluated DESNZ's assessment of compliance of the amended Scheme in 2024 SAU Report.

1.10 Key design features of the Scheme include the following:

(a) Beneficiaries can be existing and new generators, demand-side response operators[7] and storage operators.

(b) Electricity capacity is secured through technology-neutral, descending clock, pay-as-clear auctions[8] held four years ahead of the delivery year[9] (T-4 auctions) and one year ahead of the delivery year (T-1 auctions). The T-1 auction is effectively a top-up auction based on updated information about likely demand and weather forecasts. Bids are made by Capacity Market Units (units of electricity generation capacity or demand-side response capacity) for agreements to make their capacity available when required.

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[5] The primary tool used by the electricity system operator to balance supply and demand in real time.
[6] Electricity Market Reform: policy overview. It received State Aid approval from the EU Commission in 2019, covering the period from 16 December 2014 to 15 December 2024 (SA.35980 - GB capacity mechanism-UK. The Capacity Market was originally approved by the EU Commission in 2014, but this decision was annulled in 2018, before the Scheme was re-approved in 2019.)
[7] Demand side response operators are typically commercial energy users who agree to switch off assets or start up on-site generators to provide electricity to the capacity market.
[8] A 'descending clock, pay-as-clear' auction means that the auction starts at an announced price, which is reduced until the remaining bids match the available capacity in the auction. The price at this point, known as the 'clearing price', is paid to bidders that remain in the auction.
[9] The 'delivery year' or 'capacity year' means a period of one year starting on 1st October and ending on the following 30th September.

(c) Prospective capacity providers can win agreements of varying lengths, depending on the criteria they meet. Existing capacity providers generally compete for one-year agreements, while new build capacity can win the longest agreements, of up to 15 years (to provide revenue certainty and de-risk the upfront capital investment involved in building new capacity)

(d) Capacity providers receive a monthly payment for the duration of the capacity agreement.

(e) The decision about how much capacity to procure in each auction is informed by a statutory 'Reliability Standard': enough capacity must be procured to meet the standard. The Reliability Standard is set at three hours loss of load[10] expectation (LOLE) per capacity year, meaning that it is statistically expected that supply will not meet demand for three hours per capacity year.

(f) The clearing price at auction is subject to a price cap per kW, based on the net cost of new entry ('Net-CONE'). Net-CONE is the additional revenue that a new generating plant would need to recover its capital investment and fixed costs, given reasonable expectations about the amount of money it would make from energy markets over its lifespan.

1.11 Following a consultation, DESNZ proposes to introduce the following modifications to the Scheme:[11]

(a) Lifetime Extension: The capital expenditure threshold that must be met to qualify for three-year agreements will be lowered. The change is intended to support the retention of existing units by providing greater commercial certainty to underpin the upfront capital cost of work required to extend the operating life of older plants.

(b) Managed Exits: A managed exit pathway will allow unabated[12] gas plants who hold a multi-year capacity market arrangement of 15 years to exit their agreements to transfer to a dispatchable power agreement[13] which will enable the plants to convert to carbon capture usage and storage (CCUS) enabled power generation. The change aims to prevent multi-year agreements with no exit options delaying the decarbonisation of unabated gas generators.

(c) Decarbonisation Readiness (DR) Assurance: To qualify for the Scheme, it is proposed that all generators securing agreements from the 2026 T-4 auction

[10] Loss of load is when the available generation capacity is less than the system demand at a given moment.
[11] Capacity Markets 2023: Phase 2 Proposals and 10 year review.
[12] Unabated refers to the underlying industrial process before (or in the absence of) the application of pollution control measures.
[13] Designed to support CCUS-enabled power generation by incentivising natural gas fired power facilities to install and operate equipment to capture the CO_2 produced when generating electricity, for transport to a permanent storage site.

onwards that would be captured under the new DR legislation, and which are not captured under the existing Carbon Capture Readiness requirements will undertake to comply with the new DR requirements once the legislation comes into effect.[14] This change aims to support the transition away from unabated gas.

1.12 If decisions are taken to implement these policies and parliamentary time allows, DESNZ plans to lay legislation for all these modifications in time for the July-September 2025 prequalification round, before the next auctions take place in spring 2026. DESNZ explained that some of the planned modifications are unlikely to be permitted modifications under section 81(3) of the Act.[15] It has therefore referred the Scheme as a whole to the SAU.

