

Capacity Market: Improving delivery assurance and early action to align with net zero.

Energy UK Response

1 November 2021

About Energy UK

Energy UK is the trade association for the energy industry with over 100 members spanning every aspect of the energy sector – from established FTSE 100 companies right through to new, growing suppliers and generators, which now make up over half of our membership. We represent the diverse nature of the UK's energy industry with our members delivering almost all (90%) of both the UK's power generation and energy supply for over 27 million UK homes as well as businesses. The energy industry invests over £13.1bn annually, delivers around £85.6bn in economic activity through its supply chain and interaction with other sectors, and supports over 764,000 jobs in every corner of the country.

Executive Summary

Energy UK and our members thank BEIS for the opportunity to respond to this Call for Evidence and their proactive engagement with Energy UK members so far. We can confirm that we are happy for our response to be published.

Energy UK is fully supportive of the Government's ambition to reach Net Zero by 2050 and welcomes the Government's broad intent to drive to go further and faster on decarbonising the power sector as we work towards our target. Energy UK therefore welcomes this Call for Evidence and strongly supports the focus on urgent action to align the CM with net zero.

We would however like to emphasise that it is crucial the Government communicates a long-term vision for the future UK energy market. We note that this Call for Evidence has been released alongside several other government Calls for Evidence and Strategies. It is important to consider that policy decisions made on the Capacity Market as set out in this Call for Evidence may be subject to decisions coming out of other government publications. In particular we are referring to the CfE on facilitating the deployment of large-scale and long-duration electricity storage¹, the UK Government's Hydrogen Strategy² and Ofgem's Proposals for a Future System Operator³ to name a few. Once the feedback from stakeholders on the various publications has been collated and considered by BEIS we would welcome communication of a clear 'wider plan' and timeline setting out when we can expect certain policy decisions to be made.

Question Responses

1) Low carbon capacity in the CM

Question 1 - Could 'low carbon capacity' in the context of the Capacity Market be defined in terms of an emissions limit? If so, what should form the basis of this limit – for example, would it be better to base a limit on carbon intensity or overall annual emissions, and what types of capacity should be captured by this emissions limit?

¹ <https://www.gov.uk/government/consultations/facilitating-the-deployment-of-large-scale-and-long-duration-electricity-storage-call-for-evidence>

² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1011283/UK-Hydrogen-Strategy_web.pdf

³ <https://www.gov.uk/government/consultations/proposals-for-a-future-system-operator-role>

Overall, if a separate auction is introduced for new low-carbon capacity in the CM, an emissions limit would be needed to limit access to this auction. The majority of Energy UK members feel the most appropriate measure would be an instantaneous limit (rather than an overall annual emissions limit) and this would therefore require a new definition for low carbon.

We do not believe that bringing the limit down gradually from the current 550g limit will work given that the next most carbon intensive fuel after coal is gas. Whilst there are variations in efficiency, these are in a narrow range and an instantaneous limit would remove peaking plant first – which would be detrimental to security of supply. Some members propose that an annually reducing emissions bubble could be introduced – based on CMU emissions in for example 2019 (i.e pre Covid).

To expand on this, basing the emissions limit on carbon intensity would be advantageous for net zero alignment as this would negate a route to market for any existing unabated gas assets with low running hours, which under an absolute emissions target would limit any new low carbon assets clearing in the auction.

Other Energy UK members, although not opposed to emissions limits in general, question whether or not it is in fact appropriate that this falls within the CM instead of falling under the wider Environmental Permitting Regulations (EPR)⁴ in England and Wales as set by the Environment Agency (EA) and Natural Resources Wales (NRW).

Regardless of the path chosen, there is a consensus amongst Energy UK members that it is not preferable to have two mechanisms setting emissions limits. We strongly believe it needs to either fall under the CM or the EPR.

Finally, it is critical that BEIS ensure that any changes to emission levels will also need to reflect (or at least try to balance) least cost to the consumer and not impinge on security of supply.

Question 2 – Are there alternative approaches to defining low carbon capacity in the context of the Capacity Market? Please provide justifications

Energy UK members do not have strong opinions on alternative approaches to defining low carbon capacity in the context of the Capacity Market.

Question 3 - What are your views on the benefits or challenges of linking future long-term Capacity Market agreements to a new carbon emissions limit? Do you have any suggestions regarding an appropriate approach to setting such an emissions limit, and how could we best account for 'lower' rather than 'low' carbon technologies in determining eligibility for multi-year agreements?

