The voice of the energy industry

European Commission
Directorate General for Energy
Unit B2 – Internal Market, Wholesale markets' electricity and gas
1049 Brussels
Belgium

06 February 2020

Consultation on the United Kingdom's market reform plan for Great Britain

I am writing in response to the Consultation on the United Kingdom's market reform plan for Great Britain based on the GB Implementation Plan submitted to the European Commission (the "Commission") in December 2019.

Energy UK is the trade association for the energy industry with over 100 members spanning every aspect of the energy sector – from established FTSE 100 companies right through to new, growing suppliers and generators, which now make up over half of our membership.

We represent the diverse nature of the UK's energy industry with our members delivering almost all (90%) of both the UK's power generation and energy supply for over 27 million UK homes as well as businesses.

Energy UK agrees with the identified market failures by the UK Government in its GB Implementation Plan, and recognises both the necessity to have implemented a market-wide capacity mechanism to address these, and the ongoing need for it. The elected mechanism (the "Capacity Market") was introduced under an original State aid decision by the European Commission (the "Commission") in 2014. This decision came about to address the security of supply challenges arising from an increasing capacity margin from end of life generation exiting the market, the "missing money" market failure, the implications of a much higher proportion of low carbon capacity with low running costs.

This capacity margin concern is identified by Great Britain's System Operator, National Grid[1] in its annual Winter Outlook reports. Of note is the Winter Outlook report of 2013/14[2] which forecast peak weather corrected electricity demand forecast for winter 2013/14 at 54.8 GW, and de-rated actual generator availability over peak weather corrected demand to be just 60.5GW, just 5% of electricity margin against Average Cold Spell (ACS).

We agree with the proposition set out in the GB Implementation Plan that GB continues to experience resource adequacy concerns. Due to the Capacity Market, we have experienced a Loss of Load Expectation (LOLE) between 0 and 1 hours[3], below the minimum reliability standard of 3hours/year. Recent analysis by the UK Government and National Grid ESO demonstrates that the LOLE would

[1] Prior to April 2019 the Transmission System Operator for GB was National Grid. Following legal separation in April 2019, this responsibility is now held by National Grid Electricity System Operator (ESO).
[2] National Grid Winter Outlook 2013/14 - https://www.nationalgrideso.com/document/63796/download
[3] Winter Outlook ESO Winter Outlook 2019/20 - https://www.nationalgrideso.com/document/127551/download

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exceed the reliability standard in the absence of the Capacity Market between 2019/20 and 2023/24.[4] It therefore appears unlikely that the reliability standard would be met over the next 5 years without the Capacity Market, and demonstrates its continued need.

The Capacity Market continues to ensure that capacity and the "missing money" market failure is addressed at least cost to consumers. It does this through competitive auctions which run on a pay-as-clear basis, and we have experienced decreasing clearing prices as competition increases, with the recent T-3 2022/23 auction clearing at £6.44/kW/year, down from £8.40/kW/year clearing price in the T-4 2021/22 auction. Further, the Capacity Market acts to reduce scarcity pricing in the event of a capacity stress event and providing wider benefits to the system and consumers.

Energy UK agrees with the necessity for the Capacity Market and fully supports the continuation of the mechanism. Since its inception, the Capacity Market has secured billions of pounds of investment in the GB electricity system to ensure security of supply and has demonstrated its ability to significantly improve LOLE beyond the minimum standard.

For your reference, I have attached as Appendix A to this letter Energy UK's response to the Commissions (Directorate General for Competition) call for evidence on the GB capacity mechanism's State aid review which outlines members views of the Capacity Market. This was submitted to the Directorate General for Competition in April 2019.

If Energy UK could be of any assistance throughout the Commissions review, or you have any questions in regards to this response, please feel free to contact me.

Yours sincerely,

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[4] Page 26 GB Implementation Plan - https://ec.europa.eu/energy/sites/ener/files/gb_implementation_plan-final.pdf

Appendix A

Energy UK response to the European Commission's request for evidence on Great Britain's Capacity Market

18th April 2019

About Energy UK

Energy UK is the trade association for the GB energy industry with a membership of over 100 suppliers, generators, and stakeholders with a business interest in the production and supply of electricity and gas for domestic and business consumers. Our membership encompasses the truly diverse nature of the UK's energy industry – from established FTSE 100 companies right through to new, growing suppliers and generators, which now make up over half of our membership.