1.13 DESNZ explained that the Scheme is a Scheme of Particular Interest because it allows for the provision of one or more Subsidies of Particular Interest to be given.[16] In particular, a single beneficiary may win an agreement with a value above £10 million.[17]

[14] DR legislation is expected to take effect in February 2026, applying to all relevant environmental permitting applications submitted after that date. As a result of this timing, new combustion plants, not subject to existing carbon capture requirements could obtain 15-year CM agreements without decarbonisation plans in the 2026 T-4 auction.
[15] Under Section 81(1) of the Act, the modification of a scheme is to be treated as the making of a new scheme for the purposes of the application of the subsidy control requirements (unless the modification is a permitted modification within the meaning of Section 81(3)).
[16] Within the meaning of regulation 3 of The Subsidy Control (Subsidies and Schemes of Interest or Particular Interest) Regulations 2022 which sets out the conditions under which a subsidy or scheme is considered to be of particular interest.
[17] DESNZ has also determined that the Scheme allows for capacity agreements that are worth over £5 million, or which exceed £1 million and cumulate to more than £5 million with other related subsidies from the previous three financial years, to be awarded to beneficiaries in the 'production of electricity' sector, which is considered a sensitive sector.

2. The SAU's Evaluation

2.1 This section sets out our evaluation of the Assessment, following the four-step structure used by DESNZ.

Step 1: Identifying the policy objective, ensuring it addresses a market failure or equity concern, and determining whether a subsidy is the right tool to use

2.2 Under Step 1, public authorities should consider compliance of a subsidy with:

(a) Principle A: Subsidies should pursue a specific policy objective in order to remedy an identified market failure or address an equity rationale (such as local or regional disadvantage, social difficulties or distributional concerns); and

(b) Principle E: Subsidies should be an appropriate policy instrument for achieving their specific policy objective and that objective cannot be achieved through other, less distortive, means.[18]

Policy objectives

2.3 The Assessment states that the policy objective of the Scheme is to ensure sufficient reliable capacity in the GB electricity market to maintain security of supply.

2.4 The Assessment explains that a reliable electricity system is key for a well-functioning society and economy, as electricity blackouts cause severe social and economic consequences.[19] To reduce the risk of demand outstripping supply at any given moment, an excess capacity margin is required to reach the desired Reliability Standard.

2.5 The Assessment further explains that this primary objective is supported by two secondary objectives, that the Scheme (i) is cost effective for GB consumers and that (ii) avoids unintended consequences, namely incentivising fossil fuel-based generation through the Scheme.

2.6 In our view, the Assessment clearly describes and evidences the specific policy objective of the Scheme and how it is supported by the secondary objectives.

[18] See Statutory Guidance, paragraphs 3.33-3.58 and the SAU Guidance, paragraphs 4.7-4.11 for further detail.
[19] In support of its submission, DESNZ referred to a working paper published in 2021 by the UK Energy Research Centre.

Market failure

2.7 Market failures arise where market forces alone do not produce an efficient outcome. When this arises, businesses may make investments that are financially rational for themselves, but not socially desirable.[20]

2.8 The Assessment describes the following market failures that the Scheme seeks to address:

(a) Reliability as a public good. The Assessment explains that reliability is non-excludable[21] as customers cannot choose their desired level of reliability. National Grid (as the Electricity System Operator) cannot selectively disconnect them. Further, consumers do not respond to real-time changes in the wholesale price and do not send signals to generators about the optimal level of reliability. As such, the Assessment explains that capacity providers will not provide a socially optimal level of reliability in the absence of intervention.

(b) The 'missing money' market failure. The Assessment explains that, in an economically efficient situation, wholesale prices would rise high enough during any disruption to allow generators to recover scarcity rents.[22] However, the Assessment explains that an energy-only market[23] may fail to send the correct market signals to ensure optimal security of supply and to enable investors to obtain the funding needed for new capacity for several possible reasons, including because prices are unable to reflect scarcity rent[24] and whether prices would be allowed to rise is uncertain.

2.9 The Assessment also mentions a third market failure that interacts with the 'missing money' market failure. It explains that the electricity generation sector is characterised by high barriers to entry associated with economies of scale which in turn exacerbate the 'missing money' challenge. It further explains that the Scheme provides certainty to existing market participants (and potential new entrants) and reduces risks associated with uncertain market revenues, which helps to open the market to a wider range of participants.

