

Energy UK response to Capacity Market: proposals to maintain security of supply and enable flexible capacity to decarbonise

Open Consultation

December 2024

About Energy UK

Energy UK is the trade association for the energy industry with over 100 members - from established FTSE 100 companies right through to new, growing suppliers, generators, and service providers across energy, transport, heat, and technology. Our members deliver nearly 80% of the UK's power generation and over 95% of the energy supply for 28 million UK homes as well as businesses.

The sector invests £13bn annually and delivers nearly £30bn in gross value - on top of the nearly £100bn in economic activity through its supply chain and interaction with other sectors. The energy industry is key to delivering growth and plans to invest £100bn over the course of this decade in new energy sources. The energy sector supports 700,000 jobs in every corner of the country.

Energy UK plays a key role in ensuring we attract and retain a diverse workforce. In addition to our Young Energy Professionals Forum, which has over 2,000 members representing over 350 organisations, we are a founding member of TIDE, an industry-wide taskforce to tackle Inclusion and Diversity across energy.

Executive Summary

Energy UK and its members would like to thank the Department for Energy Security and Net Zero (DESNZ) for the opportunity to respond to this open consultation, and relating call for evidence, on proposals to maintain security of supply and enable flexible capacity to decarbonise. We can confirm that we are happy for our response to be published.

Energy UK is committed to delivering a Net Zero energy system and is highly supportive of the Government's clean power mission. We also recognise the essential role that unabated gas plays as the UK's main source of flexibility in providing security of supply and system operability. Unabated gas will continue to be a key component of the power system as it decarbonises and more opportunities are created for low-carbon alternatives to provide balancing services and maintain security of supply.

As such, Energy UK welcomes this consultation and the Government's objectives for an orderly transition to a decarbonised power system, in which security of supply is maintained at every stage of the transition. Energy UK is supportive of many of the Government's proposals across lifetime extensions, decarbonisation readiness, providing clear and viable routes to decarbonisation, and the development of longer-term views of future capacity requirements and supply.

We agree with the Government's recognition that unabated gas plants must be given the appropriate support – both to continue to facilitate the security of supply, while also sustainably moving to decarbonised power generation, primarily through CCUS or H2P.

Energy UK would, however, like to emphasise the importance of considering these proposals in the context of wider market reform and Government workstreams including the Clean Power Action Plan, the Review of Electricity Market Arrangements, the review of Demand Side Response in the Capacity Market and proposals for a strategic reserve. As far as possible, these proposals should also be minimally distortive to the market, promoting a technology neutral and competitive Capacity Market, aligning to our Net Zero ambitions, and ensuring good value for the consumer.

If these policies fail to achieve alignment, there could be serious knock-on consequences for the effective management of the Capacity Market – ultimately risking our security of supply.

Lifetime Extensions

Question 1: Do you support the proposal of changing the CM to reduce capacity risks by facilitating investment to extend the lifetime of CMUs? Can you tell us what you would do differently if the proposal is implemented?

The majority of Energy UK members support the intent of proposals outlined in the consultation to facilitate investment and extend the lifetime of CMUs. Facilitating lifetime extensions will create choices for assets that may otherwise be retiring. Unabated gas plays a critical role in our energy system in maintaining security of supply and providing balancing services, and this will continue to be the case even into the 2030s. This proposal represents one of the final opportunities to reform the Capacity Market (CM) in the run-up to Clean Power 2030.

To avoid potential risk of market distortion, the Government will need to ensure competition and a level playing field when implementing the proposals. Furthermore, greater clarification from Government is needed to align these proposals to extend the lifetime of CMUs to the Clean Power 2030 goal to reduce the share of unabated gas generation to below 5%.

The Government should also be mindful of the risk to its wider Clean Power objectives by removing the urgency to incentivise and invest in low carbon technologies. As such, DESNZ should provide a more detailed analysis on how the facilitation of investment to extend the lifetime of CMUs will likely impact future prices, as well as any potential indirect risk to investment in alternative routes to decarbonisation. For example, increasing the participation of Demand Side Response (DSR) and low-carbon flexibility solutions, such as batteries, in the Capacity Market by addressing existing barriers to entry for these assets. We are aware that DESNZ will be consulting on the role of DSR in the CM in due course, and urge that Government ensures as much alignment to the proposals set out in this consultation as possible.

Capacity Market Reform is also being explored through the REMA workstream. However, a potential lack of coordination within DESNZ between the REMA and Capacity Market teams risks policy decisions being made in isolation, without fully considering the broader market implications.