In general, Energy UK support linking future long-term Capacity Market agreements to a new carbon emissions limit.

Please see our answer to question 1 for suggested approaches.

Question 4- Is it necessary and appropriate for carbon intensive generation to continue to access shorter multi-year agreements, until such a time as low carbon dispatchable generation is more widely available?

Energy UK do not have a strong opinion on this question. However, it is important to note that currently (particularly in light of recent events), there is a role for carbon intensive assets to ensure security of supply. Despite this current need, we strongly suggest that BEIS ensure carbon intensive assets are not locked in for the long term, particularly in the context of the UK Government's commitment to decarbonise the UK power system by 2035⁵.

⁴Environmental Permitting Regime Core Guidance

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/935917/environmental-permitting-core-guidance.pdf

⁵ [Plans unveiled to decarbonise UK power system by 2035 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/plans-unveiled-to-decarbonise-uk-power-system-by-2035)

The majority of our members support the proposal to set aside longer 15-year agreements for low carbon technologies (we expand on this in our answer to Question 10).

Question 5 - Would you expect these suggested changes to agreement lengths to affect your decision to participate in the Capacity Market, your bidding behaviour, or the costs of and access to finance? If so, how? Can you suggest any alternative approaches to ensuring agreement lengths offered in the Capacity Market are consistent with the delivery of net zero targets?

Energy UK ask that BEIS defers to individual Energy UK member responses with regards to question 5.

Question 6 - Is it still appropriate to maintain the link between capital expenditure thresholds and multi-year agreements? If not, what other criteria could we consider using to assess eligibility for multi-year agreements (other than the new lower emissions limit discussed in section 2.3.2.1)?

We believe there should be a link between capital expenditure thresholds and multi-year agreements. The thresholds require revision to make them more relevant to the type of capacity that can contribute to the net zero ambition.

Question 7 - Should we revise the applicable capital expenditure thresholds? If so, what data could we base them on, and do we still need to have two different thresholds? Should low carbon DSR be able to access shorter multi-year agreements on the basis of emissions limits rather than capital expenditure thresholds?

We believe that BEIS should revisit when original thresholds were made, match them against expected costs at that time and assess whether underlying costs have changed since then. Additionally, BEIS should assess whether the projects looking to take contracts have changed and adjust accordingly. BEIS should also consider thresholds in the context of its low carbon ambition.

Some members do not agree with low carbon DSR being able to access short multi-year agreements, as there should be a level of transparency from the DSR regarding their components and emissions. These members believe that BEIS should also consider the risks associated with providing long-term agreements to DSR where their sources are likely to be non-firm for the duration of the contract- particularly given that the contract will be procured 4 years ahead of when they are needed.

Question 8 - Should we review the 77-month window for new builds?

Energy UK welcome verbal reassurance from BEIS that any review of the 77-month window for Capex thresholds for newbuild CMUs will be considered in a formal consultation. We also suggest that the window should also be applied to refurbishing CMUs who also incur capex ahead of auction results day.

Energy UK do not support moving the 77-month window until after CM auction results day.

If longer construction times are to be introduced for CMUs that cannot become operational in the current 4-year lead time, this 77-month window may need adjusting specifically for them – a 6-year lead time would be 72 months (less some because the auctions do not currently take place in September) which would not allow much pre auction expenditure to be captured.

Question 9 What are the benefits of maintaining the Extended Years criteria?

Energy UK requests that BEIS defers to individual member responses when considering Question 9.

2) Removing barriers to the participation of technologies and projects with long build times (Agreement lengths and Project Lead Times)

Question 10 - What are your views on the introduction of a declared later delivery year as a way of addressing the challenges experienced by projects with long build times seeking to enter the Capacity Market? Would this affect your decision to participate in the Capacity Market, and if so, how? Are there other approaches we could take to removing barriers to participation for technologies and projects with long build times?

The majority of Energy UK members support allowing New Build Generating CMUs and also Refurbishing CMUs to declare at prequalification stage a later first delivery year (a 'declared later delivery year'), up to and including the delivery year which commences two delivery years after the delivery year for the relevant T-4 auction. However, while we do not object to longer lead times for certain technologies, BEIS should be aware that it could lead to unusual auction outcomes if a plant that needs a longer lead time sets the auction price but is not there to deliver it in the same delivery year.