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[20] Statutory Guidance, paragraphs 3.36-3.50.
[21] ie a person cannot be prevented from consuming it.
[22] In theory, the inability of consumers to select their desired level of reliability could be addressed in an energy-only market by allowing prices to rise to a level reflecting the average Value of Lost Load (VoLL). This is the price at which consumers would no longer be willing to pay for energy and reflects a 'scarcity rent' (i.e. excess profit resulting from capacity limits) to electricity generators.
[23] A market where electricity generators only get paid for the electricity they produce.
[24] Electricity demand is generally inelastic to short-term price changes due to the fixed nature of contracts that most electricity consumers are on. The actions of the system operator also contribute to distorted price signals because charges to generators who are out of balance in the balancing mechanism do not, and are not supposed to, reflect the full cost of the balancing actions taken by NESO to balance the system in real time.

2.10 The Assessment outlines how the importance of reliability will increase for the foreseeable future due to the electrification of several aspects of the economy combined with a greater proportion of intermittent renewables in the energy mix.

2.11 In our view, the Assessment clearly describes and evidences the market failures that the Scheme seeks to remedy.

Appropriateness

2.12 Public authorities must determine whether a subsidy is the most appropriate instrument for achieving the policy objective. As part of this, they should consider other ways of addressing the market failure or equity issue.[25]

2.13 The Assessment explains that DESNZ has considered alternative means to achieve the policy objective including (i) direct provision of the good or service, (ii) strategic reserve,[26] (iii) direct tender,[27] (iv) capacity payments[28] and (v) supplier obligations.[29] The Assessment concludes that these options would not achieve the policy objective primarily because they would not achieve the desired level of reliability.

2.14 The Assessment then concludes that the Scheme is the most appropriate instrument for addressing the identified policy objective because the market failures identified in Step 1 show that, without intervention in the form of financial incentives, it is unlikely that sufficient reliable electricity capacity will be available to meet the Reliability Standard.

2.15 The Assessment also discusses a range of complementary actions to the Scheme, such as (i) reducing electricity requirements, and (ii) incentives on market participants to match their contracted volumes. It concludes that these measures are not sufficient in themselves to address market failures.

2.16 In our view, the Assessment demonstrates that DESNZ has considered other ways of achieving its policy objective and clearly explains and evidences why a subsidy is the most appropriate option. In particular, in response to the 2024 SAU

[25] Statutory Guidance, paragraphs 3.56-3.58.
[26] Under this option, capacity would be held outside of the electricity market and only be released in emergency situations.
[27] Under this option, the price needed to bring forward the required level of capacity to ensure security of supply is determined centrally by government. This determination would involve estimating the price that reflects the best value for money to consumers, and then paying all providers this price.
[28] Under this option, the price needed to bring forward the required level of capacity to ensure security of supply is determined centrally by government. This determination would involve estimating the price that reflects the best value for money to consumers, and then paying all providers this price.
[29] This option is based on supplier obligations stemming from bilateral contracts which place an obligation on suppliers to purchase sufficient capacity agreements to cover their share in the market from certified providers through bilateral trading. At times of scarcity, suppliers must limit their consumption to the level of capacity agreements they have purchased or face penalties.

Report, DESNZ has explained how the Scheme complements other actions contributing to similar objectives.

Step 2: Ensuring that the subsidy is designed to create the right incentives for the beneficiary and bring about a change

2.17 Under Step 2, public authorities should consider compliance of a subsidy with:

(a) Principle C: Subsidies should be designed to bring about a change of economic behaviour of the beneficiary. That change should be something that would not happen without the subsidy and be conducive to achieving its specific policy objective; and

(b) Principle D: Subsidies should not normally compensate for the costs the beneficiary would have funded in the absence of any subsidy.[30]

Counterfactual

2.18 In assessing the counterfactual, public authorities should consider what would likely happen in the future – over both the long and short term – if no subsidy were awarded (the 'do nothing' scenario).[31]

2.19 The Assessment sets out a counterfactual scenario where there is no capacity market. The Assessment states that this counterfactual was chosen based on analysis by the National Energy System Operator's (NESO) experts and on the Review of Electricity Market Arrangements (REMA) consultations and that other counterfactual scenarios were considered but rejected.[32]

2.20 The Assessment summarises NESO modelling undertaken in late 2023, which demonstrates that the Reliability Standard would not be met (the LOLE would exceed three hours) in the counterfactual. The Assessment also explains the key assumptions underlying the modelling for the chosen counterfactual of no capacity market.