The Government has also spoken of its intent to consider a strategic reserve. Some members are concerned that DESNZ does not seem to be considering this in the context of this consultation's proposals. In due course it will be important for industry to understand if and how this could impact the ongoing operation of the CM. If a strategic reserve is being considered, DESNZ needs to ensure

it is consistent with the options being considered now, as it would impact any investment decision. If the proposal is introduced next year as planned, a gas asset could qualify for a refurbished CM contract for 2029/2030- 2031/32. As such, any changes to future revenue such as through a strategic reserve must be communicated ahead of 2025 prequalification.

Question 2: Do you agree that lowering the capex threshold in this way would achieve the desired outcome? Please provide detail with your answer.

Most Energy UK members agree that, if implemented appropriately, a lowering of the capex threshold would incentivise the sufficient investment to extend the lifetime of many CMUs within the Capacity Market.

Question 3: Do you agree with the proposed reference cost level underpinning the new capex threshold? Do you have any evidence that this specific cost level would overcome existing barriers? If you disagree, please provide evidence for an alternative reference cost level.

Energy UK understands the Government's reasoning behind the proposal to reduce the threshold for Refurbishing CMUs to access three-year agreements to £50/kW – as stipulated in the Baringa study published in summer 2023. However, Energy UK questions why this figure is attached to a three-year agreement, when in Baringa's study this is the investment figure required to extend plant life by five years. Members would like further clarification as to why the threshold proposed is not set at £10/KW/yr, as represented in Baringa's modelling.

Furthermore, additional information will be required from DESNZ on the practicalities of implementing this proposal, given the relatively ambitious timeline for implementation.

Future capex threshold figures should be kept under review, to ensure that industry is not being required to spend unnecessarily to ensure an asset's extended lifetime.

Question 4: In your opinion, would this proposal result in a gaming risk; and would the proposed Independent Technical Expert certification be sufficient to mitigate the risk? If not, what other safeguards do you think should be put in place?

Energy UK agrees that appropriate safeguards should be in place to mitigate any potential gaming risk associated with measures to extend the lifetime of CMUs. We acknowledge there is danger attached to a reduction in the capex threshold that could result in gaming from CM participants.

This being said, some members perceive some difficulties relating to whether an Independent Technical Expert (ITE) can successfully and accurately determine whether work is 'necessary' or not. Unless the plant has failed and would otherwise not be operational, the consideration of 'necessary' is hard to assess. Said work to these assets could be to improve reliability, reduce the risk of major plant failure, improve efficiency, etc. and hence the argument for its necessity will often be likely to be somewhat subjective.

However, some members acknowledge that the relevant declarations for the ITE reports do allow for subjectivity (for example, point (b) in the Required Technical Standard allows the ITE to present opinions or forecasts which are fair and reasonable). Therefore, some members support the proposal to use an ITE assessment to mitigate the risk in the absence of any feasible alternatives.

Members largely believe that further clarity on the structure and process of the proposed ITE report is required before being able to provide a robust evaluation of its effectiveness. More widely,

members advocate for a more robust and standardised ITE process that provides greater assurance of proper security and accountability. It is also worth noting concerns from members over the risk of delays to the prequalification process, due to the number of projects which may be subject to an ITE. Further clarification from Government is needed on how this will be mitigated.

Some members have raised concerns about the current ITE regime's role in effectively approving multi-year refurbishment contracts, citing a lack of rigour in the procurement process and concerns about poor value for consumers.

Question 5: Do you have any views on how the proposed Independent Technical Expert certification should be implemented in a way that is proportionate and reasonable?

As noted above, Energy UK believes further clarification is needed on the ITE certification to be able to provide a clear view on how it can be proportionately and reasonably implemented. A robust set of criteria around the ITE assessment should be published well ahead of time, as well as a risk assessment, to allow market participants to assess their options.

Energy UK proposes the following considerations:

- Given the increased risk of gaming from reducing the £/kW threshold, and Government's concern that this could result in CM Agreements being awarded for works which would have been carried out anyway, some members believe that the proposed ITE certification should also reference the declaration that already exists in Exhibit A of the Rules. This states that the £/kW assessed has been determined without reference to "any substantive routine or statutory maintenance works required at the Refurbishing CMU".
- The proposed ITE certification could state that the 'improvements programme' is necessary to extend the operational life of the CMU *and* that it involves works which are not considered to be routine or statutory maintenance. This should be a statement that the ITE is able to make for a genuine improvements programme, noting the usual caveats in the definition of the Required Technical Standard.
- Some members would encourage Government to consider the impact on industry of overly restrictive ITE requirements on refurbishment spend, as it may introduce a risk that the proposals are too difficult to use for the assets that need them.