The majority of our members support the proposal to set aside 15-year agreements for low carbon technologies. This will be needed for capital intensive projects such as hydro-pumped storage in particular. However, thought needs to be given to whether or not abated technologies and CCS should be included in this. As well as whether this would apply to hydrogen projects (given the relatively low capex but high operational (fuel) costs). Energy UK would support the inclusion of CCS and hydrogen projects in the eligibility criteria for 15-year agreements (again, provided they are also not supported by another mechanism outside of the CM). Some Energy UK members would also support the inclusion of hydrogen blend projects within the eligibility criteria, though some members do not believe that any blend with natural gas should be clarified as low carbon.

Furthermore, whilst the majority of members are supportive of longer lead times, for long build time low carbon projects (i.e., pumped storage) it is important that BEIS takes a wider view as to how such projects could be supported by different mechanisms (e.g., Cap and Floor) in this respect. The majority of members believe that the proposal to limit projects which could potentially benefit from the Cap and Floor arrangements to one -year CM agreements seems like a sensible approach. This aligns with our position highlighted in our response to the BEIS Call for Evidence on facilitating the deployment of large-scale and long-duration electricity storage.⁶ However, we would point out that a small group of our members disagree with this, highlighting their rationale that whilst that approach would be consistent with the current treatment of interconnectors, those restrictions were introduced as an interim measure pending changes to the CM that would enable cross-border participation by Capacity Providers in the CM and therefore this rationale does not apply to LLES projects. Whilst all members agree that BEIS should avoid a situation where there could be over-subsidy, a small proportion of members have put forward the view that a Cap and Floor does not operate in the same way as other support mechanisms, such as CfDs, and so would not lead to the same risk of over-subsidy.⁷ We ask that BEIS engages with wider industry to further understand the reasons behind these differing views before reaching a decision.

In addition to the points made above, another small group of our members do not support any preferential changes for low carbon technology in the CM at all at this time due to the following concerns:

- They do not believe the CM is the appropriate delivery mechanism for low carbon technology. Instead, these members feel that DPAs and CfDs are more suited to deliver these changes.

⁶ [publication.html \(energy-uk.org.uk\)](#)

⁷ Two members believe that LLES projects with access to a Cap and Floor Mechanism should also be eligible to receive a 15-year Capacity Market Agreement. They believe that it is likely to be beneficial to enable LLES projects to receive 15-year contracts and be able to declare a later delivery year. Longer contracts provide greater long-term cashflow certainty and therefore a lower effective cost of capital. It also has the complementary benefit of increasing competition for the provision of long-term capacity.

- Concerns are held by a small proportion of members around the potential illiquidity in the CM if these changes go ahead with other support schemes still in place (particularly with split auctions).
- They do not consider there to be evidence that these arrangements will actually succeed in providing a route to market for low carbon technology.
- Finally, they hold concerns around the potential for a double subsidy.

There are multiple methods of intervention for bringing forward new technologies with longer build times that are currently being considered by Government (e.g., the DPA for CCS, potentially Cap and Floor for LLES). It is possible that in the long-term future, all of these technologies could be supported by the CM (this would improve competition between technologies). We encourage the ESME team at BEIS to ensure that their thinking is joined up with other BEIS teams and that a long-term vision is planned out in this respect once the live Calls for Evidence and consultations close. We also encourage BEIS to conduct analysis to produce a working model setting out how much capacity is expected to be needed and what the energy system will look like in the years running up to 2050.

On a separate note, related to the above points, Energy UK have previously called for a T-4 auction to occur exactly 4 years before the relevant delivery year as opposed to 3.5 years before. We strongly urge BEIS to look into this again as a matter of priority.

Question 11- Do you agree with our suggested approach to determining and verifying eligibility for a declared later delivery year? Are there other approaches we could consider?

Yes, we agree that the suggested approach is a sensible means of quantifying for a declared later delivery year.

Question 12- How can we best mitigate any security of supply risks arising from this approach? Can you identify any additional risks and/or disbenefits related to the introduction of a declared later delivery year?

As touched upon above, if the ability to opt for a later delivery date is introduced for some low-carbon new-build projects, it will be important that the equivalent capacity is added to the level procured in the 'main' T-4 auction for the Delivery Years for which that capacity will not be available.

Some members feel it would be imprudent to leave the shortfall to the T-1 auction as liquidity may be insufficient to ensure security of supply. However, other members feel that accounting for a shortfall in the T-1 would be a simpler option, as long as this intention is signalled early as not to skew the price too much. We would welcome further analysis in the area should BEIS choose to adjust project lead times and agreement lengths as suggested.