2.21 The Assessment notes that with a capacity market, where existing capacity is not enough to meet the Reliability Standard, the auction clearing price will rise high enough to award capacity agreements to facilitate the deployment of new generation up to the auction price cap. However, in a no capacity market scenario, the capacity shortfall that would arise could not be addressed in the short term given the lead-in times of 4 to 5 years required for building new plant.

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[30] See Statutory Guidance, paragraphs 3.59-3.73 and the SAU Guidance, paragraphs 4.12-4.14 for further detail.
[31] Statutory Guidance, paragraphs 3.62-3.64.
[32] Other counterfactual scenarios considered were enabling the capacity market to continue without reform, and implementation of other potential capacity adequacy mechanisms, but they were discounted during the REMA.

2.22 The Assessment also explains and evidences what would happen to security of supply absent the proposed changes to the Scheme, including the risk of a significant amount of existing capacity going offline before low carbon flexible alternative are available at scale.

2.23 In our view, the Assessment clearly describes and evidences, including through up to date modelling, what would be likely to happen if the Scheme was not implemented.

Changes in economic behaviour of the beneficiary and additionality

2.24 Subsidies must bring about something that would not have occurred without the subsidy.[33] They should not be used to finance a project or activity that the beneficiary would have undertaken in a similar form, manner, and timeframe without the subsidy ('additionality').[34]

2.25 The Assessment explains that the Scheme seeks to change the behaviour of beneficiaries by:

(a) Assigning an appropriate value to system reliability through auctions and providing participants with steady revenues to reflect this;

(b) Applying 'non-delivery penalties' if the agreed capacity is not available when required; and

(c) Incorporating a robust testing regime to ensure operators uphold their legal obligations.

2.26 The Assessment references an independent report on investment incentives for beneficiaries. It notes that capacity market payments are important to beneficiaries as they provide a guaranteed revenue stream that is independent, stable and carries minimal credit risk and expected to improve beneficiaries' credit rating, which reduces the cost of financing and improves the business case for their investment in plant and new technologies.

2.27 The Assessment further notes that capacity market beneficiaries must demonstrate to NESO that their capacity is equal to, or greater than their capacity obligation, and that they are subject to performance testing. Failure to provide the requested data will result in the beneficiary having to repay the capacity payments it has received.

2.28 The Assessment then describes subsidy design features that it considers relevant to additionality, including how the auction bidding process encourages operators to

[33] Statutory Guidance, paragraph 3.66.
[34] Statutory Guidance, paragraphs 3.65-3.69.

bid at a value approximately equal to the minimum required to break even, differentiated payments to new build and existing plants that reflect the fact that they have different minimum requirements to breakeven and provisions to prevent bidders receiving other subsidies (e.g. Contracts for Difference) from also bidding for a subsidy under the Scheme.

2.29 Regarding the proposed modifications, the Assessment explains that the Lifetime Extension will provide greater revenue certainty to generators in need of refurbishment, therefore incentivising them to remain open and submit competitive bids in the capacity market auctions. Through this modification, three year agreements (instead of the typical one-year agreement) will be available to operators reaching a lower threshold of capital expenditure (expressed in £/kW) than what was required before the change. The Assessment further describes practical mechanisms that aim to mitigate the risk of gaming if the capital expenditure threshold for accessing three year 'refurbishing' capacity market agreements is lowered. This includes proposals for a Director's statement that the planned expenditure would not have been undertaken in the absence of a subsidy.

2.30 The Assessment concludes that, ultimately, the Scheme brings about additionality by (i) incentivising investment to increase the amount of capacity on the system; and (ii) ensuring that sufficient capacity is guaranteed to be available at times of scarcity and that alongside revenue certainty, the Scheme achieves the policy objective by covering the additional costs of maintaining system reliability.

2.31 In our view, the Assessment clearly explains and evidences how the subsidy would change the beneficiaries' economic behaviour and how it brings about changes that would not have occurred absent the subsidy. It also explains how modifications to the Scheme do not change the overall conclusions reached under Step 2.

