



Department for
Business, Energy
& Industrial Strategy

CAPACITY MARKET AND EMISSIONS PERFORMANCE STANDARD REVIEW

Summary of call for evidence responses

March 2019



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Executive Summary

The Call for Evidence (CFE) on the Capacity Market (CM) and Emissions Performance Standard (EPS) Review¹ invited views and evidence on the performance of these two policies to date and sought to identify areas of their design that may require improvement to ensure they continue to meet their objectives.

In total, eighty-three responses were received from a wide range of stakeholders, including generators, developers, interconnectors, DSR providers, consultants, environmental groups, trade associations, investors and others.

This document provides a representative overview of the feedback received in relation to each of the thirty-six questions posed in the CFE.

We would like to thank all those who engaged with the CFE and submitted a response.

Alongside this summary of CFE responses we have issued a consultation on changes, including some which relate to priority issues raised as part of the 5-year review and the CFE.

Next Steps

In addition to issuing a consultation on some priority issues, we are continuing to reflect on the full range of issues raised. We expect to consult further, as appropriate, on priority issues and other issues identified.

The outcome of the reviews of the CM and EPS will be laid in Parliament and published in summer 2019.

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https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/732546/CM_Review_call_for_evidence_final_4.pdf

1. Introduction

The Capacity Market Review

The Capacity Market (CM) is at the heart of the Government’s plans for a secure and reliable electricity system; it aims to procure the capacity required to meet peak demand in a range of scenarios through competitive auctions held four- and one-year ahead of delivery. Its objectives are:

- *Security of supply*: to incentivise sufficient investment in capacity to ensure security of electricity supply;
- *Cost-effectiveness*: to ensure the most efficient level of capacity is secured at minimum cost to consumers; and
- *Avoid unintended consequences*: to minimise design risks and complement the decarbonisation agenda.

The Government is conducting a review of the CM (“the CM Review”) as it is five years since the legislation introducing the CM was passed. The CM Review is due to be included in a report laid before Parliament in summer 2019 and its purpose is to assess whether:

- the CM is still needed in future;
- the CM is meeting its objectives (outlined above);
- these objectives remain appropriate; and
- they can be achieved in the future in a way that imposes less regulation.

A Call for Evidence (CFE) was published in August 2018 as a first step in the review process. It sought views and evidence on the performance of the CM and whether there are aspects of its design that may require improvement if it is to continue meeting its objectives in the future. The closing date for responses was 1 October 2018.

The CFE highlighted that the Government’s view going into the review was that the CM is broadly working as intended and, while we expected the review to identify opportunities to enhance elements of the CM, we did not foresee the need for fundamental change. Rather it described the Government’s approach as one of evolution, not revolution. It did, however, identify certain priority issues to be addressed by the review – such as whether and how to enable the participation of subsidy-free renewables, and the approach to calculating de-rating factors for interconnectors.

The CFE also described key elements of the CM’s existing design which are intended to ensure effective performance against its objectives – this includes, for example, the auction parameter setting process, the principle of technology neutrality, non-delivery penalties and terminations, and delivery assurance arrangements. The CFE also highlighted key achievements of the CM to date, particularly the success of the auctions in securing our full capacity needs out to 2021/22, including 5.4GW of new build capacity of a range of technologies, at lower than expected clearing prices.

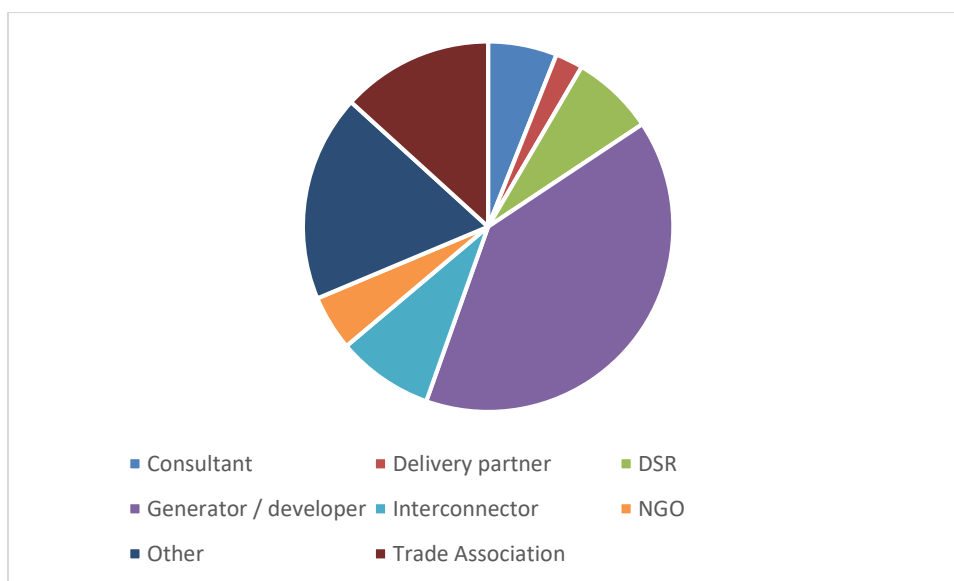
Also, as part of the 5-year review process, Ofgem published an open letter on 11 September 2018 seeking views and evidence on the CM Rules, the annual Rule change process and National Grid’s incentives². Ofgem will be publishing its response to the open letter in due course. We are required to and will be taking account of their report in our review.

Analysis of responses

A total of eighty-three responses were submitted to the CFE by a wide variety of organisations (Figure 1). Copies of the non-confidential responses are available on request.

This document provides an overview of the feedback received in relation to each of the thirty-three questions posed in the CFE that related to the CM (list provided in Annex A). Responses tended not to comment on the full set of questions.

Figure 1: Breakdown of responses to the CM Call for Evidence by organisation type



Broadly speaking, the responses lent weight to the Government’s initial view that the CM was working as intended, albeit there was scope to improve its design in some respects. There was overwhelming support amongst respondents for the CM and a clear majority thought the objectives remain appropriate. There were, however, calls to consider how the CM interacts with other markets to ensure future auctions secure a technology mix that minimises costs and is capable of fulfilling a range of energy objectives, not just addressing the generation adequacy problem.

Common themes identified in a majority of responses include:

- Opportunities for simplification, which would reduce burdens and enable more effective delivery against the CM’s objectives, particularly in relation to the prequalification process and termination arrangements;
- Whether there is a need to strengthen some requirements to ensure security of supply (e.g. non-delivery penalties, de-rating methodologies and delivery assurance arrangements);

² <https://www.ofgem.gov.uk/publications-and-updates/open-letter-five-year-review-capacity-market-rules-and-nget-s-incentives>

- How to enable / facilitate better the participation of certain technologies such as renewables, Pumped Storage Hydropower (PSH) and Demand Side Response (DSR);
- Opportunities to remove purported distortions in competition and ensuring a level playing field – some of the distortions highlighted arose due to differences in the treatment of different types of capacity within the CM whereas other distortions identified were external to (but impact upon) the CM (e.g. EU Emissions Trading Scheme, transmission and balancing charging arrangements, and Carbon Capture Readiness requirements); and
- The need to clarify and simplify some of the CM’s governance arrangements and processes.

In addition to issuing a consultation on some priority issues alongside this summary of CFE responses, we are continuing to reflect on the full range of issues raised. We expect to consult further, as appropriate, on priority issues and other issues identified.

A report setting out conclusions from the review will be laid in Parliament and published in summer 2019.