The possibility that an agreement could be terminated if a CMU Delivers early is of concern to Energy UK members. If this rule was to be introduced, then the logistical response would be to not rush for fear of termination. It must also be borne in mind that if constructed sooner than expected, the CMU could be able to contribute to security of supply as well as being low carbon and thus contribute to being able to speed up the energy transition.

As a final point on the Agreement Lengths section of the Call for Evidence, Energy UK strongly recommend that BEIS ensure that any policy decision made is flexible and adaptable to the future market.

3) Alternative Auction Designs

Question 13- What are your views on the benefits and challenges of introducing an auction design splitting auctions between new build and refurbishing low carbon capacity and existing capacity? Would this affect your design to participate in the Capacity Market or your bidding behaviour, and if so, how?

This question on the benefit and challenges is difficult to answer without knowing what other mechanisms might be available to support decarbonisation and to whom they will be applied. There should be the basic premise of avoiding over subsidy – a CMU should not be able to access two multi-year agreements that allow it to be over compensated. As mentioned in question 10, a large proportion of our members believe that a CMU should be able to take part in either the CM under a multi-year agreement or another type of long-term support but should not be able to access two sources of multi-year agreement that would allow it to be over-subsidised.

Question 14- What are your views on the potential split auction designs considered in sections 2.5.2 and 2.5.3? Are there alternative designs we should consider? And what approach could we take to setting targets for a separate low carbon auction?

Views on split auctions

In theory, Energy UK are supportive of the potential split auction designs considered in the Call for Evidence to incentivise more low carbon generators in the CM. Energy UK would like to highlight some practical issues that BEIS will need to iron out before going ahead with this proposal. Therefore, at this stage, we cannot say whether we are unconditionally or conditionally supporting the introduction of a split auction to bring forward low carbon capacity as we require more information and engagement with BEIS before we can reach a firm view.

Firstly, we note that the 2023 timescale BEIS reference in the Call for Evidence is extremely ambitious. Given the current issues with the Delivery Body (DB), in particular the with the DB portal (see the Energy UK document prequalification key asks, first sent to BEIS in January 2021, for more details). We welcome prior clarification from BEIS that the DB have been heavily involved in the development of this proposal. If BEIS decide to move forward with this proposal, we would further welcome a timeline setting out how the DB will be able to practically and logistically deliver this proposal by 2023.

Secondly, we would welcome more information on how a low carbon auction would work in practice (i.e., alongside CfDs and potentially a Cap and floor for other types of subsidy low carbon generation) and what BEIS would expect to see in terms of amounts and types of low carbon capacity participating in this alternative split auction. There is a strong need for BEIS to present a bigger picture of how best to support low carbon plant in the future (i.e., through the CM, CfD, revenue stabilisation such as Cap and Floor etc).

Finally, to reiterate, Energy UK urge BEIS to ensure consistency in messaging and joined up thinking with relation to other policy publications and decisions being taken at the same time (e.g., the LLES Call for Evidence, the Future System Operator proposals and the Government's Hydrogen Strategy).

Auction designs

In terms of auction designs, If BEIS are to move forward with this proposal, Energy UK's preference would be running 2 categories in one auction (i.e., having a low carbon category within the 'normal' T-4 auction rather than having 2 separate auctions).

Approach for setting targets

In terms of the approach BEIS should take on setting targets for a separate low carbon auction, we would first welcome clarity from BEIS as to what technologies they intend to categorise as 'low carbon'. For example, will batteries be counted in this category along with unsupported renewables, and LLES technologies such as pumped-hydro storage? One possibility that a few of our members have suggested could be to only require combustion CMUs seeking classification as low carbon capacity to demonstrate compliance with a carbon emissions limit. In this case, low carbon plant such

as storage, renewable generation, hydropower, nuclear and turn-down DSR would automatically qualify for the proposed low carbon benefits. Some members feel that this approach would have the benefit of avoiding the need to set a methodology to calculate emissions from renewable, storage capacity etc, which are assumed to comply already. These members see this working in a similar way to the current Rules for Fossil Fuel plant (i.e., a definition would be set out in the Rules for combustion CMUs and a methodology written for only those CMUs. All CMUs would then need to make a declaration at prequalification.

Furthermore, in our view we do not believe that interconnectors for example should be counted as 'low carbon' given that you cannot guarantee the carbon intensity 4 years in advance and also cannot establish derating factors for 15 years with any agree of certainty.