Step 3: Considering the distortive impacts that the subsidy may have and keeping them as low as possible

2.32 Under Step 3, public authorities should consider compliance of a subsidy with:

(a) Principle B: Subsidies should be proportionate to their specific policy objective and limited to what is necessary to achieve it; and

(b) Principle F: Subsidies should be designed to achieve their specific policy objective while minimising any negative effects on competition or investment within the United Kingdom.[35]

[35] See Statutory Guidance paragraphs 3.74-3.110 and paragraphs 4.15-4.19 for further detail.

Proportionality

2.33 The Assessment details a number of aspects of the Scheme that are relevant to proportionality, including the size of the subsidies, monitoring, evaluation and the selection process. In relation to the latter, it notes that agreements are awarded following competitive, market-wide, technology-neutral pay-as-clear auctions which encourage bidders to submit bids that reflect the true economic cost of providing their capacity.

2.34 The Assessment explains that the scheme is designed to:

(a) promote sufficient participation in the auctions, for example by making longer-term agreements available for certain categories of beneficiaries and secondary trading of capacity agreements.[36]

(b) ensure that the right level of capacity is procured, including by using the Reliability Standard, Net-CONE, the price cap and the capacity target (see paragraph 1.10(f)).[37] The Net-CONE, price cap, and capacity target are regularly reviewed to ensure that they remain appropriate.

(c) avoid over-procurement through modelling which looks at minimising the worst outcome across all possible scenarios. An ancillary metric, loss of load probability, shows that there has not been over-procurement to date.

2.35 The Statutory Guidance notes that a scheme without an end date is not likely to be proportionate or limited to what is necessary,[38] but the Assessment explains that the removal of a ten-year time limit in the last round of auctions is both appropriate and proportionate because there is continued evidence that the Scheme is needed over the longer term (rather than as a temporary intervention as originally envisaged) and there are 'multiple robust controls' in place to make sure that the Scheme continues to comply with Principle B.[39]

2.36 In our view, the Assessment demonstrates the design of the Scheme contributes to ensuring that it is proportionate and limited to the minimum necessary in line with the Statutory Guidance. We found particularly useful DESNZ's consideration on how the design features of the Scheme have, to date, helped promote sufficient levels of participation in the auctions and that the outcomes of auctions thus far have been competitive and helped reduce the risk of overcompensation. In the context of the proposed modifications to the Scheme, however, the Assessment could more clearly discuss the impact of the Lifetime Extension on proportionality

[36] Capacity providers can exit capacity market agreements by selling them (in secondary trading), hence promoting participation by reducing risk.
[37] The capacity target is set annually and is driven by the volume needed to meet the Reliability Standard.
[38] See paragraph 3.99 of the Statutory Guidance.
[39] These include (i) the annual discretion of the Secretary of State to not hold auctions for a given year, (ii) controls on costs and distortive impacts included in the annual auction parameter setting, (iii) the statutory requirement to review the Scheme every five years, and (iv) wider government reviews continue to assess the need for the Scheme (eg REMA).

and, in particular, explain how DESNZ has reached the conclusion that the impact of this change on costs is expected to be minimal.

Design of subsidy to minimise negative effects on competition and investment

2.37 The Assessment systematically and in turn discusses several aspects of subsidy design mentioned in the Statutory Guidance. These are (i) the breadth of beneficiaries and the selection process, (ii) the timespan over which the subsidy is given, (iii) the performance criteria, and (iv) monitoring and evaluation.

2.38 The Assessment and supporting materials consider in some detail how these features of the Scheme contribute to minimising negative effects on competition and investment within the capacity market and, briefly, in the wholesale and balancing markets. In particular, the Assessment submits that the 'competitive, non-discriminatory' auctions are designed to enable a wide range of participation from across the market, in turn minimising distortions. It further outlines that the pay-as-clear format also encourages smaller players to compete for agreements by taking away advantages that larger, vertically integrated companies would have in a pay-as-bid auction model resulting from increased access to market information. [40]

2.39 Several subsidy design aspects of the Statutory Guidance are covered by a wider reading of the Assessment. These are (i) the nature of the instrument, (ii) the size of the subsidy, (iii) the nature of the costs covered, and (iv) ringfencing.

2.40 In our view, the Assessment clearly demonstrates and evidences how design features of the Scheme contribute to minimising any negative effects of the Scheme on competition and investment within the United Kingdom.