The 15 November 2018 judgment of the General Court of the CJEU has annulled the Commission’s June 2014 State aid decision not to raise objections to the UK Capacity Market scheme in June. This prevents the UK Government from making capacity payments under existing agreements until re-approval.

Alongside this Summary of CFE responses we have issued a consultation on changes, some of which are further technical changes related to the State aid judgement and some of which are changes related to priority issues raised as part of the 5-year review.

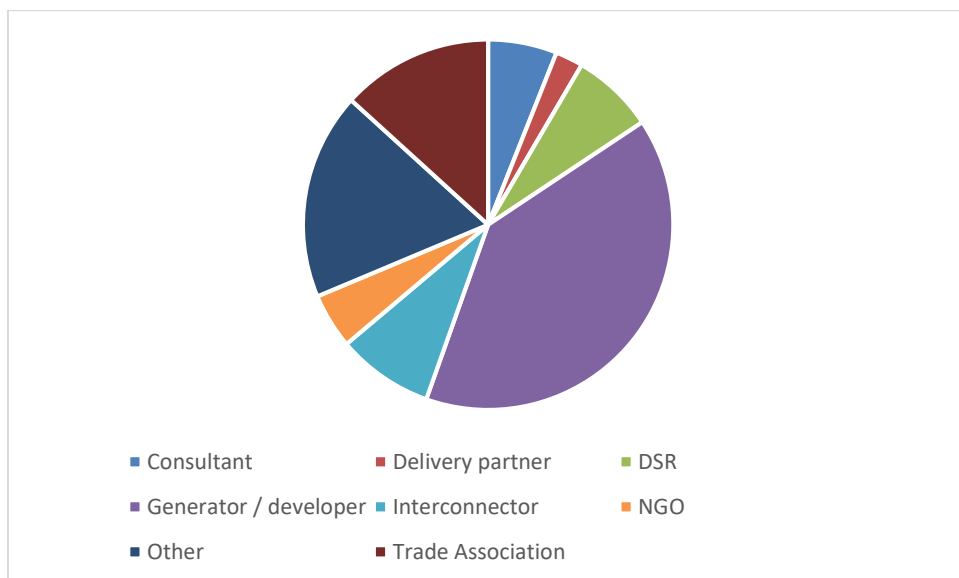
The Emissions Performance Standard Review

The Government also has a statutory obligation to review the Emissions Performance Standard (EPS) to answer similar questions on whether the measure is achieving its objective, does the objective remain appropriate, and can it be achieved in a way that imposes less regulation.

The objective of the EPS is to ensure that new fossil fuel-fired electricity generation contributes to electricity security of supply in a manner consistent with the UK’s decarbonisation objectives. The mechanism is a limit on the carbon dioxide emissions produced by new fossil-fuel generation plants.

A total of twenty-seven responses were submitted by a wide variety of organisations (Figure 2). An overview of the feedback received in relation to the three review questions is provided in section 3.5.

Figure 2: Breakdown of responses to the EPS Call for Evidence by organisation type



An overwhelming majority of the 27 respondents to the EPS questions noted that the measure has been achieving its objective and supported maintaining the measure. Many acknowledged that the role of the EPS is a backstop which complements other decarbonisation policies, including the carbon price floor.

There were some suggestions for the EPS to be tightened in the future to further decarbonise the electricity grid and encourage the latest technology and high efficiency.

The outcome of the EPS review will be laid in Parliament and published in summer 2019.

2. Summary of responses

2.1 Assessing the need for the Capacity Market and its objectives

Consultation question:

1. Do you believe there is a need to maintain the Capacity Market? What conditions would be necessary for the Capacity Market to be withdrawn?

Summary of responses

Of the 68 responses that commented on this question, the overwhelming majority agreed there is a need to maintain the CM.

Only a small number disagreed. Of these, some pointed to the low clearing price of the most recent auctions as evidence of the availability of surplus capacity and argued that other market developments (e.g. smart meters, cash out) will ensure security of supply. However, the large majority of respondents supported the CM and commented that whilst the clearing prices in the most recent auctions have been low they have not been zero and are likely to rebound in future due to upcoming closures (particularly coal and nuclear) and likely increased demand in the 2020s. It was also noted that the other market reforms necessary to ensure security of supply in the absence of the CM are not complete yet and that given the market is continuing to evolve the future impact and effectiveness of these reforms remains highly uncertain. Therefore, respondents thought that the CM is still needed as an insurance policy against changing circumstances (both in terms of the policy landscape and electricity system) and to maintain investor confidence. One respondent believed the CM should be a permanent feature of the market as it is buying a commodity.

The small number of respondents that were opposed to the continuation of the CM suggested that it favours existing capacity and distorts market signals that would otherwise support investment, or that there are other ways of securing security of supply (e.g. a strategic reserve).

Some respondents in favour of the continuation of the CM gave their support with caveats. They felt that the CM should remain but stressed the importance of reforms to:

- remove distortions that impact competition in the auctions (although some noted that many of the main distortions exist outside the CM);
- provide better support for specific technologies with particular reference to PSH and DSR (whereas others either stressed the importance of maintaining technology neutrality or expressed concerns around the participation of some technologies, particularly non-dispatchable renewables and interconnectors); and
- adapt to future security of supply challenges such as a greater need for flexibility and the changing nature of stress events (although others cautioned against using the CM to address all energy challenges).

Some responses in favour of CM continuation provided suggestions for when the CM could suitably be removed. These included a prolonged period of near-zero clearing prices or once new technologies (such as DSR and storage) or other market reforms were sufficiently established. Several also suggested the Government develop a clear exit strategy which considered, amongst other things, the impact of long-term agreements on the functioning of the wider market once the CM had been removed.

Consultation question:

2. Do you believe the current objectives of the Capacity Market remain appropriate?

Summary of responses

Of the 64 responses, the overwhelming majority were supportive of the CM's current objectives.

As with responses to Question 1, support was generally given with caveats on how to further improve the CM. A significant number called into question (either explicitly or implicitly) the principle of technology neutrality and advocated reforms to the CM that would either better support particular technologies (this included new build generally, pumped storage, low(er) carbon generation, flexible generation, large-scale gas generation or projects in specific locations) or restrict the participation of competitor technologies, particularly interconnectors.

In a similar vein, the small number of respondents that did not support the CM's current objectives did so on the grounds that the CM was not securing the "right" technologies from either a cost or carbon perspective. The use of split auctions or more sophisticated de-rating factors were often advocated in these responses to ensure the CM better supported their chosen technology. Others, however, cautioned against diverging from the principle of technology neutrality and favouring specific types of capacity over others.

Some of the respondents that did not support the current objectives argued for greater focus on specific objectives (particularly decarbonisation and avoiding unintended consequences) or the introduction of a new objective to ensure the CM encourages investment in flexible capacity. Others, however, argued that decarbonisation should be left to other policy mechanisms and that the CM should not be extended to try and resolve all energy issues. For example, several responses suggest that flexibility could be better incentivised by reforming ancillary services to bring them more into line with the CM.

2.2 Assessing performance against the Capacity Market's objectives

Security of Supply

Consultation question:

3. Do you think the arrangements outlined in section 3.1 are adequate to ensure sufficient capacity is secured through the auctions to deliver security of supply?

Summary of responses

Of the 45 responses, the majority believed there were adequate arrangements already in place to ensure sufficient capacity is secured.

Of the minority who disagreed, a number thought it was too early to tell if current arrangements were effective as there had not yet been a stress event. Linked to this, some felt the current penalty regime was too weak to ensure delivery during stress events.