Question 15- What are your views on expanding the scope of the Price Taker Threshold to potentially make it a price cap for Price Taker Capacity? Would this impact bidding behaviour? What changes to the Price Maker Memorandum might be necessary to ensure any changes to the Price Taker Threshold would be effective?

Energy UK does not have a strong view with regards to this question. We request that BEIS defers to individual member responses.

Question 16- What are your views on the potential benefits or challenges of amending the Net Welfare Algorithm to calculate to next lowest bid, rather than by the round floor price? Would this have an impact on bidding behaviour?

One potential challenge highlighted by an Energy UK member is that this would likely lead to Applicants submitting exit bids at the auction round floor in each round, if their intended exit bid was lower than the round floor. Although, the suggested would not have changed the outcome in the 2021 T-1 auction.

Question 17 - How might the changes to auction design considered in section 2.5 interact with other design possibilities explored in Chapter Two concerning agreement lengths (2.3) and projects with long build times (2.4)

This question is difficult to answer without knowing whether BEIS intends to introduce a Cap and Floor arrangement for certain technologies.

BEIS needs to ensure that CMUs that do need longer lead times / a longer period of qualifying capex / are low carbon / are in receipt of another subsidy such as the Cap and Floor / are refurbishing etc., do not fall between the policy cracks because they end up being a small subset of the range of technologies in the CM. The revised design whether it be a split auction or a single auction needs to cater for all these variations.

4) Short term considerations: improving delivery assurance (penalty regime)

Question 18- What are your views on changing the figure used in calculating the penalty rate (for example, from 1/24 to 1/8 or 1/4)? Should the penalty rate be linked to the Value of Lost Load rather than the auction clearing price? Please provide supporting reasons/evidence.

Energy UK members would support a review of all penalty fees within the CM. We believe that a review of penalty fees for non-delivery should be considered in conjunction with existing fines and termination fees to ensure that any adjustments are proportionate. To aid this, Energy UK would welcome an anonymised overview of what the determination and penalties in the CM have looked like so far (outside of non-delivery given there has been no stress event to date). Energy UK would also support simplification of how penalties are applied which will contribute to removing complexities from the CM as a whole, provided that the same outcome can be ensured (i.e.) creating the right behaviour without being overly onerous on CMUs.

There are three schools of thought within Energy UK:

- i. Some Energy UK members feel that in the absence of a CM stress event to date, it is not appropriate to strengthen non-delivery penalties given that they have never been issued before and their effectiveness cannot be tested. In their view, this issue is more about CMUs that don't interact with the wholesale and balancing markets and for whom the CM is an opportunity to earn extra revenue, without having to do much in return. These members believe that it is incredibly unfair to penalise the many (who have a strong incentive to deliver via other market mechanisms) for the behaviour of a few (who don't). These Energy UK members feel that increasing the CM penalty across the board would only be fair if the cash out penalty was applied in a system stress event to non-BMUs who don't deliver.
- ii. Other members consider the existing fines and terminations fees to be too harsh and current non-delivery fees to be too soft - leading to disproportionate outcomes. These members feel that the fees for non-delivery should reflect the outcome of a plant not being able to deliver in a stress event and a balance needs to be struck between ensuring enough capacity can be procured and ensuring the awarded capacity is actually able to deliver when called upon.
- iii. Different members believe BEIS should proceed and tighten penalty rates for non-delivery in the near-term to ensure the CM provides system reliability.

Whilst we have not indicated a preferred option in this Call for Evidence response and would welcome a wider review of all penalty fees, we have set out some thoughts from Energy UK members on some of the proposals below.

Energy UK members feel that the existing link between the auction clearing price and the penalty rate is not a useful one and do not support this proposal. Members feel that a single known flat rate would better reflect the impact on consumers since the impact of loss of power is not in any way related to the outcome of an auction held four years previously. Also, the fact that T-1 auctions have cleared at very different levels to the T-4 auctions highlights that the clearing price of the T-4 auction is not a good indicator of the value of capacity closer to the delivery year. Having a penalty rate that is fixed in advance of any auction would provide a clearer signal with respect to delivery obligations and would avoid the current situation where different CMUs have greatly differing penalty rates depending on which auction, they acquired their capacity agreement. Energy UK believe that the absolute level of such a penalty should be a matter of formal consultation, but it should be recognised that parties already face potentially strong cash-out incentives to deliver and having a penalty rate set too high would not be efficient.

Question 19- 22 - What are your views on the changes we consider to the annual and monthly penalty caps? What are your views on the options we consider for improving the coordination of capacity during a stress event? Do you agree with the idea of introducing an additional Satisfactory Performance Day for CMUs that fail to deliver in a stress event?