Question 6: Are there any potential unintended consequences or risks that you think the government should consider?

As outlined above, it is essential that the Government's Clean Power 2030 ambition is not undermined by potential measures to extend the lifetime of CMUs.

It is also critical that DESNZ considers these proposals in the context of wider market reform and initiatives including REMA, Strategic Reserve and the review of Demand Side Response in the Capacity Market. We are concerned at the moment that there is a lack of coordination within DESNZ between these two workstreams.

As far as possible, these proposals should also be minimally distortive to the market, promoting a technology neutral and competitive CM, aligning to our Net Zero ambitions, and ensuring good value for the consumer.

Decarbonisation Readiness

Question 7: What impact does a proposal for plants in England to demonstrate compliance with upcoming DR requirements have on plant participation in prequalification in 2025 and the early 2026 T-4 auction?

Energy UK is broadly supportive of the principles outlined in the Government's recently published Decarbonisation Readiness (DR) consultation response.

It is our understanding that, given the timing of the new DR requirement does not align with the upcoming CM round, the Government is aiming to secure a commitment from units in the 2025 CM prequalification round to meet these requirements.

There is, however, a level of concern over the potential for extra administrative burden on industry, as these proposals have the capacity to create more complexities within the prequalification and auction processes. As such, Energy UK would urge the Government to simultaneously ensure that DR requirements are sufficiently robust, whilst guaranteeing that any CM alignment is not overly burdensome for industry.

Further clarification is also welcome on the extra transitional funding support for the Environment Agency (EA) to alleviate any resourcing issues as it inherits extra administrative burden relating to ensuring DR compliance. As stated in Energy UK's response to the Government's consultation on proposals to expand the Carbon Capture Readiness (CCR) requirements in March 2023, more detail on resourcing is required on this given the scale of the challenge within EA. We have identified this as a considerable barrier to successful implementation and could potentially lead to significant delays for projects.

As such, across all Options presented, there should be safeguards in place for CMUs to ensure that any delays in receiving a permit which are attributable solely to the regulator do not result in termination. This would align with the arrangements in the current CM Rules for delays which are attributable solely to the providers of the asset grid connection.

Question 8: Do you foresee any difficulties in prospective plants being able to comply with the proposed requirements under Option A? If so, please say what they are.

Energy UK does not foresee many overwhelming difficulties in prospective plants complying with the requirements under Option A given the light touch nature of the proposal.

One concern, however, raised by some members is the potential that CMUs may fail to adhere to the DR requirements later in their agreements, given the voluntary nature of the commitment ahead of time, and no penalty for a failure to comply. There is a chance that plants may be built that would not be compatible with a low carbon system and then unable to operate throughout Delivery Years.

It is worth noting, however, that given the overall lack of detail across the three Options presented, it is not possible for Energy UK to take a definitive view.

Question 9: Do you foresee any difficulties in prospective plants being able to comply with the proposed requirements under Option B? If so, please say what they are.

Energy UK's initial view is that the permitting requirements in Option B are overly complicated and excessive, which would likely lead to difficulties for assets participating in the prequalification process.

One key concern is the potential for assets to face significant delays in obtaining the necessary permits from the EA. As such, attaching a termination event for failing to obtain a permit over a year, before the delivery year starts, feels unwarranted.

Members are not supportive of the implementation of Option B.

Question 10: Do you foresee any difficulties in prospective plants being able to comply with the proposed requirements under Option C? If so, please say what they are.

Similar to our views on Option B, Energy UK largely believes that Option C is unnecessarily cumbersome, and the permitting process should not fall under the remit of the Capacity Market.

Most members are therefore not supportive of the implementation of Option C.

It is worth noting that a minority of members think Option C is a preferable choice to Options A and B, given that it will compel asset owners to comply with DR requirements and gives greater time than B to obtain the permit. However, as noted previously, it should include a safeguard to avoid the termination of the agreement in the event a permit isn't awarded due to delays in the EA process.

Question 11: Which option do you prefer? Please explain why.

Based on the information provided in our response to previous questions, the majority of Energy UK members are in favour of Option A.

Question 12: If Option B or C are implemented, what are your views on whether they should be a permanent measure which applies to all future CM applicants?

Energy UK believes that, should Options B or C be implemented, they should not be made a permanent measure and should be removed when DESNZ is confident that the 'misalignment' with DR implementation and CM auction rounds has been corrected. Specifically, that the permitting process with DR has been established and operating normally, and that it is not possible for plants to enter the CM auction without going through the regular permitting process.