Others who disagreed raised concerns regarding the participation of and reliance upon certain types of capacity for security of supply purposes, particularly interconnectors but also storage, DSR and non-firm capacity. Several responses also argued that ensuring sufficient capacity does not, on its own, guarantee security of supply – other factors such as the location and flexibility of capacity were identified as important too.

A significant number of responses pushed for greater transparency in the parameter setting process, with some suggesting greater stakeholder engagement and consultation in the production of the Electricity Capacity Report (ECR). Others expressed concerns with the Secretary of State's role as the final decision-taker on the auction targets – some felt there should be greater transparency of the rationale for the final decision, to provide greater confidence that it was evidence-driven rather than political, whereas others felt the Secretary of State should not have a role in the decision-making process at all. And one comment suggested that National Grid should review past forecasts and report on their accuracy.

A small number of responses commented on some of the detailed, technical aspects of the parameter setting process including: The Reliability Standard shouldn't be aligned to connected markets; net-CONE is too high and should be reviewed; the methodology should be clearer on how it takes account of distribution connected assets; and National Grid should model complex, combined events.

Consultation question:

4. What are your views on the split between the T-4 and T-1 auctions and the amount of set aside?

Summary of responses

There were 40 responses to this question. A significant number felt the split was about right and offered no further comment.

There were a number of comments on the amount of set-aside for the T-1 auction. A few expressed support for the decision taken in 2016 to reduce the amount of set-aside and others felt it should be reduced further still – reasons given include: there are likely to be limits to the amount of capacity available to participate in future T-1 auctions, and the volumes of DSR coming through the T-4 auctions demonstrates the T-1 auctions are not needed as a route to market for this technology. However, a significant number of responses argued for an increase in the T-1 targets or at least a guaranteed minimum – reasons given include: avoiding over-procurement, better value for money and the T-4 auctions are difficult for DSR.

Other comments focussed on the timing of the auctions. Some felt that quicker construction times, particularly in relation to smaller flexible generation, could facilitate a T-3 or T-2 auction. Conversely others felt we should introduce a T-8 or T-6 auction to facilitate the participation of PSH. Several responses commented on the sequencing of the annual auctions, expressing a preference for the T-4 auction to be run before the T-1 auction.

Consultation question:

5. Has the Capacity Market been successful in supporting investment in capacity (new and existing), both directly and indirectly? If not, please identify any changes that need to be made.

Summary of responses

Of the 67 responses, the majority agreed (or partially agreed) that the CM has been successful in supporting investment. A number of responses noted the importance of the availability of 15-year agreements in supporting investment in new build capacity.

Some responses felt the CM was only partially successful (or was unsuccessful) at supporting investment because its design favours existing capacity or new build with low capital expenditure such as gas and diesel engines. And some argued that it was other revenue streams driving investment (e.g. Triads), not the CM.

One respondent believed the CM had delivered the right mix of capacity, including new, highly flexible generation that is crucial to the integration of renewables. Others suggested that the CM had failed to bring forward the right mix of capacity either due to distortions in the wider market or barriers in the CM's design. Specific concerns on the technology mix were that the CM had secured no new PSH, insufficient volumes of DSR, and insufficient large scale, baseload gas capacity (although others noted this may be because this type of capacity is not necessary or that it would come forward if / when prices are higher). And several responses suggested that early success in supporting new build battery storage had been undermined by recent changes in the approach to de-rating this technology.

There was some criticism of the participation of interconnectors, with claims that this was artificially depressing clearing prices and thereby undermining investment in other forms of capacity. There were some concerns expressed around the deliverability of some of the new capacity particularly DSR and distributed generation.

A number of respondents identified changes that they believed would better support investment. For example:

- Timing of the auctions: suggestions included a T-8 (or T-6) auction to facilitate the entry of PSH, ensure the T-4 auction is held in December to provide more time between the auction and delivery year, and a T-3 (or T-2) auction would be more appropriate for capacity with quick build times.
- Agreement length: introduce longer-term agreements for PSH which reflect their high capital costs and long lifespans, provide DSR with access to longer-term agreements, and revisit earlier work on price duration curves.
- Minimum capacity threshold: reduce to 1MW to facilitate entry of DSR.

And again, some references were made to the need to remove distortions that exist in the wider market and better align ancillary services with the CM.

Consultation question:

6. Do the current 1, 3 and 15-year agreement lengths support investment in capacity and do they deliver against the objective of cost-effectiveness?

Summary of responses

53 respondents provided commentary on this question.

Most comments were focussed on the 15-year agreements available for new capacity. A substantial number were supportive of their continuation, arguing they were critical to providing investor comfort and supporting non-recourse funding. One response claimed that, in relation to new build capacity, their removal would limit participation to balance sheet funded organisations. Another suggested that the 15-year agreements may act to reduce the cost of capital and so prove more cost effective for consumers.

An almost equal number of respondents were critical of the 15-year agreements. One felt that basing access to these agreements upon a capital expenditure threshold may be too blunt to protect consumers given some new build capacity was gaining access even though longer-term agreements were probably not necessary to support the investment (e.g. low capex, small scale peaking generation). A number of others argued that the 15-year agreements were distorting the market, increasing the risk of over-procurement, locking-in capacity that may not be suitable in the future, and making it more difficult to withdraw the CM in future.

A range of changes were suggested including:

- Offer longer-term agreements of 20 – 25 years, particularly important for PSH (although other responses felt that 15-year agreements were adequate to support PSH);
- Reduce 15-year agreement length to 10, 5 or 3 years;
- Make all agreement lengths accessible to all technology types, and remove any distinction between existing, refurbishing and new;
- Offer agreements for a single year only, but ensure there are clear signals that the CM will be maintained for longer (it was noted that other capacity mechanisms only offer 1-year agreements but are still capable of supporting investment in new capacity);
- Greater gradation of agreement length based on expenditure above a minimum business as usual level; and

- Allow participants to choose the length of their obligation, possibly with an adjustment to the price offered based on the length of agreement chosen.

The 3-year agreements for refurbishing capacity attracted fewer comments. There was broad agreement that they had been ineffective in their current guise. The most commonly suggested change was lowering the capital expenditure threshold.

There were differing views on agreement lengths that should be available for DSR (even amongst respondents from the DSR sector). Some felt that DSR would benefit from access to longer term agreements to help cover administration costs and with planning, whereas others felt they weren't necessary.

Consultation question:

7. Should penalties be adjusted to strengthen incentives for delivery during stress events? If so, how should penalties be adjusted? Please provide a view on the methodology and factors to consider when setting penalties.

Summary of responses

Of the 44 responses which commented on this question, the majority were in favour of strengthening the penalty regime.

A number of respondents argued that it is too early to increase penalties or is unnecessary as the wholesale price and imbalance cash out price (which is set to become more punitive) are sufficient to incentivise delivery during a stress event. Others noted that higher penalties would increase financial risk which may limit participation (particularly of certain types of capacity) and therefore increase CM costs. Several argued that non-delivery risks during stress events should be dealt with through de-rating factors.

Those in favour of strengthening penalties claimed that the ineffectiveness of the current regime has been known for a long time – that it is not a penalty but rather provides for a clawback of revenues only and consequently the CM is viewed by many as a 'free option'. A number also argue that stronger penalties would better incentivise desirable behaviours during prequalification and the delivery year and promote secondary trading. And whilst some acknowledged that signals from other markets should incentivise delivery during stress events, they also noted that exposure in these other markets is variable in practice.