We ask that you defer to individual member Responses for detailed views on questions 19-22.

To reiterate, we support BEIS' intention in the five-year review to review the existing penalty regime in its entirety.

Question 23 – Would you expect any of these changes to the penalty regime to affect your decision to participate in the Capacity Market, your bidding behaviour or the cost of and access to finance, and if so, how?

Energy UK is not in a position to provide this information. We please ask that you defer to individual member responses when considering this question.

Question 24- What are your views on the benefits and challenges of the alternative model for a penalty regime set out in section 3.1.5? Are there other models we should consider?

As mentioned in our answer to question 18, on the whole, the majority of Energy UK members welcome sharper penalties as a way of ensuring delivery and that participants are not incentivised to participate even if they are not confident of delivering their obligations. We therefore support a review of both the calculation of the penalty rate and the raising of the existing annual cap on penalties – subject to consultation.

Those that do not support a strengthened penalty regime consider that the Capacity payments for CMUs are an essential part of their revenues and they have a very strong incentive through the wholesale market to respond to scarcity signals to avoid imbalance. Penalising further in the CM for non-delivery is not warranted. In addition to this, some members have expressed concerns that too harsh a penalty regime could deter new project development, especially newer, state of the art low carbon technologies (this is due to the fact that such assets are likely to have teething issues relevant to mature technologies), as well as prematurely hasten the closure of older assets that otherwise may be able to support security of supply through the transition.

One of the potential proposals is to recover non-delivery penalties through a suspension of payments for a pre-determined number of months. This in our view would hamper the efficient operation and dispatch of plant and lead to unnecessary costs and emissions. It is currently possible to manage outages and to respond to periods of low demand in the knowledge that after a system security event it is possible to allocate over-delivered energy from one CMU to another that may have under delivered. This facilitates normal outage patterns and efficient dispatch since the penalties are related to MWh and can be traded after a system event. If the penalties become based on monthly blocs, it is difficult to see how trading would function and it would necessitate a much more simplified way of pre-empt trading of agreements in order to manage outages and even dispatch decisions. Such transfers are currently very difficult and liquidity is poor as units cannot take on obligations above their de-rated capacity. In any case, the approach would not ensure that credit cover does not become an issue if the annual cap is raised.

Further to this, there are considerations we believe BEIS should take into account before reaching a decision:

- The effect a penalty regime that is too 'harsh' will have on investor confidence as well as the risk of some participants facing administration in the worst-case scenario.
- the effect a penalty regime will have on intermittent renewables particularly during longer than expected periods of system stress. The CM should not disincentivise the participation of technologies that cannot deliver energy with certainty or indefinitely such as renewables. However, we equally believe the same rules should apply across all technologies rather than positively discriminating. We point out that if penalties are strengthened, this should be resolved through secondary trading arrangements so that a CMU is able to trade right up to delivery. We urge BEIS and Ofgem to share more information on the work being done on secondary trading as a matter of priority.
- Exempting gas generators from CM penalties if they have been load shed (instructed to stop taking gas) in order to manage the safety of the gas system in a gas supply emergency i.e. through no fault of their own.

5) Connection Capacity Tests

Question 25 - What are your views on appropriate testing arrangements for wind and solar CMUs, distribution connected CMUs, and co-located CMUs?

Energy UK welcome clarity and detailed rationale from BEIS as to what the current issues are that have led to BEIS considering arrangements for Connection Capacity Tests.

Energy UK supports the idea of being able to choose a connection capacity but not the need for a connection capacity test. CMUs are not being paid on the CM connection capacity but on their derated connection capacity (their capacity obligation) and currently have to 'point' to settlement periods where they have metered at this level. They also have to perform Satisfactory Performance Days (SPDs) at their capacity obligation. We therefore do not agree with the statement on page 53 of the consultation document that:

'Any over-stating of Connection Capacity may result in consumers paying for capacity which cannot be relied upon or is not available as the nominated capacity is potentially greater than the CMU can deliver'

The metering evidence provided at pre-qualification demonstrates that consumers can rely upon the capacity. Having the test ahead of the Delivery Year only shows that the capacity can be relied upon at that moment – it does not guarantee any further that it can be relied upon in the Delivery Year. Performing the test may not be possible for CMUs that are on long term outage and only returning to operation for the Delivery Year

If BEIS and Ofgem continue to be concerned that an applicant may overstate its connection capacity, one solution to consider could be that BEIS could require one of the SPD tests to be at the connection capacity and if this cannot be evidenced, the CMU would face a connection capacity overstatement penalty. This would ensure that at pre-qualification CMUs did not overstate their connection capacity.