Providing clear and viable routes to decarbonisation

Question 13: Please indicate whether you would consider using pathway A and provide details to support your answer.

As a trade body, Energy UK does not own or operate assets. Our answer is based on insight from our members about their approach to decarbonisation routes.

Energy UK believes Pathway A is a pragmatic proposal to ensure a managed exit pathway for CMUs. This option is widely supported by our members. Energy UK members will individually provide further evidence in their consultation responses.

We believe that it is a sensible approach to first be able to qualify for a Dispatchable Power Agreement (DPA), and then subsequently apply to leave your CM agreement. This would ensure there are no substantial capacity gaps or misalignment in funding.

Question 14: Do you agree with the managed exit process timings for pathway A, as set out in Figure 1?

Energy UK agrees that the proposed timings for Pathway A seem reasonable. A notification cut-off of nineteen months before the delivery year, in which to signal intention to use a managed exit to the CM, allows the National Energy System Operator (NESO) time to adjust targets to the next T-4 auction round, while simultaneously removing any significant risk premium from investment decisions as early as possible.

Question 15: Do you agree with the proposed eligibility criteria set out in Table 1? Do you see any barriers to providing evidence of being party to a DPA at the required time? Please provide details to support your answer, including sharing your views on the nature of the evidence we suggest providing.

Energy UK is supportive of the proposed eligibility criteria as set out in Table 1 of the consultation. We agree that the criteria is logical and in line with the types of agreements it would apply to.

CMUs with multiple single-year agreements

However, while Energy UK welcomes proposals to provide a pathway for exiting the CM for CMUs with multi-year agreements, it is also important to note that the same issues arise for CMUs with multiple single-year agreements that may extend beyond the point at which a unit enters a DPA and wishes to transfer out of the CM.

As such, existing plants with single-year agreements need certainty that they can enter T-4 auctions in the knowledge that should they secure a DPA, they will not have CM Agreements terminated and face penalties. Therefore, we recommend that the criterion of holding a multi-year agreement should be removed in order to provide a level-playing field and ensure maximum liquidity in upcoming auctions.

Barriers to evidence

There is insufficient information about the process of providing evidence for Energy UK to provide a definitive view on barriers. However, on the basis of what is included in the consultation, Energy UK does not anticipate any issues for assets to provide evidence.

Timelines

Energy UK urges the Government to provide greater clarity on its approach to the allocation of CCS DPA agreements, as timelines for DPA contract allocation have not yet been confirmed. Furthermore, without the Network Code in place, issues with timing misalignment are likely if a CMU is awarded a DPA contract, but unable to get connected straight away.

Question 16: Can you identify any unforeseen consequences in the CM that could arise from a managed exit via pathway A? Please give details with your answer.

A key concern for Energy UK with Pathway A is the lack of clarity from Government on the management of volumes of capacity likely leaving and re-entering the CM. Will this capacity be replaced, and the temporary CM volume losses taken into consideration as part of future demand forecasts?

As such, it would also be useful to understand whether Government has plans to enforce a cap on the volume of unabated gas that can step out of the CM at once, and if so, how would Government decide who was authorised a managed exit over others? Some members advocate for a risk assessment, which would cover all proposed Pathways, to account for the important locational and operational flexibility aspects of volumes exiting the CM.

Energy UK would like to emphasise the importance of a holistic and joined-up approach to managed exits. While this consultation focuses solely on a managed exit for CCUS as part of a DPA, there are other funding mechanisms and contracts for emerging technologies that will likely interact with the CM. Energy UK has concerns around the timings related to these proposals, and would welcome more transparency from DESNZ around potential impacts on consumer costs of transitioning from a 15 year CM agreement to a DPA.

Energy UK recognises that other Pathways are explored in DESNZ's related Call for Evidence, but urges Government to take a consistent approach to all technologies and their associated managed exits from the CM.

Question 17: If you were a multi-year agreement holder for an unabated gas CMU that you planned to convert to power CCUS, how would you prefer to manage the outages associated with the conversion process? Please provide details of your answer with reference to the options stated in the proposed generation outage management section and any supporting information, including the conversion type, capacity size, and generation outage period.

Option 1

Energy UK believes that Option 1 is counterproductive as it could unnecessarily penalise assets for switching to a low-carbon technology as a result of their obligation to the CM agreement.

There is an assumption that Original Equipment Manufacturers (OEMs) will have the capacity to schedule works during specifically planned outages, but these often happen at peak time for regular maintenance, which could lead to delays and potential risks to security of supply.

