

SEE SEPARATE COVER LETTER FROM SUSTAINABILITY FIRST (3 October 2022)

ANNEX

Response to specific REMA consultation questions

From Sustainability First – www.sustainabilityfirst.org.uk

Judith Ward. Associate

Email : Judith.ward@sustainabilityfirst.org.uk

Chapter 1

1. Do you agree with the vision for the electricity system we have presented?

We broadly agree with the context, vision and objectives for electricity market design set out in the consultation and the case for change as made.

2. Do you agree with our objectives for electricity market reform (decarbonisation, security of supply, and cost effectiveness)?

The energy system, including the electricity system, continues to face the very long-standing challenge of the energy trilemma - of decarbonisation, security of supply and affordability. These three basic goals remain equally vital in achieving a sustainable energy system and the REMA objectives must therefore support a 'right-balance' between all three.

Chapter 2

3. Do you agree with the future challenges for the electricity system we have identified? Are there further challenges we should consider? Please provide evidence for additional challenges.

Potential end-user outcomes which may arise from the different REMA options – and packages of options - must be tied far more directly and transparently into the REMA process.

Our cover letter and our limited answers to the consultation questions raise some important questions and concerns from the end-user perspective and some basic issues of principle about the REMA options – yet to be adequately addressed in the REMA process. See Qn 5 below.

The consultation sets out detailed questions about the many different market options under consideration, and asks for specific evidence which we are not in a position to provide.

4. Do you agree with our assessment of current market arrangements / that current market arrangements are not fit for purpose for delivering our 2035 objectives?

We agree that present market arrangements have enabled rapid growth in renewables and also some welcome development of demand-side services. We also agree that we are now at a point in the transition to a net-zero electricity system where present incentives do not promote the 'right' supply-side technologies in right timescales (investment, operational) and in right places.

In particular, given the current energy price crisis, we agree that a main and urgent REMA outcome is to decouple gas price-setting from renewables in electricity wholesale markets and so drive down average wholesale prices.

Chapter 3

5. Are least cost, deliverability, investor confidence, whole-system flexibility and adaptability the right criteria against which to assess options?

As they stand, these five assessment criteria do not seem sufficiently to address how the different REMA options might impact different end-users.

From an end-user standpoint, REMA has major impacts which will be baked-in via highly technical market-design decisions. These reforms are huge and complex and may take years to conclude. Major strategic decisions made in REMA over the next 2-3 years will shape basic end-user outcomes for the next 20-30 years. BEIS indicates that it sees the end-user side of the equation addressed via its expected Retail Strategy. BEIS assurance that the REMA and Retail teams are working in 'lock-step' is of course welcome. Nevertheless, for end-users the different REMA options signify not just opportunity but also many potential risks which need to be far better understood. It is therefore **important that the criteria to assess the REMA options should also take account of potential end-user impacts. We would therefore add a sixth criterion against which to assess the REMA options - that likely outcomes for end-users are broadly 'fair' or 'equitable'. Also, that what is 'fair' and 'equitable' should be transparent and as far as possible agreed across key stakeholders.**

6. Do you agree with our organisation of the options for reform?

Generally, organisation of the REMA reform options is supply-side focused - with little consideration of potential impacts on end-users - other than an assumption throughout the consultation that the reforms will promote - from an electricity system standpoint - 'right' end-user responses for flexibility and location.

We welcome the BEIS intention to engage with a wide range of stakeholders **but we should also like to see the REMA reform options – and proposed packages – supported and to some extent 'tested' through a dedicated REMA End-User Forum. This to include a 'right-mix' of consumer representatives (household, I&C), local, metro and devolved government, the CCC & NIC, representatives of community energy, social and environment NGOs plus academics with end-user expertise. BEIS and Ofgem would also be 'at the table', and the ESO as appropriate.**

An End-User forum could help ensure end-user voices and inputs are 'heard' and sustained through the likely long-haul of the REMA process. This forum would support both BEIS and Ofgem in gaining a clearer grasp of the REMA options on different categories of end-user – including how reform options might best eventually be 'packaged'. An end-user forum would support identification of

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positive end-user outcomes from REMA, avoid unwanted ones, and actively help bridge policies to the BEIS Retail Strategy and future retail market development.