A number of respondents argued that, to mitigate the increased level of risk associated with stronger penalties, any such changes should be accompanied by improvements in secondary trading arrangements, the introduction of a dispatch signal, a relaxation in Satisfactory Performance Days (SPDs) and/or changes to demonstrating connection capacity. One respondent noted that the insurance industry may be comfortable covering off penalty risks.

Suggested changes to the penalty rate include:

- It should be higher than 1/24th and reflect the low probability of stress events;
- It should be based on Value of Lost Load (VOLL) to reflect the damage caused by non-delivery, although it was acknowledged by some that this could be too punitive for those exposed in other markets; and

- It should be uniform and not linked to the clearing price, whereas others felt it should remain linked to the clearing price.

Comments on the penalty caps include:

- Annual and monthly caps are important in assuring lenders that debt repayments can be met even with limited number of missed stress events
- Annual cap of 100% is in line with other contracts and should be retained;
- Annual cap should be increased (numerous caps proposed ranging from 110% to 200%) or removed entirely to ensure CM is not viewed as a 'free option'; and
- Monthly cap removes incentives to keep the capacity available or secondary trade.

Consultation question:

8. Do the current arrangements relating to credit cover and delivery milestones provide sufficient incentives / assurance that capacity will be delivered, with particular reference to DSR?

Summary of responses

39 respondents commented on this question, of which a slight majority felt that the existing arrangements relating to credit cover and delivery milestones were not sufficient to ensure that capacity will be delivered.

Most comments focused on arrangements for DSR. A significant number argued that credit cover for unproven DSR should be increased to ensure fairness (i.e. all technologies should be exposed to the same credit cover requirements) and address concerns around deliverability. A smaller number of respondents felt the current level of credit cover for DSR was sufficient (or too high) as DSR had a proven record of delivery and warranted different treatment due to its small size. A number of respondents (both for and against an increase in credit cover for DSR) suggested that credit cover should be released progressively as DSR components are registered over time, with an increase in credit cover for any unproven DSR remaining by the time of the T-1 auction (alternatively surrender any remaining credit cover and reduce the DSR Capacity Market Unit's (CMU's) obligation at this point). The main difference in opinion was whether the level of credit cover should be increased to start at £10k/MW and increase to £15k/MW at T-1, or be maintained at £5k/MW increasing to £10k/MW at T-1. Several responses also suggested additional reporting requirements for DSR to demonstrate progress in recruitment of components or tightening some of the delivery milestones (e.g. bringing forward the timing of the DSR Test to take place ahead of the T-1 auction).

Other, more general comments on the delivery assurance arrangements identified ways in which they could be loosened (e.g. remove the reporting milestones for new build CMUs, remove the requirement for the same CMU to hold credit cover for both the T-4 and T-1 auctions, and partial draw down of credit cover in the event of partial non-delivery) or tightened further (e.g. introduce greater controls to ensure new build CMUs have fully considered and secured financing).

Consultation question:

9. Do the termination events and fees need to be adjusted to create the right incentives for delivery? If so, how? Please provide a view on the methodology and factors to be considered.

Summary of responses

There were 39 responses to this question, the large majority of which would like to see changes made to the termination events and fees.

A number of responses explicitly stated that the termination fees should be raised to deter speculative bids (or linked to inflation to ensure their effectiveness doesn't decrease over time) whereas others felt they were too punitive and should be reduced. One respondent suggested that termination fees should be removed for DSR.

The majority of comments focussed on the complexity of the current system and argued that it should be simplified. In particular it was noted that: the range in fees (£5k/MW - £35k/MW) was too broad; some events attracted no termination fee; and there were different fees for similar events between technology types. A significant number of responses argued that the termination fees should be based on the impact of the termination on the CM and consumers rather than the type of event or technology (i.e. the only differential in fees should be in respect of a termination event that take places before or after a T-1 auction, with higher fees after a T-1 auction to encourage early exit and provide an opportunity to secure replacement capacity). A number of responses suggested that the termination fee ahead of the T-1 auction should be linked to the price of securing replacement capacity (i.e. the T-1 clearing price) – it was noted that multi-year agreements may warrant a higher fee given the need to replace the lost capacity in multiple T-1 auctions.

A number of respondents advocated an approach through which a CMU which is only partially able to meet its testing requirements should only face termination for the proportion of the capacity obligation it was unable to meet (i.e. partial termination).

A few responses also noted that improvements to secondary trading could help manage delivery risks. Other suggestions included allowing the replacement of capacity through a change of address or technology, and ensuring terminations aren't triggered by milestones before secondary trading is permitted.

Consultation question:

10. Do any other changes need to be made to ensure delivery of capacity by the different types of technology?

Summary of responses

The 43 responses to this question raised a wide range of issues, many of which were covered in relation to other questions and so are only listed briefly here:

- Concerns were expressed in relation to the ability of various technologies to contribute to security of supply. In particular, non-dispatchable renewables, interconnectors and DSR. For example, in relation to the deliverability of DSR it was noted that DSR providers are likely to select the timing of their DSR Tests and SPDs to coincide with favourable activity levels which may not be reflective of their ability to provide capacity during times of system stress;
- Proposals were put forward to better facilitate the participation of a number of technologies, particularly PSH and DSR; and
- Other suggestions made include improvements to secondary trading, introduction of a dispatch mechanism, allowing capacity providers to select their own de-rating factor, higher penalties for existing generation and requiring all technologies to complete extended performance tests.

Consultation question:

11. To what extent does the CM design ensure capacity resources are used in the most effective manner during stress events? Do you have any ideas on how it can further be improved?

Summary of responses

36 respondents commented on this question.

Some felt that changes to the current arrangements were not necessary if other proposed improvements to the penalty regime and secondary trading were taken forward. Others argued that, although current arrangements work well for conventional plant, there would be value in refining arrangements in relation to DSR, intermittent renewables and limited duration storage. One specific point raised in relation to storage was that further measures were needed to prevent recharging in the lead up to a stress event.

There was a broad range of views on the type of improvements needed. Some felt that the CM should incorporate a dispatch signal whereas others argued that a CM-specific dispatch signal could conflict with other dispatch signals used by the System Operator (SO) and so should be avoided. Other respondents thought there would be value in the Delivery Body providing better information on stress events ahead of prequalification (to help inform participants' assessment of risks and bidding strategies) and in the run-up to an actual stress event (e.g. the Delivery Body should issue a 4-hour notice and a 1-hour notice, and, at gate closure, provide information on the likely load following obligation and expected duration of the stress event).

There were also calls for closer alignment between the CM and Balancing Market (BM) (e.g. valid BM offers at gate closure should be treated as a Relevant Balancing Service) and for wider access to the BM to be facilitated.

A number of responses also felt that the 4-hour notice period favoured inflexible capacity and should be reduced to a minimum, whereas others believe that this arrangement was fair to all capacity.

Consultation question:

12. Do the de-rating factors correctly recognise the contribution made by different technologies to security of supply? What changes need to be made?

Summary of responses

The 51 responses to this question raised a wide range of views. One response suggested de-rating factors should be scrapped entirely. Others suggested allowing capacity providers to self-select their own de-rating factor, although some recognised this is likely to be perceived as too risky for consumers. A slight variation on this theme was a suggestion to allow capacity providers, where they are concerned about the technical performance of their asset, to select a lower de-rating factor than that calculated by the Delivery Body for that generating technology class.