Option 2

Energy UK believes that Option 2 would come with significant commercial risks for participants, due to the lack of liquidity in secondary trading.

It is well known that there are many longstanding issues with secondary trading. Energy UK believes that a range of improvements would need to be made before considering this as a viable option. Energy UK has previously called for increasing the window for secondary trading to take place (e.g., from the conclusion of the T-4 auction) and allowing prospective CMUs to trade away obligations before achieving the Substantial Completion Milestone.

Energy UK also understands that DESNZ and Ofgem are currently undertaking a holistic review of secondary trading arrangements in the CM (as discussed in the Capacity Market Advisory Group meetings), and so cannot comment on the suitability of future secondary trading whilst the outcome of that review is not known. Members encourage Ofgem and DESNZ to provide updates to industry on this as soon as possible as it has been an industry priority for the CM for several years.

Energy UK also has concerns with the potentially slow process of bilateral engagement, as well as difficulties in sourcing an off-taker that could provide the sufficient energy required.

Option 3

Energy UK considers Option 3 to be the most technically feasible approach to managing outages associated with the conversion process. It is likely that a “grace period”, whereby a CMU has exited its CM agreement before conducting the necessary works to decarbonise, would allow for a far smoother process in comparison to Options 1 and 2.

Similar to Option 1, the level of efficiency is dependent on the availability of specialists. Outages will need to be project-specific. This means that timings will not necessarily align with CM delivery years.

As above, a key concern about Option 3 is the potential capacity gaps that could occur as a result of assets leaving the CM for an extended period of time, which could impact market resilience and system reliability.

It is challenging for Energy UK to take a definitive view on the management of future outages without more certainty and information on this scenario. Specifically, it is difficult to provide an answer on the management of outages without sufficient certainty on how long it should take to convert technologies to CCS, as well as how long of an outage is needed.

Further clarity is required on the number of exist pathways that will be made available as this will affect decision making and should be factored into capacity planning.

Question 18: Are there any additional barriers, whether under the CM or not, which would prevent you from using pathway A?

Energy UK maintains that there is a real need for Government to provide policy certainty and visibility to industry. The current lack of long-term assurance for alternative power decarbonisation contracts is a barrier to investment and is limiting industry’s ability to be an early mover in this space.

Energy UK believes it is essential to ensure that outage periods for CCUS-related work are free from penalties, so that projects are not discouraged by short-term capacity obligations.

Question 19: What are your views on whether a decision to refuse a notice of intent to use a managed exit should be a Delivery Body reviewable decision under Regulation 68 of the Electricity Capacity Regulations 2014?

Energy UK supports the proposal for a notice of intent to use a managed exit to be a reviewable decision under Regulation 68 of the Electricity Capacity Regulations 2014. We agree that this would give CM participants greater confidence in knowing that commercially significant decisions made as part of the CM prequalification process are able to be challenged and refuted where necessary. Should these decisions go unchecked, it would likely represent a sizeable commercial risk.

Energy UK believes that Government could go further to ensure decision makers are held accountable by proactively providing greater clarity on the criteria under which a delivery body might refuse a notice.

Question 20: What wider changes to the CM and other policy would you expect to be needed to enable unabated gas CMUs to decarbonise?

Energy UK notes that the decarbonisation of unabated gas assets will require joined up thinking across the Government's energy policy workstreams. A holistic approach should be taken to ensure that CM reforms for the decarbonisation of unabated gas are aligned with objectives for REMA and Clean Power 2030.

The Government must also provide early indication and clarity on long-term policy decisions about the role of unabated gas in the UK power market in the mid- to late-2030s. This includes plans for a strategic reserve as set out in the Government's General Election Manifesto 2024, and how this interacts with the proposals set out in this consultation.

Assessment of Impact

Question 21: Do you agree with the consideration of impacts set out in this consultation? Are there any additional impacts of the policies we are consulting on which the government has not considered? Please provide supporting evidence where possible.

This consultation notes that the lifetime extensions proposal "has the potential to reduce liquidity in future auctions as we lock-in multi-year agreements of up to three years for existing assets". It is unclear what is meant by this. Energy UK's understanding is that the proposal should not negatively impact auction liquidity, as the capacity awarded to multi-year Agreements would then be included in NESO's Base Case for the following two T-4 auctions, and therefore would not need to be procured again in those years.

In other words, the volume of capacity entering subsequent auctions would decrease, but so would the auction target. Energy UK would welcome clarification from Government on this point.