Capacity Market Consultation – Capacity Market Rule change proposals

E.ON Response

Executive Summary

1. E.ON welcomes Ofgem's efforts to ensure that markets are fair, transparent and work for the customer. This extends to the Capacity Market with its objective of ensuring security of supply at the lowest cost to the customer, a principle we fully support.

2. With this in mind, we advocate Rule Change proposals such as CP247 and CP343 which enable more providers to participate in secondary trading; notably those who originally failed at prequalification or have recently commissioned. Secondary trading is an essential element of a fully functioning Capacity Market allowing participants to mitigate the risks of non-delivery. We believe an effective secondary trading market would allow participants to manage the recently debated technology specific delivery risks such as capacity duration and others, for example, response times for conventional power stations. An effective secondary trading market along with a strengthened penalty regime would be a far more efficient way to address the perceived need to introduce measures specifically aimed at one technology type such as the banding of storage units for de-rating. We offer our full support to a review of the effectiveness of the current secondary trading arrangements and how these could be improved.

3. We also note the minded to decision on Rule Change proposals CP313 and CP314, endorsing the participation of renewable technologies in the Capacity Market. This is clearly in line with the original State Aid Approval of 2014 where it explicitly states that "The measure is open to low-carbon generators" and "Renewable generators… will be allowed to participate once their RO contracts expire". Again, this is consistent with our affirmation that the Capacity Market must uphold the principle of technology neutrality. In an era of fast-paced technology change it is also of paramount importance that the process by which new technologies are added to the list of assets eligible to become Capacity Providers is smooth and flexible. Enabling as many technologies as possible to participate in the Capacity Market will increase liquidity and competition in the auction which will benefit consumers – a measure of success for both Ofgem and E.ON.

4. We welcome the measures proposed to provide more flexibility to change or alter DSR components within a DSR CMU as referenced under Of12. These reflect the reality of a large number of sites making up DSR assets which can be subject to change. We also support the proportionate approach of allowing DSR Test Certificates to remain valid for the remainder of the Delivery Year.

5. E.ON was disappointed that proposal CP265 (E.ON) which sought to revoke BEIS' decision to amend Schedule 3 (Generating Technology Classes) to separate out the storage technology class into multiple categories was rejected. To reiterate, we believe that this approach both undermines the original principles of the capacity market; of a technology agnostic framework

designed to meet an appropriate security of supply standard, and contradicts the objectives of the "Smart Systems and Flexibility Plan", which aims to remove barriers to smarter technologies such as batteries. Furthermore, it is discriminating against a seemingly arbitrary feature of one technology (i.e. capacity duration for batteries) whilst disregarding issues which could have an equal or greater impact on ability to deliver capacity such as response times for conventional generation. We are of the belief that a fully functioning secondary trading regime, coupled with a robust penalty mechanism would be sufficient to mitigate any technology specific risks and that, furthermore, these risks could and should be managed by the Provider. E.ON is extremely uncomfortable over the precedent the implementation of storage de-rating according to duration bandings has set.

6. We have also outlined our concerns over CP353 which looks to instigate technology classes based on duration bandings for DSR storage. As well as overlooking the principle of technology neutrality, it also fails to consider several practical implications which we believe make this Rule Change unviable. These are outlined in detail under our response to CP353.

7. We were disappointed by the rejection of Rule Change proposals that related to removing barriers to participation of behind the meter generation eg CP261 (E.ON). Whilst we appreciate changes to Regulations are not within Ofgem's scope, co-ordination between BEIS and Ofgem on these matters would enable valid change proposals to gain traction.

8. Finally, we regret Ofgem's decision not to allow Existing Generating CMUs who successfully prequalify to have the option of withdrawing from the auction (CP264) or amending their bidding capacity (CP266) before the auction. This issue has been particularly pertinent recently in the instance when DEFRA instigated changes under the MCPD which made CMUs unviable just before the end of the prequalification session. CMU owners did not have time to assess the impact of these changes within this very small window but would have been able to do so in time for the auction.