Assessment of effects on competition or investment

2.41 As outlined in paragraph 1.8, the Scheme is a key mechanism for securing sufficient electricity supply in GB to meet future peak demand, and it operates alongside the wholesale and balancing markets.

2.42 In relation to competition and investment, the Assessment explains that:

(a) the proportion of capacity market agreements for low carbon flexible technologies has increased since 2017/18 and that a consistent amount of new build generating capacity have secured agreements in the last five T-4 auctions. Gas turbine technologies receive most of the awarded capacity agreements and have consistently held a significant proportion of them since 2017/18. Gas powerplants and battery storage systems account for the

[40] In pay-as-bid auctions all successful participants pay the price that they bid in the auction.

largest proportion of the new build capacity agreements, and the Managed Exit scheme change is expected to further encourage participation of gas assets in the Scheme.

(b) DESNZ modelling shows that for almost two thirds of the total capacity receiving capacity market payments between 2020-2025, these payments form less than 10% of their total income.

(c) concentration in the T-4 market has declined since 2017, suggesting it has become more competitive. Concentration in the T-1 market is relatively high and has seen little change since 2017, with the top eight parent companies holding 78% of awarded de-rated capacity in the last auction round. Supporting documentation notes that high concentration rates could have implications for market power and bidding strategies.

(d) there are no regional limitations on entry into the Scheme and no additional locational signals were introduced by the Scheme. The Assessment further states that the Scheme was designed to be consistent with the European Union internal energy market rules, minimising impacts on trade and competition, and outlines that there are neither export nor import restrictions on capacity providers.

(e) by design, the capacity market will have a dampening effect on wholesale market electricity price volatility. This is a result of the Scheme leading to more capacity in the system, which can earn revenue both in the capacity market and the wholesale market. Supporting evidence from the 2014 impact assessment showed that the capacity market decreases the wholesale price due to increased capacity margins available as a result of capacity brought forward by the capacity market, and, more generally, reduces gaming risks in the energy market.

(f) whilst many beneficiaries participate in the electricity balancing market, the mechanics of the capacity market do not have an impact on the operation of the balancing market, and where obligation to contribute to the balancing market had been a factor in failure to deliver on capacity agreements, this would be taken into account in determining penalties.

(g) the Scheme has negative effects on competitiveness and investment in GB in terms of costs to users because funding the Scheme adds costs to user bills, including industrial and commercial users. However, the Assessment also notes that security of supply has a positive impact on competitiveness overall.

2.43 The Assessment outlines how several features of the Scheme aim to promote investment and encourage wider participation. It explains that increasing the

diversity of low carbon technologies within the capacity market will help to limit the power sector's exposure to volatility in the international fossil fuel market.

2.44 In our view, the Assessment clearly considers and evidences some of the effects of the Scheme on competition and investment in line with Annex 3 of the Statutory Guidance. The Assessment also addresses some of the shortcomings identified in the 2024 SAU report, including further detail on the changes in the level of concentration in auctions and the mix of technologies among beneficiaries of the agreements. However, the Assessment should ensure that it includes a full analysis of the likely continued impact of the Scheme on competition and investment, including looking at the impact that the Scheme has had to date. For example, it could include:

(a) A summary of how the subsidies have been allocated to date, according to monetary value (rather than just absolute number) of the agreements awarded, split by technology type and by new entry/existing market participants.

(b) A fuller discussion of supporting evidence on the concentration rates, and how they have an impact on competition and price, particularly in the T-1 auction. This could include whether the companies receiving larger Scheme payments tend to be the same companies each year, and the degree to which the Subsidy payments enable these companies to exercise any market power in the capacity market and beyond. This would give a clearer indication of impacts the Scheme may have on increasing the market power of the largest companies in the sector.

(c) A clearer indication of potential and actual market size, outlining the number and type of electricity generation or capacity that have been eligible to participate in the auctions compared with the number who pre-qualify and who secure capacity market agreements over time. This would give a clearer indication of whether there are any potential barriers to entry (e.g. at the prequalification stage) or incumbency advantages that could be distorting competition and leading to higher concentration rates.