A number of responses were focussed on the approach to de-rating specific technologies:

- Interconnectors: a number of concerns were raised in relation to the current approach to de-rating interconnectors. Several responses also requested greater transparency in the process;
- DSR: a number of responses felt that the way in which DSR CMUs are de-rated should be more closely linked with the technology of the constituent components. One particular risk identified was that of behind-the-meter batteries benefitting from a higher de-rating factor. Several responses argued that greater transparency of DSR components and technologies was needed and that there was potential to de-rate components individually. Others made the case that DSR was not duration-limited and that it would be inappropriate to separately de-rate components;
- Hybrid: a number of respondents stated that de-rating factors for hybrid CMUs should reflect the high value they provide to the system; and
- Storage: one response argued that the approach adopted in relation to de-rating limited duration storage should be applied to other technologies. Another suggested that all technologies should be required to demonstrate they can provide capacity for more than 4-hours.

Several responses noted that de-rating factors based on Equivalent Firm Capacity (EFC) was the correct approach for non-firm capacity, although one expressed concern about the lag between increased deployment of non-firm capacity and the reduction in the incremental EFC. Other responses claimed that non-firm capacity should not be allowed to participate in the CM even if EFC de-rating factors are applied.

Some responses felt that de-rating factors should be weighted to take account of other factors such as carbon emissions, flexibility, location and the type of connection agreement (i.e. firm

vs. non-firm). Others argued that de-rating factors should only take into account factors that impact security of supply.

Several responses highlighted the need to address issues relating to the demonstration of connection capacity through implementation of the proposals developed by Ofgem.³

Cost effectiveness

Consultation question:

13. Do you think there are there sufficient safeguards in place to reduce the risk of over-procurement? If not, what changes could be made to further reduce the risk of over-procurement?

Summary of responses

Of the 34 responses to this question, around half felt there were sufficient safeguards in place to avoid over-procurement, with several noting the importance of the reliability standard and role of the independent Panel of Technical Experts. Some felt that under-procurement was the bigger concern, whilst others noted that recent auctions had over-procured but that this was in the consumer's interest as capacity had proven to be so cheap.

A number of responses expressed concern regarding the role of stakeholders, for example National Grid, in determining the auction targets as they may be inclined to over-procure. Several noted limitations to the Least Worst Regrets approach, including the use of overly pessimistic scenarios which may be unduly affecting the recommended targets. Again, several argued that the CM was securing the wrong type of capacity.

A few respondents suggested improvements to the process. Several requested greater transparency in the target setting process, and one suggested that BEIS reports on the actual level of security of supply delivered by the target. Others recommended setting aside a greater proportion of the target for the T-1 auction or removing longer-term agreements.

A small number felt that it was too early to tell, particularly given there had not yet been a stress event.

Consultation question:

14. Do you believe that the auctions have been sufficiently liquid to date and to ensure strong competition? If not, how could we improve liquidity and competition?

Summary of responses

Almost all of the 37 responses to this question agreed that the auctions to date had been highly liquid (with some suggesting liquidity was too high) which had contributed to low clearing prices. One response thought the low clearing prices reflected in part a well-designed regime. Another felt the auction rounds could be shortened as a consequence of the high liquidity. Several responses, however, expected liquidity to decrease in future as larger amounts of existing plant closed, with the liquidity of future T-1 auctions in particular less certain.

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A number of responses felt that, although the auctions had been liquid, distortions in competition had driven the low prices and led to incorrect outcomes. Problems identified included: inaccurate de-rating factors for interconnectors and DSR; variable exposure to termination fees between technologies; embedded benefits for some types of capacity but not others; and preferable treatment of DSR over generation (and vice versa).

Suggestions to further improve liquidity were put forward, including:

- Enabling participation of more technologies including wind, solar, hybrids, PSH, combined heat and power (CHP) and onsite generation;
- Simplifying the prequalification process and removing Regulation 69(5) which prevents the submission of additional information at appeal; and
- Limiting capacity agreements to 1-year only.

Consultation question:

15. What further changes are needed to better facilitate the participation of new, innovative or smart technologies, including from DSR, in the Capacity Market?

Summary of responses

There were 38 responses to this question. A significant number either felt that changes were not necessary or that individual technologies should not be given special treatment. The importance of technology neutrality and a level playing field was stressed by many, with some responses arguing that the only differentiation between technologies should be in terms of their de-rating factors.

There was a broadly held view that new, innovative and smart technologies were typically the preserve of smaller players in the market and therefore many of the suggested improvements focussed on simplification and clarity. For example, simplification of the Regulations and Rules (including making consolidated versions available in one location), simplification of the prequalification process (including removal of Regulation 69, removal of the requirement for Directors to be listed on Companies House, reviewing the requirement for annual declarations from legal owners and replacing the requirement for postcode with grid reference) and greater clarity of information on stress events (both generally and in advance of specific stress events, possibly even the introduction of a dispatch signal).

A number of responses suggested that improvements to secondary trading and better alignment between the CM and ancillary services, whilst beneficial to all participants, would be of particular value to innovative and smart technologies.

A range of changes were suggested by respondents to better support DSR. This included:

- Increasing the volume set-aside for the T-1 auction and committing to procuring at least 50% of that capacity.
- Reviewing agreement lengths, as current arrangements (up to 15-year for new build generation versus 1-year agreements for DSR) may be creating market distortions;
- Changing the definition of “non-CRMS distribution CMU” to enable non-exporting generation, including CHP, to participate;

- Lowering the 2MW minimum threshold to enable entry of sites below this threshold that cannot be easily aggregated;
- Making it possible for DSR to add and remove individual components (i.e. asset reallocation);
- Introducing lower cost and less disruptive bespoke metering arrangements and providing greater flexibility around the timing of the DSR Tests; and
- Writing accountability for data flows from Half Hourly Data Aggregators (HHDAs) and Half Hourly Data Collectors (HHDCs) into the Rules.

A number of responses proposed the CM be re-designed to support PSH. Specifics included:

- Introducing a T-8 or T-6 auction to account for longer development and construction times (an alternative suggestion was the provision of a grace period with additional milestones to allow for late delivery);
- Introducing the option of longer-term agreements, possibly up to 20 – 25 years, to reflect the longer lifespans and higher capital expenditure associated with PSH; and
- Either holding a separate auction for PSH or ensuring the CM recognises and values the additional benefits of PSH (decarbonisation, flexibility, locational etc.), possibly through adjustments to de-rating factors.

Consultation question:

16. How could we go about allowing augmentation of batteries?

Summary of responses

32 respondents provided comments on this question. A number of responses were concerned that augmentation of batteries was being considered in isolation. They argued that other technologies would also benefit from the introduction of arrangements to allow an increase in capacity part-way through a multi-year capacity agreement and therefore, to ensure technology neutrality, this issue should not be considered in relation to batteries alone.

One respondent felt the simplest solution would be to allow battery storage CMUs with multi-year agreements to redeclare their duration band (and therefore change their obligated capacity) on an annual basis. However, to ensure the protection of consumers, a number of respondents argued that any arrangements should not provide a free option for capacity providers and therefore any additional capacity arising from augmentation should have to bid into future capacity auctions as a separate CMU on a competitive basis. It was acknowledged that this would likely introduce considerable complexity particularly in relation to metering arrangements, the demonstration of SPDs and extended performance, and the application of non-delivery penalties.

One respondent suggested that specific arrangements were not necessary given any extra capacity could be employed through existing secondary trading arrangements.