Whether you agree with our minded-to decisions, set out in Annex B:

1. General Provisions

(CP247 Alkane), and CP343 (Welsh Power)

These proposals would extend Secondary Trading eligibility.

9. As per the comments in the Executive Summary, E.ON supports the minded to position to take forward the Rule Change proposals on Secondary Trading so as much eligible capacity as possible can participate in the Capacity Market.

3. Prequalification Information

CP253 (Centrica), CP347 (Centrica) and CP348 (Restore)

We therefore propose to allow a free choice of periods for evidencing historical output … generators would be able to specify any three periods when evidencing historical output, in contrast to the current requirement to provide the "highest" outputs. We are therefore proposing to replace the term 'Average Highest Output' in Rules 3.5.3 and 3.5.4 with the term 'Average Output'.

10. E.ON are supportive of the Rule Changes allowing a free choice of periods for evidencing historical output and replacing the term "Average Highest Output with "Average Output". This makes rooms for units whose outputs are expected to routinely be lower than previous highest outputs.

11. We are also supportive of the removal of the requirement to submit periods one month before the start of the Prequalification Window, agreeing that this change would alleviate issues such as the exclusion of generating units which have commissioned close to the prequalification window.

CP293 (EP UK Investments)

This proposal would remove the exclusion that prevents Existing CMUs which opted out of the T-4 Auction for a delivery year on the basis that they would be closed down by the start of the delivery year from participating in the T-1 Auction. We are minded to take forward this proposal.

12. We endorse the proposal to remove the exclusion that prevents Existing CMUs which opted out of the T-4 Auction from participating in the T-1 Auction. E.ON supports measures that increase market transparency by enabling the best, most up to date visibility of future plant availability. It is entirely possible that the circumstances of a CMU can change in between the T-4 auction and the T-1 for the same delivery year meaning that a CMU becomes viable where it was not previously. This unit should not be precluded from participating in the T-1 and providing valuable capacity.

13. We note the concerns raised around deliberately with-holding capacity from the T4 in order to push the price up however we are minded to agree with Ofgem that the barriers around market manipulation are sufficient to prevent this sort of behaviour.

CP334 (RWE)

Rule 3.6.3(d) permits Existing CMUs which are not directly connected to the Distribution System to use a letter from the Private Network owner as evidence of their connection rights. This proposal would extend that provision to enable New Build CMUs bidding into the T-1 Auction to demonstrate their rights to use a Private Network. We are minded to take forward this proposal.

14. We support the Rule Change to extend permission to use a letter from the Private Network owner as evidence of connection rights to new build CMUs as well as existing CMUs (as it

currently stands). This helps to level the playing field between different types of unit as well as removing barriers to entry which will increase auction liquidity and competition.

CP242 (ADE), CP243 (ADE) and CP261 (E.ON)
These proposals all relate to removing barriers to participation of behind the meter generation, notably Combined Heat and Power (CHP) Generators. We are minded to reject all three proposals as they would each require amendments in the Regulations.

CP261 proposes to amend the definition of "non-CMRS distribution CMU" which currently requires each generating unit to export to the distribution network.

15. It is disappointing that Rule Change CP261 which sought to amend the definition of "non-CMRS distribution CMU" (currently stipulating each generating unit export to the distribution network) was rejected. We understand that implementing this Rule Change is hampered by definitions in the Regulations and that there cannot be inconsistency between the Rules and Regulations. However, this definition is creating a barrier to available, often very efficient capacity from participating. We would therefore welcome Ofgem's commitment to working with BEIS to find solutions to these issues.

CP350 (Saltend Cogeneration)
This proposal would allow a site which is connected to a Private Network and which is not connected to a distribution network to prequalify. We intend to consult on a minded-to position in 2019.

16. E.ON support allowing a site which is connected to a Private Network but which is not connected to a distribution network to prequalify. It is currently the case that distribution connected CMUs have to have permitted export to DNO so, in an example where a CMU is connected to a private network but doesn't have permitted export, the unit is unable to participate. If the proposal is to allow for transmission connected assets to export to a network with 0 TEC, it should be also follow that units connected to a DNO without permitted export can also participate.