2.45 While the Assessment explains that, operationally, the balancing mechanism and the wholesale market sit alongside the capacity market, the Assessment should do more to clarify how the capacity market impacts competition in these markets. This could include, for example, evidence on the proportion of generators that participate in all of these markets and on the extent to which subsidy earnt in the capacity market could potentially impact on auction bidding strategies and prices within the balancing mechanism and the wholesale market.

Step 4: Carrying out the balancing exercise

2.46 Public authorities should establish that the benefits of the subsidy (in relation to the specific policy objective) outweigh its negative effects, in particular negative effects on competition or investment within the United Kingdom and on international trade or investment.[41]

2.47 The Assessment lists the following benefits of the Scheme:

(a) It has successfully fulfilled its main objective of ensuring security of supply;

(b) It has successfully provided technology neutral support to a range of new projects;

(c) It has increased the percentage of new build low carbon capacity successful in pre-qualification, particularly in relation to battery storage technology, and in securing capacity agreements;

(d) It has run at an acceptable cost to consumers. Auctions have been competitive, securing enough capacity at the lowest possible cost. Evidence suggests the Scheme has avoided over-procuring;

(e) It does not adversely affect particular geographical areas and the benefits are nationwide; and

(f) It does not have a distortive impact on international trade in electricity. Interconnectors to several countries currently have capacity agreements in the GB capacity market.

2.48 The Assessment also identifies some negative effects of the Scheme, namely:

(a) The Scheme's technology neutral design has supported maintenance and deployment of fossil-fuel based generation, with negative impacts in terms of greenhouse gas emissions. The Assessment identifies some mitigations, including emissions limits placed on capacity market units, which have effectively resulted in coal-based generation being phased out;

(b) The Scheme carries a financial cost to consumers and businesses. This has ranged from £7 to £15 per year in auctions to date, but recent clearing prices suggest household impacts will 'significantly increase' from the original expected impact; and

(c) The Scheme's costs are spread across industrial and commercial users, with a negative effect on competitiveness and investment in GB. For example, the

[41] See Statutory Guidance, paragraphs 3.111–3.119 and paragraphs 4.20–4.22 for further detail.

Assessment states that electricity has cost considerably more for UK steelmakers since 2021 than their German and French equivalents.

2.49 The Assessment concludes that the cost impact on the wider system and consumers is outweighed by the benefits of the Scheme. This is supported by calculations in the original 2014 Scheme Impact Assessment,[42] which DESNZ assesses are still applicable today. In particular, the Assessment notes that the Scheme has successfully incentivised deployment of new build capacity and has secured the reliability of the GB electricity system at costs consistent with the initial estimates from the Impact Assessment. It adds that there are several reasons to believe the Scheme remains necessary, including an ageing nuclear and gas fleet, and increasing electricity demand due to the decarbonisation of the economy.

2.50 In our view, the Assessment clearly sets out the positive effects of the Scheme in relation to the policy objectives, its geographic impacts, as well as some of the potential negative impacts. However, the shortcomings identified in paragraphs 2.44 to 2.45 in relation to competitive effects may impact the identification of negative effects, which should be reflected in the balancing exercise.

Energy and Environment Principles

2.51 This section sets out our evaluation of the Assessment against the energy and environment principles.[43]

2.52 DESNZ has conducted an assessment of the Scheme against Principles A,B,C and D.

Principle A: Aim of subsidies in relation to energy and environment

2.53 Subsidies in relation to energy or the environment should be aimed at (1) delivering a secure, affordable and sustainable energy system and a well-functioning and competitive energy market, or (2) increasing the level of environmental protection compared to the level that would be achieved in the absence of the subsidy. If a subsidy is in relation to both energy and environment, it should meet both limbs.[44]

2.54 The Assessment explains that the Scheme complies with the first limb of Principle A, because it achieves these objectives while operating alongside the main energy market. The Assessment explains that the Electricity Capacity Regulations 2015 explicitly references the objective of promoting investment in capacity to ensure security of supply. It provides examples of scheme design aimed to achieve

[42] 2014 Capacity Market Assessment
[43] See Schedule 2 to the Act, and Statutory Guidance, Chapter 4.
[44] Statutory Guidance, paragraphs 4.19-4.28.

security of supply whilst balancing it with the need to ensure good value for money for consumers.

2.55 It adds that the Scheme also fulfils the objective of delivering a well-functioning and competitive energy market by allowing all technology types to compete in centrally held and transparent auctions.