Consultation question:

17. Please provide any other ideas on how to improve cost effectiveness of the Capacity Market.

Summary of responses

The 32 responses to this question covered a lot of issues raised elsewhere including: re-designing the CM to better support PSH; allowing the participation of wind and solar; removing market distortions; removing uncertainty and improving other markets (including greater alignment with ancillary services and adopting a view of whole system costs); splitting the auctions in a variety of ways; switching to shorter-term agreements; setting aside a greater volume for the T-1 auction; simplifying the prequalification process; removing Regulation 69 and reviewing the appeals process; making improvements to the Delivery Body's IT systems and giving them more resource; strengthening non-delivery penalties and streamlining termination events and fees; and improving secondary trading.

Additional suggestions, not raised elsewhere, included:

- Aligning timings between the CM delivery year and the annual cycles associated with Transmission Entry Capacity (TEC) charges and carbon pricing to provide greater certainty of costs going into the auctions; and
- In relation to the CM supplier charging methodology, replacing demand forecasts with actual demand data from the previous year.

Avoiding unintended consequences

Consultation question:

18. What are the main distortions in competition that need to be addressed to ensure a level playing field in the CM auctions?

19. Are there distortions in the interaction of the various markets (wholesale, ancillary, CM) or their charging arrangements which impact the effectiveness of the CM?

Summary of responses

There were 49 responses to Qu18 and 40 responses to Qu19. Given the significant overlap in the issues raised in relation to these questions, a joint summary is provided.

In terms of distortions within the CM, many were raised by respondents in relation to earlier questions, but in summary they include:

- Barriers to the participation of new PSH, some renewables (wind and solar), DSR and generation located on private wire;
- Favourable treatment of DSR, including lower credit cover requirements, lighter touch delivery assurance, inaccurate de-rating factors and the potential to benefit from the CM

supplier charging arrangements (a number of other respondents argued that differential treatment for DSR was justifiable and not distortionary);

- Short duration batteries as appearing as DSR and benefitting from a higher de-rating factor (several respondents questioned the extent to which this was a problem);
- Favourable treatment of new build generation, including exposure to access to long-term agreements and exposure to weaker termination events and fees;
- Favourable treatment of distributed generation, including weaker termination events and fees, and the ability to participate even if they possess non-firm connection agreements;
- Favourable treatment of interconnectors, particularly their de-rating factors and support received through the Cap and Floor regime; and
- The lack of consideration of emissions from different technologies.

The main distortions in the wider policy landscape identified by respondents include:

- The Carbon Capture and Readiness (CCR) requirement to demonstrate the technical and economic feasibility of retrofitting CCS effectively prevents the deployment of peaking capacity above 299MW, compelling the use of smaller, more expensive and higher-emitting technologies.
- The EU Emissions Trading Scheme (EU ETS) does not apply to very small generating units – with the increasing value of the EU ETS, this avoided cost has the potential to provide them with a significant competitive advantage;
- Charging arrangements for Transmission Network Use of System (TNUoS) and Balancing Services Use of System (BSUoS) are a source of embedded benefit for some types of capacity;
- BSUoS arrangements place storage at a relative disadvantage as it is charged on both its demand and generation;
- Ancillary services are not sufficiently aligned to the CM, are too complex, the procurement process is not sufficiently open or transparent and the contracts are too short to support investment; and
- Interconnectors are treated differently to generation in many respects, including exemptions from TNUoS charges and carbon prices, and can access support through the Cap and Floor regime.

Consultation question:

20. How could the Capacity Market better complement the decarbonisation agenda, whilst still ensuring technology neutrality?

Summary of responses

There were 51 responses to this question. A significant number argued that the CM should not be a driver for decarbonisation as there are other policy mechanisms which have this as their specific objective. Others noted that the CM supports decarbonisation by ensuring security of supply is maintained as deployment of low carbon generation increases. A number suggested the most efficient way to ensure decarbonisation is to maintain strong carbon pricing, such as ensuring that small capacity is exposed to the EU ETS.

Other respondents suggested changes to the CM that would further support decarbonisation. Most commonly mentioned was opening the CM to participation by renewables (wind and solar), whilst others called for better facilitation of participation by PSH and DSR. Some argued for more structural changes to the CM including incentivising flexible or low carbon generation through, for example, introducing an emissions limit (various models were suggested, for example a limit for biomass or new build only, a limit as per the winter package proposals but possibly reducing over time) or taking account of emissions when setting de-rating factors. Finally, it was suggested that long-term agreements should be removed to avoid locking-in capacity too far into the future.

3.3 Priority issues

Renewables

Consultation question:

21. Should wind and solar be allowed to participate in the Capacity Market? Why?

Summary of responses

63 respondents commented on this question, the large majority of which were strongly in favour of allowing wind and solar into the CM.

Those opposed to the change tended to do so on the grounds that they thought the participation of non-dispatchable capacity would be contrary to the CM's objectives.

Those in support frequently noted that, whilst wind and solar technologies can make a contribution to security of supply, establishing an appropriate de-rating factor was critical. Others argued that, due to the CM's technology-neutral design, allowing appropriately de-rated wind and solar to participate was a matter of both fairness and law. Many noted that the change would likely result in increased liquidity and value for money for consumers.

A number of respondents stated effective penalties would lessen the risks of non-delivery by wind and solar, but also that they should be uniformly applied across all technologies (a smaller number believed a separate penalty regime for non-dispatchable resources may need

to be developed). An effective secondary trading regime was also mentioned several times as being critical to allowing non-dispatchable generators to fully cover their positions.

Some respondents stressed that no projects in receipt of other low-carbon subsidy should be allowed to participate, and there were concerns raised (by both supporters and non-supporters of changes) about the risk of too much non-firm capacity and too little firm capacity available on the system.

Several responses noted that the CM would not provide a major revenue stream and so felt that alternatives, such as Contracts for Difference (CfD), would be a better focus to bring forward new renewable projects. Hybrid projects (with battery storage) were identified several times as being the most effective way for wind and solar to participate in the CM and contribute to security of supply.

Consultation question:

22. What factors need to be considered to enable renewables to participate in the Capacity Market whilst ensuring security of supply?

Summary of responses

There were 51 responses to this question. The most frequently referenced factors to be considered when including wind and solar in the CM were an effective and liquid secondary trading market (e.g. the removal of the 5-day notice period was considered necessary if secondary trading was to work effectively for renewables) and appropriate de-rating factors (with several references each to the use of the EFC methodology and an incremental approach to de-rating). Geographical location was also noted as a factor to consider when determining de-rating factors.

Maintaining a technology-neutral penalty regime was also mentioned in a substantial number of responses, although a few felt there should be some differences (e.g. both lower and higher penalty caps for renewables were suggested).

The need for effective metering and testing was also raised in several responses. One response stated that the SPD tests might not be appropriate for wind, and others noted that renewables may need a differential approach as with interconnectors.

Facilitating hybrid projects, e.g. those accompanied by storage, was viewed as important to security of supply in several responses and it was noted that intermittent generation needs to account for any system costs it imposes. Some responses also noted that, to ensure renewables were not over-compensated for their contribution to security of supply, the potential for the cumulation of Government support from across different schemes needed to be accounted for.

Consultation question:

23. What factors need to be considered to enable the participation of hybrid projects in the Capacity Market?

Summary of responses

There were 37 responses to this question. Many stressed that the growth of hybrids was an important goal that would benefit security of supply, with some going as far to say that renewables should only be allowed to participate in the CM provided they were deployed alongside a dispatchable technology (with storage referenced most often). However, a number of responses felt that effective secondary trading was capable of fulfilling the same role and therefore questioned the value of facilitating hybrid CMUs. Others questioned whether any changes to the Rules were necessary to facilitate the participation of hybrids (some stating it already happens, albeit not in relation to renewables) or whether there was any benefit to the capacity provider of entering hybrid CMUs as opposed to separate CMUs.