CP353 (Scottish Power)
This proposal would create new Demand Side Response (DSR) Technology Classes with different minimum durations, and apply the extended performance tests to these newly created Technology Classes.

17. We have raised our objections on the principle of creating new Technology Classes for DSR in the Executive Summary. Here we have outlined some of the practical considerations of introducing such a measure.

18. Whilst we accept that the introduction of a specific de-rating approach for Limited Duration Storage has created an anomaly (where storage participating as DSR is not subject to the same de-rating), we do not believe the solution proposed in CP353 has been fully considered. It presents a number of problems for practical implementation:

- The DSR baselining and test methodology analyses the change in demand for a given period. Storage, with its ability to both import power and export power, could potentially undertake tests during periods when charging would normally occur. In these charging periods the baseline and test methodology would consider the change from import to export, measuring more capacity than actually exists. For a storage system with symmetrical charge and discharge rates, this could amount to a result of up to twice the actual capacity.
- DSR CMUs typically comprise aggregations of multiple DSR components. The proposed approach of assigning a DSR CMU a Technology Class category based only on the shortest duration of any storage present within that DSR CMU raises a question - how would the de-rating factor be determined given that a DSR CMU could contain a mixture of DSR components types with both storage and non-storage DSR assets, and storage of different durations within the same CMU? Would an assumption be made that all capacity within the CMU was storage, or a fraction? It is apparent that the aggregations typical of DSR CMUs have either not been considered or, at least, not addressed under this proposal.
- In order to remove the disparity between DSR storage and Generation storage, it could be expected that the same or very similar de-rating factors would apply. This would provide a very strong driver on aggregators to segregate DSR into storage DSR and non-storage DSR capacity. It is then probable aggregators would group components with similar durations together to create CMUs with uniform characteristics. This could exacerbate the very issue we are trying to avoid of having CMUs which are only able to deliver for a short period of time. However, if this segregation isn't done, we are left with the problem of calculating de-rating factors for a CMU made up of several components each with different duration capabilities.
- As outlined, the incentives are likely to drive aggregators to allocate Storage DSR into specific CMUs, segregated by duration. This mirrors the same approach as the existing Generation Limited Duration Storage classes. The proposed new DSR Technology classes could amount to no more than an unnecessary duplication of the existing Limited Duration storage classes but with the complexities raised above as a result of aggregations of several components.
- The absence of a de-minimis derogation means even small amounts of storage located on a DSR site could be subject to the application of the storage de-rating factor. This would have a disproportionate impact where that storage is a small proportion of the overall DSR capacity.

19. Given these problems with the proposed solution, we would suggest a simple alternative be considered i.e. that all limited duration storage assets above a de-minimis threshold be required to participate as generation, within the existing Generation Limited Duration Storage Technology classes. This avoids the complexity of introducing a large number of new DSR Technology Classes, addresses the deficiencies of the DSR baseline methodology to potentially over-report storage capacity and, by having a suitable de-minimis derogation, ensures that very small storage capacities do not trigger disproportionate impacts and metering costs.

20. Where storage assets above the de-minimis threshold are physically located within a larger DSR asset, the Capacity Market already includes mechanisms to allow this capacity to be separated

through the use of bespoke metering. This would allow DSR capacity to participate as it does currently (as DSR) and storage to participate as Limited Duration Storage within the Generation Technology Class. Noting the potential costs of implementing bespoke metering, we believe it would be pragmatic and not unduly impact on delivery risk for a de-minimis derogation to be set such that a site delivering DSR from a mixture of technologies would not need to have bespoke metering if only a small proportion of the total capacity was from the storage. For example, a maximum threshold of 20% of overall site DSR capacity or up to 1MW in a site with capacity of at least 2MW could be considered as being able to enter as DSR.

21. As is apparent, CP353 seems not to have considered the significant practical implications of creating DSR technology classes of different durations. As outlined above, these would need to be addressed by disproportionately complex Rules, outweighing any perceived benefit. If Ofgem are minded to take this Rule change forward, we would urge consideration of alternative approaches such as reallocating storage DSR onto the duration limited storage generation class.