2.56 The Assessment sets out that the proposed changes to the Scheme do not impact its overall compliance with the first limb of Principle A and further notes that the Lifetime Extension will contribute to the delivery of a secure energy system.

2.57 The Assessment sets out that the second limb of Principle A is not directly applicable because the Scheme is not intended to increase the level of environmental protection. It notes that despite this, the Scheme complements other schemes which deliver increased environmental protection.

2.58 In our view, the Assessment clearly explains and evidences how the Scheme complies with Principle A of the Energy and Environment Principles.

Principle B: Beneficiary's liabilities as a polluter

2.59 Subsidies in relation to energy or the environment should not relieve the beneficiary from liabilities arising from its responsibilities as a polluter under the law of England and Wales, Scotland, or Northern Ireland.[45]

2.60 The Assessment sets out that the capacity agreements do not relieve beneficiaries from their duties as polluters. The Assessment adds that the placement of emissions limits mitigates the impact of burning fossil fuels. Further, the Assessment sets out that the modifications to the Scheme do not alter the Scheme's compliance with Principle B as they do not change the requirement for the beneficiaries to fulfil their duties as polluters under the relevant laws.

2.61 In our view, the Assessment clearly explains and evidences how the Scheme complies with Principle B of the Energy and Environment Principles.

Principle C: Subsidies for electricity generation adequacy, renewable energy, or cogeneration

2.62 Subsidies or schemes for electricity generation adequacy, renewable energy, or cogeneration should not undermine the UK's ability to ensure that wholesale electricity and natural gas prices reflect actual supply and demand, and that the wholesale electricity and natural gas market rules will, in general terms, be transparent, encourage free price formation, and operate in an efficient and secure

[45] Statutory Guidance, paragraphs 4.29-4.34.

manner.[46] They should also not unnecessarily affect the efficient use of electricity interconnectors between the UK and the European Union. Finally, they should be determined by means of a transparent, non-discriminatory and effective competitive process, or, alternatively, an explanation should be provided for why a non-competitive process was used.[47]

2.63 The Assessment sets out that all criteria under Principle C are met because the Scheme:

(a) does not undermine the ability of the UK to meet its obligations under Article 304 of the Trade and Cooperation Agreement, including provisions on proportionality, transparency and non-discrimination. The Assessment explains that participants to the Scheme are able to operate as normal within the wholesale energy market as the Scheme exists alongside it and that the criteria of proportionality, transparency and non-discrimination are met.

(b) does not unnecessarily affect the efficient use of electricity interconnectors provided for under Article 311 of the Trade and Cooperation Agreement. The Assessment explains that interconnectors are able to participate in the Scheme and the UK have since committed to support greater level of interconnection.

(c) was developed through a transparent, non-discriminatory and effective competitive process. The Scheme was developed through a process which involved close collaboration with industry and market regulators as well as public consultations. There is a regular review cycle and information on the capacity market rules and regulations are publicly available online. Existing and new build capacity of all technologies are able to compete in the auctions.

2.64 In our view, the Assessment clearly explains how the Scheme complies with Principle C of the Energy and Environment Principles.

Principle D: Subsidies for electricity generation adequacy

2.65 Subsidies for electricity generation adequacy may be limited to installations not exceeding specified CO2 emission limits.[48]

2.66 The Assessment sets out the CO2 emission limits that apply to the Scheme, which were introduced through the Capacity Market (Amendment) Rules 2020 that came into force ahead of T4 round. The Assessment further explains that these limits

[46] Article 304 of the Trade and Cooperation Agreement between the United Kingdom of Great Britain and Northern Ireland, of the one part, and the European Union and the European Atomic Energy Community, of the other part (TCA)
[47] Statutory Guidance, paragraphs 4.36-4.44.
[48] Statutory Guidance, paragraphs 4.45-4.47.

were further strengthened by the changes made to the Scheme in 2024, including the introduction of multi-year agreements for low carbon, low capex technologies to provide greater revenue certainty and incentivise further low carbon participation in the Scheme. The Assessment explains that the changes made in 2025 do not alter the compliance with Principle D.

2.67 In our view, the Assessment clearly explains how the Scheme complies with Principle D of the Energy and Environment Principles.

Other Requirements of the Act

2.68 DESNZ confirmed that no other requirements or prohibitions set out in Chapter 2 of Part 2 of the Act applies to the scheme.

28 March 2025