Our members turn renewable energy sources as well as nuclear, gas and coal into electricity for over 27 million homes and every business in Britain. Over 730,000 people in every corner of the country rely on the sector for their jobs, with many of our members providing lifelong employment as well as quality apprenticeships and training for those starting their careers. Annually, the energy industry invests over £11bn, delivers £88bn in economic activity through its supply chain and interaction with other sectors, and pays £6bn in tax to HMT.

Executive Summary

Energy UK welcomes the opportunity to provide evidence to the European Commission, as part of its in-depth investigation into Great Britain's Capacity Market (GB CM). We support the original decision made in 2014 to approve the GB CM and believe that it remains compatible with the European Union's (EU) State aid rules and that it was fundamentally the correct decision. The GB CM annulment has brought uncertainty to many companies that hold capacity agreements and have made investment decisions on the basis that the mechanism was State aid compliant and could be legally relied upon. It is worth highlighting, that although statements have been made by the UK Government that there is no immediately impending security of supply issue, as financial uncertainty increases, there is an increased chance of capacity unavailability due to financial constraints. We therefore strongly encourage the Commission to conclude its State aid investigation on the GB CM as rapidly as possible consistent with due process, to ensure the continued security of supply.

The mechanism has been successful in bringing to market significant volumes of Demand Side Response (DSR). The UK government has put in place a number of measures to bring forward DSR including dedicated transitional auctions for DSR, which resulted in the technology achieving higher clearing prices than has been possible in auctions open to all technologies. The existing CM design has proven to deliver competitive auctions between different capacity providers with a significant proportion of unproven DSR CMUs able to obtain agreements without the need for access to longer agreement tenures. There is a lack of evidence to suggest that access to longer term agreements would increase the amount of DSR able to compete. The reasoning behind DSR not being able to qualify for longer term agreements being that it does not meet the requirement of the significant capital expenditure threshold, which large new-build Capacity Market Units (such as generation or storage) may be able to easily meet.

The possibility of foreign capacity directly competing in the GB CM has been an aim of the UK Government since the mechanism's original design. Challenges, however, remain in the way in which this might be delivered, and the UK Government has presented proposals how this could be brought forwards. We encourage the UK Government to continue to review how this could be done, however, we ask that the European Commission is pragmatic in its review of this element, and policy intent is acknowledged to bring foreign capacity to market outside of the current interconnector model.

a) Background to the GB Capacity Market - EMR Five-Year Review Process

The UK government consulted extensively prior to introducing the GB CM and recognised that adjustments over time would likely be needed, to reflect learning from experience. Under Great Britain's Electricity Market Reform (EMR), a Contracts for Difference (CfD) scheme, a Carbon Price Floor (CPF) and a Capacity Market (GB CM) were proposed and subsequently brought forward. The EMR works to bring renewables to market through the CfD, to encourage lower carbon forms of generation through the CPF and to deliver security of supply to Great Britain through the GB CM. In all, the GB CM works alongside the CfD mechanism and the CPF in efforts to combine meeting domestic decarbonisation goals with security of supply.

In the EMR it was stipulated that following five years of implementation, there should be a holistic review for its appropriateness and effectiveness. This process of policy review was to be concluded in 2019, following consultation in 2018. This framework provided an opportunity for appropriate adjustments to be made to the mechanism considering learning from experience and development of the energy system. It should be noted GB CM stakeholders were able to make their views known on the scope of this review and the elements of it during the Five-Year Review consultation.

Many incremental refinements have already been made to the GB CM since 2014 to better deliver the CM objectives. The wider Five-Year Review of the mechanism had commenced with a consultation launched in August 2018[5] and further consideration and consultations planned in 2019. While Energy UK members have a range of opinions on how detailed GB CM rules should evolve over time, our members are united in their view that the GB CM remains fundamentally the right instrument for delivering security of supply. The already planned Five-Year Review is the right mechanism for considering and consulting on any changes which might be considered desirable in the light of the experience to date. Adjustments have already been delivered through this policy evolution strategy, including enabling interconnected capacity to participate (2015), addressing the risk of accumulating multiple State aid revenues of a CMU (2016), and bringing forward the start of the GB CM to address immediate security of supply concerns (2016).