Developing effective de-rating factors was identified as the critical issue to get right for hybrid sites by a substantial number of responses, with several suggested approaches:

- De-rate each technology and unit separately, and then add them together to derive a de-rated capacity at the CMU level;
- De-rate at the CMU level to reflect the dispatchable nature of the hybrid CMU and/or any synergistic effect (e.g. when renewable generation capacity exceeds connection capacity and a battery enables this excess reserve to make a greater contribution);
- Apply a standardised uplift factor to the de-rating factor for hybrid CMUs; and
- Allow self-selection of the de-rating factors.

Several responses noted that devising de-rating factors for a long list of possible technology combinations could be very complex and so take time to develop and implement. Others stressed that this should not delay the inclusion of wind and solar in the CM, and that existing rules would be adequate until a new approach developed.

Other issues identified by respondents include the need for: a clear definition of “hybrid”; robust metering arrangements; appropriate credit cover requirements and termination fees; and appropriate planning exemptions for cases where batteries do not require consents.

Consultation question:

24. What factors need to be considered when developing the de-rating methodology for wind and solar? What approach could be taken to de-rating hybrid CMUs?

Summary of responses

In the 37 responses to this question, Equivalent Firm Capacity (EFC) was noted several times as the most effective de-rating methodology for wind and solar. Concern was expressed that existing de-rating factors for wind might be higher than actual delivery during a stress event. Some suggested de-rating factors for non-firm renewables should decrease as deployment increases (often referred to as an ‘incremental’ approach to de-rating). Others suggested such

incremental de-rating factors should be available in advance to help parties to predict likely values and avoid over-rewarding long-term agreements (some suggested only 1-year agreements should be available for renewables). Several responses noted de-rating factors should take account of regional differences for wind e.g. different de-ratings for onshore and offshore wind was suggested, with one response mentioning a third category used for CfDs: 'island wind'. Allowing applicants to pick their own de-rating factors was also mentioned.

Responses that touched on the de-rating of hybrid CMUs acknowledged that developing an appropriate methodology may take longer, although they saw no reason why those technologies could not participate in the meantime based on the existing approach.

Consultation question:

25. For co-located projects, do you think that all components of the site (both the CM eligible and the non-CM) will be able provide their full capacity during the system stress event due to local distribution or transmission network constraints?

Summary of responses

31 respondents commented on this question. Most noted that this question was site-specific, and difficult to set a general principle. There was a difference in opinion over whether connection constraints might prevent all components of a site contributing their full capacity during a system stress event. Those that thought it was not an issue noted that the Rules already require there be sufficient connection capacity for all CMUs to deliver their de-rated capacity. And others noted that DNOs require total cumulative capacity to be applied, so network constraints are unlikely to be an issue.

Respondents who thought it might be a problem noted that one of the benefits of co-location is a reduction in overall connection capacity. Others suggested the CM should be reviewed to ensure that components not participating in the CM are given de-rating factors so that sufficient connection capacity is available for all sources feeding into a particular connection point.

A number of respondents felt that distributed generation should be required to have a firm connection agreement to participate in the CM (as with transmission connected capacity), though others felt non-firm capacity should be able to participate.

Some respondents felt that robust non-delivery penalties would be sufficient to address any issues with connection capacity. Others noted that appropriate metering arrangements were also important.

Consultation question:

26. What lessons can be learnt from the participation of renewables in other overseas capacity markets?

Summary of responses

There were only 12 responses to this question. Key points raised include: nearly all System Operators take account of wind and solar contributions to security of supply in their resource adequacy assessments; wind is allowed to participate in several schemes (France, PJM, Ireland) although it has not necessarily been in wind and solar generators' financial interest to take contracts; and participation of wind in the Irish CM may not be a direct comparator, as the two schemes differ with respect to physical delivery and the Irish regime's penalty exposure is much higher.

Interconnectors and cross border participation

Consultation question:

27. Is the current de-rating factor methodology for interconnectors appropriate for assessing their contribution to security of supply? Are there any particular challenges or risks you wish to highlight?

Summary of responses

Of the 50 responses, a slight majority expressed concerns with the current de-rating methodology for interconnectors, with only a handful supportive. A substantial number did not comment on the de-rating methodology, instead offering wider comments relating to interconnector participation in the CM – these are captured in the summaries to Questions 28 and 29.

Amongst those respondents expressing concerns, around three quarters thought the de-rating factors tended to be too high and a quarter thought they were too low. Both groups argued for greater transparency at various stages of the process including in relation to establishing the modelling assumptions and inputs, the production of the ECR, the PTE's consideration of NG's recommendations, and Ministerial consideration of the NG/PTE advice. And both felt that, whilst data on historic performance could be useful, the way in which it was currently used was not appropriate. Rather it was argued that the focus should be on historic performance during periods of system stress, with potential for this more limited range of data to be used to help test modelling results.

Those who felt interconnector de-rating factors have been set too low argue that actual performance in stressed conditions has been impressive, out-performing their de-rating factors, and that the power of price signals is underestimated. Some also expressed concerns with the use of forward modelling of interconnector performance based on inadequate assumptions. And others argued that de-rating factors should reflect only technical availability, with concerns with performance dealt with via penalties.

Those who felt the de-rating factors have been set too high pointed to perceived risks associated with interconnector performance e.g. that performance is variable and they regularly under-perform relative to their de-rating factors, that they could export during stress events and that de-rating factors should reflect the risk of coincident scarcity events in the interconnected countries). Some also argued that additional interconnectors will give diminishing returns in terms of their contribution to security of supply and therefore new

interconnectors should receive lower de-rating factors. Several also noted the need to consider potential biases within National Grid when considering their advice on interconnector de-rating factors.

Consultation question:

28. What other factors need to be considered to ensure that interconnectors and domestic capacity providers compete on a level playing field? Please provide ideas on how any issues you have identified can be addressed.

Summary of responses

There were 46 responses to this question. Nearly half the respondents claimed that interconnector access to the Cap and Floor regime is discriminatory, with a number arguing that this means interconnectors are not exposed to the missing money problem or non-delivery penalties in the same way as domestic capacity. A small number argued that the Cap and Floor regime is not discriminatory.

Other factors identified by respondents as unfairly benefitting interconnectors included the avoidance of TNUoS and BSUoS charges, the difference in carbon price paid in the connected countries (some responses suggested a carbon border tax should be applied to imported generation based on the recent historic carbon intensity of the connected market) and the lighter touch SPD arrangements for interconnectors. Concerns were also raised in relation to the ability of interconnectors to participate in two different CMs and their de-rating factors. A number of responses went as far as arguing that interconnectors should not be allowed to participate in the CM at all.

Some respondents argued that interconnectors were being unfairly disadvantaged as they do not have access to multi-year agreements and because their de-rating factors were too low.

Consultation question:

29. How could we facilitate direct participation of overseas capacity in the future?

Summary of responses

42 responses provided commentary on this question. Of those expressing a view on whether direct participation of overseas capacity should be allowed to participate, the majority were in favour (albeit this support tended to be caveated through reference to the numerous challenges likely to be faced in delivering this in practice). Those opposed did so on the grounds that the additional complexity would outweigh the benefits, that the CM should support domestic capacity only or that it would lead to insufficient signals for interconnector investment.