4. Determination of Eligibility

CP264 (E.ON) and CP266 (E.ON)
These proposals would allow Existing Generating CMUs who successfully prequalify to have the option of withdrawing from the auction (CP264) or amending their bidding capacity (CP266) before the auction..

22. As outlined in the Executive Summary, E.ON regret Ofgem's decision to reject Rule Change CP264 in particular but also CP266. Changes in circumstances between prequalification and the auction can have a material impact on CMU's pricing strategies. We accept that in most cases these can be managed in the CMU's auction price strategy but a material change could result in a CMU being uneconomic even at the price cap (the change in MCPD implementation in 2017 could have had this effect on some CMUs). Therefore CMUs could be forced into the auction at the price cap when they know they couldn't deliver capacity at this price.

CP327 (NGIH)
This proposal would put a requirement on the GB System Operator (SO) to publish the information it uses to calculate whether a Capacity Market Notice (CMN) should be issued, every half hour in real time.

23. Having access to information the SO uses to calculate whether a CMN is needed from one source and on a half hourly basis would be useful, especially for turn down DSR which is needing to weigh up a balance of lost production costs with the risk of being required by the capacity market. While this proposal was not taken forward we think this issue requires further consideration.

OF12 – Changes to DSR tests following component changes

24. We welcome the measures to provide more flexibility to change or alter DSR components within a DSR CMU and the proportionate approach of allowing DSR Test Certificates to remain valid for the remainder of the Delivery Year.

25. We would suggest that the proposed new rule 8.3.4(j) which limits the number of times DSR components can be changed, should be amended to clearly apply those limits on a per-CMU basis. The current drafting is somewhat ambiguous and suggests a fixed limit applying to the Capacity Provider which would then have a varying impact depending on the size of the Capacity Provider, the number of CMUs they have and the sizes and numbers of DSR components they are utilising.

26. We would also suggest that these changes will require an amendment to the requirements for Demonstrating Satisfactory Performance (13.4) to ensure that any DSR component can only be used for demonstrating satisfactory performance in one DSR CMU within a Delivery Year.

13. Testing Regime

CP277 (Endeco) and CP344 (ADE)

These identical proposals would permit Satisfactory Performance Days (SPDs) to be demonstrated through DSR Alternative Delivery Periods, with data gathered by Balancing Services Metering. We are minded to take forward these proposals.

27. We would support these proposals on testing. Their implementation means that, for a CMU with large components, small changes would no longer have such a disproportionate impact.

CP300 (ESC)

This proposal seeks to allow Capacity Providers more time to rectify issues identified in a failed Metering Test where the Capacity Provider has been notified of the failure a significantly in advance of the relevant Metering Test Certificate deadline.

28. E.ON welcomes Ofgem's proposal to eliminate the current 40 working day deadline limit on rectification plans.

CP259 (E.ON)

This proposal seeks to allow an additional window for completing DSR Tests, up to 30 working days after Prequalification Results Day. This would allow Capacity Providers to complete tests for Unproven CMUs prior to the auction, confirming their proven capacity and adjusting the CMU's size accordingly, before entering it into the auction.

29. As outlined in the Rule Change submission, the current prohibition on CMUs from carrying out DSR Tests in the period between the Prequalification window commencing and the Capacity Agreements being awarded means that Capacity Providers are prevented from proving their DSR capacity prior to the auction. Allowing this additional DSR testing

window of approximately 6 months would have distributed the DSR Testing workload more evenly across the year. It would also have served to increase the certainty of actual capacity available, reducing the risk of CMUs failing to deliver their capacity obligation.

30. In their Consultation "Improving the Framework", BEIS highlighted concerns over the reliability of DSR assets. This proposal would have addressed some of these and allowed more time to assess this reliability so it is difficult to understand why it has not been accepted.

CP260 (E.ON) and CP332 (RWE)
Both CP260 and CP332 seek to amend the testing regime under Chapter 13 in order that Interconnector CMUs should demonstrate Satisfactory Performance Days equal to or greater than their Capacity Obligation, rather than demonstrating an output greater than zero.