Regardless of the approach taken, BEIS need to carefully consider and engage directly with relevant parties on how exactly this will work in practice. It is important that if BEIS proceed with this proposal it does not become unduly onerous on CMUs.

To further explain this, when looking at renewable assets we do hold concerns that the Connection Capacity testing arrangements could affect the time a renewable site can be operational. BEIS will need to work closely with renewable assets to work out a solution that will mitigate this risk. If the test is introduced, we believe that it should apply to all CMUs. For wind, setting a threshold will be difficult given the differing outputs and performances on wind farms dependant on their location.

With respect to co-located CMUs, it is already a requirement for transmission connected units to maintain sufficient TEC to allow for the export of the sum of derated capacities of units at the same site. This ensures that all CMUs are able to deliver their obligations at the same time. If the proposals for the testing of Connection Capacity are taken forward, then it would follow that the obligation should be enhanced to cover the sum of Connection Capacities, thereby avoiding the need to simultaneous testing. Similar obligations should be in place to ensure that distribution connected CMUs also have sufficient distribution capacity to allow for the sum of all Connection Capacities to be exported.

Question 26 - Which is your preferred option of those proposed in section 3.2.5 relating to the timing of the connection capacity test? Are there alternative approaches we could consider?

We recognise BEIS' preference for the Connection Capacity Test being undertaken by the February, ahead of prequalification for the T-1 auction to minimise the risks to security of supply. We do however question what would happen if there was a long-term outage for a particular asset that is only returning to operation for the Delivery Year. Further questions are raised in this respect in terms of evidencing that a CMU is unable to undertake the test due to an outage.

Energy UK request that BEIS engages with Ofgem on the findings of the Ofgem Call for Evidence that took place last winter (2020) specifically on small CM plants and visibility of availability.

We also question what the connection capacity tests proves beyond the evidence of capability required at pre-qualification. Here applicants have to evidence metering at their derated connection capacity given that CMUs are paid at this level, it seems unreasonable to require them to evidence a greater level of delivery.

6) Capacity obligations of CMUs that have been terminated

Question 27- Would it be beneficial for us to enable a third party (such as the Delivery Body) to re-auction capacity obligations in respect of CMUs that have been terminated during the delivery year, or between a capacity auction and the start of the relevant delivery year? If so, what are your views on the principles for such an arrangement (set out in section 3.3.2), and do you have any commercial considerations and/or concerns about the use of a third-party facilitator?

Energy UK strongly believe it would be beneficial for BEIS to enable a third party, such as the Delivery Body, to re-auction capacity obligations in respect of CMUs that have been terminated during the delivery year, or between a capacity auction at the start of the recent delivery year. We request that if BEIS decide to go ahead with this change, that it is made a priority change.

Energy UK are not in a position to provide commercial considerations on behalf of our members; however, we ask that you defer to individual member responses for more information.

7) De-rating factors

Question 28 - In your view, do the current de-rating methodologies remain appropriate and reflect a CMU's risk of non-delivery? If not, what alternative methodology could be applied and why? Please submit any evidence in support of your view.

Some Energy UK members believe that the current de-rating methodology is in need of reform to better reflect the risk of non-delivery from each individual CMU.

We note that on Page 59 of the consultation document, BEIS suggest that one approach could be

'Allowing capacity providers to decide their own de-rating factors, with the NGENSO's calculated de-rating factors acting as an upper limit. The introduction of tougher non delivery penalties... may encourage capacity providers to select de-rating factors more reflective of their CMU's technical performance and risk of non-delivery.'

These members agree that instead of each technology type having the one de-rating factor, capacity providers should be able to choose their own de-rating factor within an agreed band. This would allow capacity providers to ensure that their de rating factor better reflects their specific asset and the factor chosen would also be influenced by tougher non-delivery penalties.

8) Long term considerations: Capacity Market Ten-year review and Future Market Design

Question 29: Do you have initial views based on your experience on the Capacity Market's performance since its implementation that we should consider?

Energy UK very much welcome the fact that BEIS are commencing this work early and we strongly support the focus on net zero. Energy UK also welcome the Co-creation approach BEIS have proposed to take and we look forward to hearing how this will work in practice, not least with the creation of the CM Review and Design Committee, which we are eager to be involved in. We would like to request that BEIS ensures a diverse set of parties and stakeholders are included in the CM Review and Design Committee to ensure that all perspectives are seen.