b) Appropriateness of the measure

Under the mechanism, longer term (>1 year) agreements are only available for new or refurbishment projects which meet substantial Capital Expenditure (CapEx) thresholds. Historically, Turn-down DSR does not involve CapEx of the necessary scale. Therefore, it has not been deemed appropriate to award longer-term agreements, and has not been able to meet the criteria necessary to warrant such support. Although in scope for the GB CM Five-Year review, at the time of mechanism design this seemed an appropriate measure and criteria for multi-year contract eligibility. Energy UK does note that DSR that is new build or refurbished Behind-The-Meter (BTM) generation or storage can secure longer term agreements by participating in auctions as generation/storage. It has never been the policy intent to

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

restrict DSR's ability to come to market, rather, it is deemed the most appropriate way to incentivise participation without being disproportionate to the expenditure incurred by the capacity provider.

Some DSR providers in Energy UK's membership are of the view that multi-year agreement availability in T-4 auctions would not incentivise customers to bid into auctions. This is due to the required time to comply with agreement obligations; considering developments since 2014, others may find value in multi-year contracts, if they can meet eligibility criteria. Providers of DSR can be customer sites that wish to maintain a certain level of flexibility (they may not see value in locking-in to a long-term agreement where obligations must be met at risk of penalties or termination fees). The T-1 auctions are of importance for these assets. We note that in the 2013 EMR consultation document *"the target volume of capacity [for DSR] for the year ahead will be at least 50% of the capacity that was reserved for it at the four year ahead stage will be procured*"[6], this would further incentivise these forms of DSR.

The chosen 2MW threshold aimed to keep the mechanism's administration processes manageable and is the same or similar to thresholds which apply in other Capacity Markets around Europe. There is little evidence that it has disadvantaged DSR – for example the transitional auction which allowed a much lower threshold (500kW) attracted very few bids below the 2MW threshold (8.5MW, representing 8 CMUs).[7]

c) Proportionality of the measure

The GB CM cost recovery method is appropriate, proportionate and fair. Being based on gross electricity consumption between 16:00 and 19:00 each weekday in winter ensures that there is a dependable signal to reduce peak demand. This also ensures that the GB CM costs are recovered in a fair and equitable way from all types of consumers. The GB CM cost recovery method, based on supplier market share on typical winter peak periods, provides an additional incentive for DSR to facilitate reduction in demand on winter weekdays. While alternatives were considered, there were sound reasons for the chosen methodology and it cannot be said to disadvantage DSR. This methodology provides regularity to all suppliers and provides them with a predictable charging stream.

d) Avoidance of negative effects on competition and trade

The policy behind the GB CM and the design of the mechanism has opened competition for all technologies that can meet pre-determined requirements to maintain security of supply. This included providing DSR an appropriate and proportional route to market in the mechanism. DSR is a key tool to providing capacity to the GB energy system, potentially bring significant cost savings to the GB billpayer, and it is our view that this is recognised by UK Government. The GB CM has included measures clearly designed to support DSR, such as lower credit requirements (£5,000/MW compared to £10,000 for new build generation[8]) and softer testing regime requirements. It would, however, prove impossible to reserve amounts of DSR capacity in auctions, as it would be inconsistent with The Environmental and Energy State Aid Guidelines (EEAG).

[6] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/255254/emr_consultation_implementation_proposals.pdf
[7] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019XC0322(02)&from=EN
[8] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/791236/Principal_Regulations__Keeling_Schedule___general__final.pdf