31. We are disappointed with the decision to reject CP260 which sought to level the playing field over Satisfactory Performance Day requirements between Interconnectors and other types of CMU.

CP263 (E.ON), CP313 (Innogy), and CP314 (Innogy)
These proposals seek to enable onshore wind and other renewable technologies to participate in the Capacity Market.

32. As outlined in the Executive Summary, allowing onshore wind and other renewable technologies to participate in the Capacity Market is consistent with the original State Aid guidance. We are pleased to see further analysis will be carried out on this issue and will support this work.

CP265 (E.ON)
This proposal seek to revoke BEIS' decision[8] to amend Schedule 3 (Generating Technology Classes) to separate out the storage technology class into multiple categories with different durations.

33. Further to the comments in the Executive Summary, we are clearly disappointed that this revocation was not taken forward and believe it sets a worrying precedent for further discrimination against other technologies.

CP303 (ESC)
This proposal would allow the use of Metering Equipment that does not meet the minimum accuracy classes specified in Schedule 7 (Bespoke Technical Requirements).

34. In our view this is a proportionate measure which recognised the need for metering to meet the overall accuracy requirements whilst allowing some flexibility over individual metering components. By not accepting this proposal, the Rules remain very prescriptive about the components in a metering system. This means modern, flexible, lower cost metering solutions are not permitted. The metering standards referenced in the Rules are decades old and are not reflective of contemporary technology.

35. We also can see how CP303 could have enabled Providers to supply capacity more cheaply as it would reduce the need for costly upgrade work providing limited benefit. By not accepting this Rule Change proposal a barrier to entry remains in place for some of the smaller players in the Capacity Market many of whom could deliver capacity more cheaply.

Of13 (Ofgem)

36. We are of the opinion that the proposed re-drafting of the baseline methodology for storage is problematic, especially for any storage unit that doesn't have a relevant balancing services contract such as a FFR/EFR agreement at the time of the event. Equating the baseline for storage with DSR is fundamentally flawed. This is because of the very different operational modes of the two technologies. A lot of DSR involves changing a daily, routine process for a company – i.e. the company would usually run their plant in a certain way with a process for a particular day. A baseline is therefore appropriate as it reflects "average" or "expected" behaviour. The operational mode of storage however is generally assessed on a second by second basis, based on economics at the time (which could be wholesale market, balancing mechanism or another service). It generally does not follow a pattern so an "average" or "expected" baseline approach is inappropriate.

37. We would like to draw Ofgem's attention to a scenario where storage units are participating in the Balancing Mechanism. Because the BM is centred around system balance and not system demand, these actions are fairly random throughout the year. The Balancing market does not count as a "relevant balancing service". So, for a storage unit participating in the BM, its actions, although rational, could be random with respect to time. It is therefore questionable whether there remains any merit in making a baseline judgement on the last 10 days and the last 6 weeks.

38. A second scenario is that of storage that intends to provide Firm Frequency Response (FFR) without a long-term contract. A storage unit may be acting in FFR markets, which are run on a monthly basis and with contracts typically lasting for 1 month. In a situation where a System Stress Event occurs the day after that contract ends, determining a baseline could be very problematic. In this situation the suggested baseline would take into account what the battery has been doing as part of its FFR contract. However, that mode of operation has nothing to do with the action that would have taken place in a period when not performing FFR which the suggested baselines do not address.

39. We do not believe OF13 takes into account the issues we have raised above and are also of the opinion it belies an understanding of storage units' modes of operation and the markets in which a unit would typically operate.

15. Schedules & Exhibits

CP252 (Centrica) and CP285 (Energy UK)
These proposals suggest rationalising the number of certificates and declarations required as part of prequalification.

40. E.ON is supportive of any changes which open up the Capacity Market to as many participants as possible - this can only serve to increase the pool of capacity available, increasing competition and liquidity in the auction.

41. We therefore agree with Rule Change proposals such as CP252 and CP285 which suggest rationalising the number of certificates and declarations required as part of prequalification.

E.ON

May 2018