Given that Government has now taken on the 2035 target to decarbonise the electricity sector, it would make sense that this 10-year review and the development of detailed policies following this call for evidence are rolled into one working group (or groups given the complexity of the challenge).

When moving forward with this work, we would welcome clarity from BEIS on how they see the future governance of the CM working as well as the resource split between BEIS and Ofgem in this context. Furthermore, it is also important to consider the role of the Future System Operator (FSO). The Delivery Body will need to ensure that governance arrangements and adequate resources are in place to facilitate the proposed changes to the CM.

Energy UK would like to take the opportunity highlight that we believe BEIS should be placing a strong focus on the future role of gas in security of supply as we transition to net zero by 2050 when conducting the 10-year Review.

Question 30 - What are your initial views on the Capacity Market as a continuing mechanism to address system adequacy? Is there a need for continued market intervention by the government to address electricity security? And could the Capacity Market (or an alternative electricity security mechanism) address wider system services such as flexibility and stability?

It is important that the value of flexibility and locational services is addressed through Balancing Services as the requirements for many services are finite and location is important and therefore a system wide auction is not the best means of procurement. If the Balancing Services reflect their value to operating the system, and the ESO gives its best indication of the future requirement for different services, then providers of those services will be able to take such income into account when bidding into the CM. This process will then displace less flexible capacity providers that are not able to assume access to the same levels of Balancing Services revenues.

Energy UK members believe the CM is still an important tool in maintaining security of supply. We believe it is sensible to align the CM with net zero by ensuring high carbon assets are not able to access long-term 15-year agreements. However, BEIS need to recognise the value in existing assets (e.g., unabated CCGTs) as a transitional fuel in providing support to a renewables-led system.

Question 31 – Are there alternatives to the Capacity Market that may meet our current or future electricity security needs better than we should consider? Please provide evidence to support your views.

Energy UK believes the Capacity Market plays and will play a key role in meeting our current and future electricity security needs. We are not in a position to provide suggestions for alternatives to the Capacity Market at this stage.

9) Cross Border Participation

Question 32 - Should we continue to enable cross-border participation in the Capacity Market? If not, why not? In the absence of cross-border participation, how should target capacity calculations be altered to reflect the contribution of cross-border flows to security of supply?

Energy UK do not believe that cross-border participation should be automatically pursued by the UK government. Energy UK members consider that a number of practical changes would need to occur at the EU level before direct Cross Border Participation can be safely implemented at the UK level. Energy UK suggest that BEIS observe how it is implemented at the EU level before scoping out how direct Cross Border Participation could work in the UK.

Question 33 - If the CM continues to enable cross-border participation, what should be the preferred approach to cross-border flows – enabling direct participation of foreign generation, or continue with the existing indirect cross-border participation model (via interconnectors)? Please provide evidence to support your views

To repeat our answer to Question 32. Energy UK believes that BEIS should observe what happens on the EU side with regards to Cross Border Participation before considering a preferred route forward.

Energy UK acknowledge that interconnectors were introduced the CM in 2015 as a temporary measure until the necessary framework was in place to allow non-domestic capacity providers to participate in the CM. Energy UK also agree with the disadvantages of interconnector participation in the CM as set out in the Call for Evidence document (listed below for ease):

- Reliability of interconnectors and their contribution to Security of Supply (i.e. if there is a pan European stress event)
- Potential fairness/ level playing field due to market distortions in the wider market landscape (e.g., interconnectors can access the cap and floor regime and they are exempt from paying Transmission Network Use of System (TNUoS) and Balancing Services Use of System (BSUoS) charges, plus they can participate in multiple capacity mechanisms).

We do however urge BEIS to consider the effects (if any) on the wider market and wholesale prices if Interconnectors were no longer allowed to compete in the CM. Some Energy UK members therefore recommend that BEIS consider altering the extent to which interconnectors are derated to better reflect their contribution to security of supply. This would go some way in addressing some of the concerns set out above. Other members feel that the involvement of interconnectors in the CM as a proxy for Cross Border Participation and now this seems unlikely, they should be removed in order to make room available for GB units that will be able to deliver more reliably in a stress event.

Next Steps

We would like to thank you in advance for considering our response and look forward to hearing further clarification of the next steps in due course. If you have any questions regarding our response in the meantime, please do not hesitate to contact me on the details below.

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