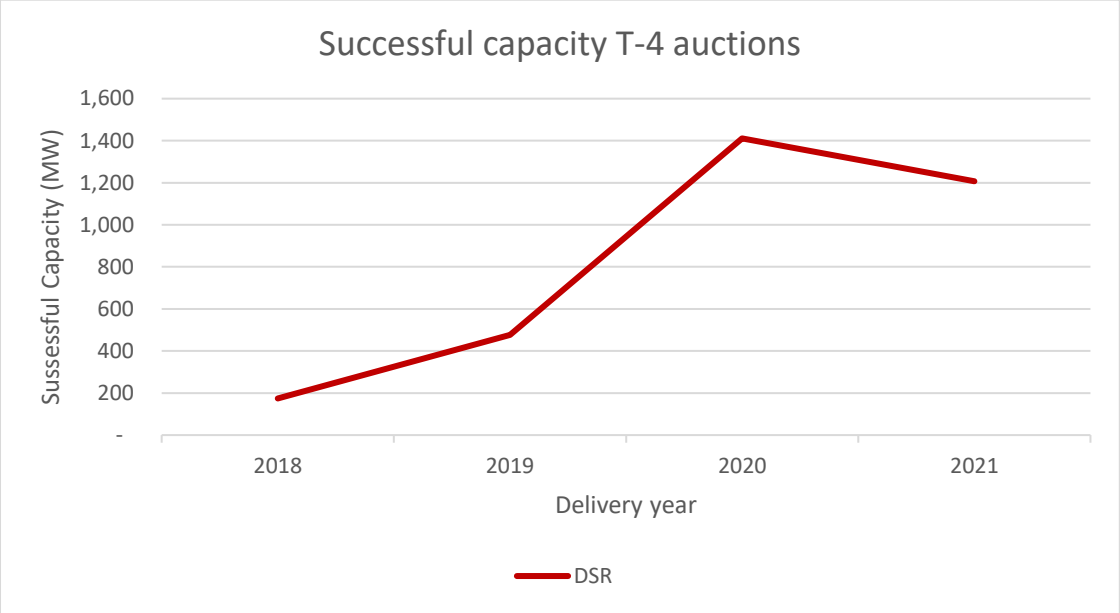

Figure 1 Successful Demand Side Response (DSR) Capacity Bids into the CM T-4 auctions (MW)

Evidence provided over the lifetime of the GB CM from auctions held to date shows that DSR participation in the mechanism has grown substantially over time and a range of DSR companies have had noted success. The transitional auctions provided commercial opportunities (and resulting in higher auction clearing prices) which were not accessible to other technologies or forms of capacity provider. These auctions in 2016 and 2017, brought forward a an additional 475MW and 312MW respectively, with the 2017 auction run solely for turn-down DSR participation. At the time of the GB CM's design, there was an expectation that DSR would primarily participate in T-1 auctions, whereas increasing amounts have been brought to market through the T-4 auctions. The results from the previous GB CM auction show a clear increase in DSR participation and awarded capacity agreements (in megawatts). As outlined in Figure 1, the original T-4 2014 auction brought short of 200MW of DSR capacity into the GB CM, compared to the T-4 2016, just two years later, successfully awarded capacity agreements to 1.4GW of DSR. In 2017 this saw a further 1.2GW, a significant volume, and clearly demonstrates that the CM provides incentives for DSR providers.[9]

e) Participation of foreign capacity

Energy UK acknowledges the case for the direct participation of foreign capacity in the GB CM. We agree that capacity providers should be able to participate in the Capacity Mechanisms (CMs) of other Member States and welcome the process for developing a methodology of cross-border participation as set out in the newly adopted recast of the EU Electricity Regulation (Regulation). The details to be included in that methodology are still to be further specified by ENTSO-E and approved by ACER within the timescales foreseen in the Regulation once it enters into force. The UK Government has acknowledged the potential to include of foreign capacity directly competing in the GB CM since the mechanisms original design. It was initially proposed that this could be done through implicit auctions in which buyers and sellers in each market can bid into the other.[10] However, this is a complex policy

[9] https://www.emrdeliverybody.com/CM/Auction-Results-1.aspx

[10] https://ec.europa.eu/energy/sites/ener/files/documents/cross-border_crm_study_-_final_report_-_170106.pdf

to implement and the UK Government should be given time to explore how this would be done and the scope for appropriate reciprocal arrangements with interconnected countries. We would expect the European Commission to provide support on an ongoing basis to assist all CMs in the EU to create a consistent approach forward including this in CM designs as appropriate over time.

The UK government has shown considerable intent to apply this in domestic policy and has continued to investigate how this could be brought forward, consulting on this as part of the call for evidence issued in August 2018[11]. Energy UK believes that this should be reviewed outside of the scope of this process to approve the GB CM, given the need for a clear focus on ensuring the security of supply. The current interconnector model provides a suitable solution in the interim. Energy UK looks forward to continuing to work with the UK Government to develop an appropriate framework to facilitate this.

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

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