7. What should we consider when constructing and assessing packages of options?

A main aim of these reforms is to drive greater cost-reflection and stronger economic signals on a whole-system basis - whether for long-run investment, for overall system efficiency (real-time included) or to promote system-wide flexibility. **How these sharper economic price-signals – for peak, for periods of scarcity and plenty, for location - eventually pass through to end-users are of fundamental importance.** We welcome encouragement of greater end-user flexibility to support lower overall system costs. But, at the same time, **winners, losers and significant distributional impacts will arise.** In particular, questions will arise as to how far winners can expect to take the full benefit of their flexibility to the system and / or how far all customers can expect to benefit from the more efficient system envisaged as a result of the different options and how these options in the end are packaged. These end-user impacts – which will be many and complex - need active consideration in assessing the many REMA options outlined in the consultation.

Chapter 4

8. Have we identified the key cross-cutting questions and issues which would arise when considering options for electricity market reform?

REMA has major cost-implications yet to be understood – including for end-users. BEIS anticipate a far larger electricity system (~300 GW) to meet higher demand. It is therefore welcome that BEIS plan to assess all options – including how these in the end are packaged together - against ‘least cost’ as well as deliverability. **We agree that a main and urgent REMA outcome is to decouple gas price-setting from renewables in electricity wholesale markets and so drive down average wholesale prices.** But, even once gas no longer sets wholesale prices all or much of the time, there are **still major questions of ‘missing money’** (to promote new mass low-carbon plant, to ensure sustained long-run investment in renewables, to de-risk large nuclear (even though outside REMA scope). REMA means some current subsidies will be unwound but there will also be a need for new subsidies to decarbonize our power system by 2035. **From an end-user standpoint it is not clear at this stage how far REMA may ultimately be expected to be ‘cost-neutral’ – nor in what timescale. From an end-user standpoint it will therefore be very important to ensure an informed discussion of :**

- **Expected REMA costs & benefits – and very important - when to expect a draft impact assessment – and**
- **How far new / additional costs and subsidies are best met by end-users (current, future) - and/or by tax-payers**

9. Do you agree with our assessment of the trade-offs between the different approaches to resolving these cross-cutting questions and issues?

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On end-user outcomes to arise from the REMA reforms, the potential for ‘winners’ is acknowledged in the consultation but scant attention is given to potential ‘losers’. The consultation implies that these are matters for the retail strategy.

An early understanding of which end-user groups are most and least likely to benefit from different REMA options is critical in assessing trade-offs, including whether mitigations might be needed if a particular option is pursued. These considerations apply in particular to trade-offs among the REMA options – or package of REMA options - to promote flexibility, locational pricing and market-splitting / green power pool.

What this means in practice is **that far more thought is needed in assessing the REMA options as to how different industry costs and charges might flow through to end-users via retail tariff structures, who the likely winners and losers might be and associated distributional impacts. These are first order questions which cannot simply be left to the expected Retail Strategy.**

For example on flexibility : BEIS indicates that price-signals for flexibility will deliver benefit at both the individual level - plus lower system costs overall (wholesale, avoided network costs). While considerable end-user upside should be expected from flexibility, no account is taken in the consultation of the potential downside for those consumers and end-users who, for whatever reason, are not able to be flexible at high-cost times. These trade-offs need far more thought and are possibly the biggest REMA question for end-users. Over many years Sustainability First has researched demand-side flexibility for both households and I&C customers – including what it means to be a smart consumer in practice – and especially what it may mean in terms of fairness, likely winners and losers and distributional impacts . The consultation does not discuss how far end-users who are non-flexible may end-up shouldering an ever-larger share of system costs that might be either peak- or capacity-related, especially in a world of universal half-hourly settlement. One mitigation / trade-off would be to mutualise certain common costs (as now for households) – but this could also dull hoped-for price signals for flexibility.

For trade-offs that impact end-users, similar distributional questions arise from a move to locational marginal pricing and from market splitting and a green power pool.

See also Qns 5, 6, 7 & 8

10. What is the most effective way of delivering locational signals, to drive efficient investment and dispatch decisions of generators, demand users, and storage? Please provide evidence to support your response.