A significant number of comments highlighted the likely complexity of including overseas generation in the CM and accepted that it will take time to develop a suitable and pragmatic solution. Several stressed the importance of reviewing interconnector de-rating factors in the interim.

Responses identified a wide range of issues that would need to be considered when designing a model for enabling the participation of overseas capacity in the CM. These included:

- The need to recognise both the overseas capacity and the interconnector and how to split revenues (and liabilities) between the two;
- How the overseas capacity can demonstrate delivery in relation to stress events and SPDs;
- How to limit participation of the overseas capacity according to its geographical location and the capacity of the interconnector to that location; and
- How to manage the ability of the capacity to participate in multiple CMs which could have implications for security of supply and fairness.

A number of responses suggested that it could be necessary for a UK-based company to participate in the CM and then contract privately with the overseas capacity and interconnector. Others suggested that interconnectors could act as aggregators for overseas capacity.

Another theme raised in responses was one of fairness. In addition to the point made regarding the ability for overseas capacity to participate in multiple CMs, a number argued that overseas capacity should face the same requirements and obligations, as far as possible, as domestic capacity. Others felt that overseas capacity should pay an equivalent carbon price to GB capacity.

Finally, some respondents believed that cross-EU rules would be needed to do this properly, and others felt that it would be helpful to establish an industry working group to look at the issues in more detail.

3.4 Institutional framework

Consultation questions:

30. To what extent do the current institutional arrangements support an effective change process? Please provide suggestions on how issues can be addressed.

31. To what extent do the defined and allocated roles and responsibilities support effective administration and delivery of the annual processes related to pre-qualification, delivery and payments? Please provide suggestions on how issues can be addressed.

32. Please provide any suggestions you have for improving the management of fraud and error risk.

Summary of responses

There was considerable overlap in the issues raised in relation to these questions and so the responses are summarised together. There were 46, 40 and 20 responses to these questions respectively.

A majority felt there was a lack of clarity between the CM Rules and the CM Regulations. A smaller majority felt that more issues should be moved from the Regulations to the Rules.

Most felt there was a lack of clarity between the roles of BEIS and Ofgem with many suggesting Ofgem take a greater role. A number of respondents also felt there was a lack of clarity in the roles of the organisations involved in delivery.

A majority, but not all, raised issues around the service provided by National Grid as the Delivery Body, mostly in relation to prequalification and the ICT platforms ('The Portal'). Many of the respondents raising this issue suggested that National Grid were under-resourced.

Some felt that the Delivery Body should be allowed more flexibility or tolerance in applying the Rules and Regulations. A small number of respondents requested that Regulation 69 (which prevents the submission of new information at appeal) be amended or removed.

Most also said that the Rules change progress was overly complex and long. Some took the contrary view; that the rule change progress was too short to fit with the auction cycle. Many requested official publication of a consolidated version of the Rules and Regulations.

Some felt there should be a greater role for industry groups in amending the Rules and Regulations.

Consultation question:

33. Are there any lessons from overseas capacity mechanisms that could be useful in improving the GB Capacity Market?

Summary of responses

There were just 16 responses to this question. The French, Italian, ISO-NE and PJM CMs were the most commonly cited mechanisms, with examples drawn in relation to non-delivery

penalties, DSR delivery assurance, models for the participation of overseas capacity, governance and administration, and the use of decentralised reliability options. It was also noted that almost every other capacity mechanism has some form of dispatch mechanism.

3.5 Emissions Performance Standard

Consultation questions:

34. To what extent has the EPS been achieving its objective? Please provide evidence to support your views.

Summary of responses

An overwhelming majority of the 27 responses to the set of EPS questions were in support of the measure and sought for it to be maintained. Many of the responses acknowledged that the role of the EPS is a backstop which complements other decarbonisation policies, including the carbon price floor.

A very large proportion stated that the EPS has been successful in achieving its objective. Many noted that since the introduction of the EPS (along with other measures including Carbon Capture Readiness), no new coal plant has come forward. A small number of responses were not definitive in whether the EPS was achieving its objective or not.

One response stated that the EPS is only partly achieving its objective as the current design is focused only on preventing the construction of large baseload unabated coal power stations. It was raised that there is an amount of other, non-coal, high-emission fossil-fuelled generation (such as “peaking plant”) being built or contracted which would not fall within scope of the EPS. Concerns were around the recent increases in running hours from peaking plant and that in its current form the EPS is unable to regulate this rising source of emissions.

Issues and suggestions provided by respondents are captured in the summary of question 35 and 36 below.

Consultation questions:

35. Is this current objective of the EPS still appropriate? Could it be achieved in a way that imposes less regulation?

36. Have any issues arisen in the operation of the EPS which should be considered?

16 of the 17 respondents indicated the current objective is broadly appropriate. Two respondents provided caveats to this around whether the measure is still needed and it is unlikely that large new unabated fossil-fuel plant would have come forward. But there was also an acknowledgement of the need for regulatory stability.

One respondent stated that while the objective of the EPS is still appropriate, its design is no longer fit for the modern electricity system. Concern was raised regarding the growth of smaller decentralised generation, and with the running hours of peaking plant increasing and having an impact on emissions.

Suggestions for improvement were raised by a small number of respondents. This included:

- Calls to tighten the EPS (for example by reducing the capacity threshold to 1MWth and to make the limit instantaneous) in the future to encourage the latest technology and higher efficiencies, by applying it to other smaller non-coal, high-emission fossil-fuelled generation.
- In time, using the EPS measure (alongside other policies) to help achieve the Government's future carbon budgets; suggesting that it could be used to phase out gas plant, and to focus on less-efficient gas plant first.
- For an EPS to be implemented as part of the General Eligibility Criteria for the Capacity Market.

A small number of respondents sought clarity on how and when the Government would bring forward legislation to end unabated coal power generation.

Whilst not within the scope of the review of the EPS, some respondents referenced other measures impacting the achievement of the UK's decarbonisation objectives. This included:

- The importance of a long-term carbon price signal to drive decarbonisation in the electricity sector. Some respondents called for a robust carbon price and more clarity on GB's carbon pricing regime; and
- Concerns around the smaller decentralised generation that is exempt from the EU ETS.

Annex – list of respondents

Respondents	
ADE	National Grid ESO
Aecom	National Grid Ventures
Anesco	Natural Resources Defense Council
British Hydropower Association	Nemo Link
Calon Energy	NeuConnect
Carlton Power	Npower
CBI	Octopus Investments
Centrica	Renewable Energy Association
Citizens Advice	Regen
Client Earth	Regulatory Assistance Project
Community Windpower	Robin Maclaren
Drax	RWE
EDF	Sandbag
EEF	Scottish Power
Electricity Storage Network	SmartestEnergy
Energy Systems Catapult	SP Energy Networks
Enel X	Statnett
Engie	Statkraft

Respondents	
E.ON	SSE
EPUK Investments	Tesla
Exxon Mobil	Triton Power
FAB Project	UK Power Reserve
Flexitricity	Uniper
Green Alliance	University of Edinburgh school of mathematics
Greenbackers	Vattenfall
Innogy	Veolia
Intelligent Land Investments Group	VPI Immingham
Intergen	Wind Analytics
Mutual Energy Ltd.	WSP

*we also received 9 confidential responses from DSR providers / generators / developers and interconnectors.

This publication is available from: www.gov.uk/government/consultations/capacity-market-and-emissions-performance-standard-review-call-for-evidence

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