From an end-user standpoint, a shift away from a single national wholesale price by introducing new locational signals into wholesale pricing is possibly one of the least thought-through of the REMA options. The aim is to provide stronger locational price-signals at the transmission level – both short-run on what to operate - and long-run on where best to site – whether for generation or for demand. **From an end-user standpoint – that is from the standpoint of demand - LMP (locational marginal pricing) is a controversial option and potentially also hugely complex. Importantly, there are also other potentially effective ways to introduce stronger locational signals into the electricity system including via network charges - both transmission and distribution – and which the consultation does not discuss.**

Locational pricing options for wholesale prices as outlined in the consultation - zonal, nodal - introduce different levels of complexity and new costs from an end-user standpoint. Not least, our

recent submission to Ofgem on Locational Marginal Pricing discusses these issues of fairness and complexity in more detail¹. In particular **for existing demand**, especially in the face of the current energy crisis, we struggle to envisage how introducing stronger locational signals for existing businesses and homes might be acceptable in the ‘real-world’ of today. On the face of it, zonal pricing appears to be simpler and more readily understood from an end-user perspective – especially with respect to demand. **However, it is hard to see how the sheer complexity (including prospective central despatch) and / or the likely post-code lottery of nodal pricing can be justified from an end-user standpoint – in particular if nodal prices are to be applied to customer demand as well as to generation².**

11. How responsive would market participants be to sharper locational signals? Please provide any evidence, including from other jurisdictions, in your response.

Locational wholesale pricing as described in the consultation is conceived first and foremost as a mechanism to tackle spiralling balancing costs by making locational factors in the balancing mechanism sharper and more transparent than now. Arguably, for much-needed long-run price signals relating to siting of generation or storage - LMP seems a somewhat indirect and potentially blunt mechanism - and whose desired outcomes may be more achievable via new approaches to network charges.

Throughout the consultation, generation and demand are referenced together in terms of locational pricing. A good start point would be to split out REMA consideration of likely impacts of LMP on (1) generation (including prospective central despatch with nodal pricing) (2) large-scale storage and (3) demand and end-users.

As noted, (Qn 10 above) **for existing consumers (business, households), regions and communities – unable to relocate their demand - major questions arise around fairness and equitable treatment if significant cost-penalties are to be introduced into retail tariffs simply for happening to be located in a ‘wrong’ place from the standpoint of the electricity system.**

12. How do you think electricity demand reduction should be rewarded in existing or future electricity markets?

We were glad to see that incentives for electricity demand reduction are ‘within scope’ for REMA and would be keen to see more work taken forward. However, BEIS have yet to spell out how consideration in REMA of new incentives for electricity demand reduction will link either with the

¹ https://www.sustainabilityfirst.org.uk/images/Ofgem_Call_for_Input_on_Locational_Pricing_240622.pdf

² ² Shortly before publication of the REMA consultation in mid-July 2022, Utility Week reported the then BEIS Secretary of State on the potential post-code lottery that could result from nodal pricing – and how that could be expected to play in the real-world ...‘he expressed doubt that localising the wholesale price of electricity is politically feasible because households may balk at having / paying different bills depending on where they live in the country.....’those regional disparities are something that as elected officials we are very aware of and don’t necessarily want to see.” <https://utilityweek.co.uk/kwarteng-raises-postcode-lottery-fears-over-local-electricity-pricing/>

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Ofgem Strategic Innovation Fund challenge on energy efficiency, or more important, with government wider work to deliver existing and future energy efficiency programmes and measures, including the ECO and other government and local-government programmes for thermal insulation.

Consideration of REMA options – including electricity demand reduction incentives - must tie directly and transparently to real-world end-user outcomes via retail markets. **Our suggested End-User forum (Qn 6) could support BEIS in looking through a ‘real-world’ lens at proposals put forward through the REMA process for electricity demand reduction incentives.**

REMA outcomes for end-users must also very clearly join-up with the upcoming Retail Strategy - and also with other relevant BEIS work programmes - including on Affordability and Fairness and Rebalancing of Energy Costs and Energy Efficiency programmes and measures. At the end of the day, practical and deliverable outcomes for end-users – whoever they are and wherever they are located- will make or break the REMA reforms in delivering a net-zero power system by 2035.

Chapter 5

Review of Electricity Market Arrangements

13. Are we considering all the credible options for reform in the wholesale market chapter?

We agree that a main and urgent REMA outcome is to decouple gas price-setting from renewables in electricity wholesale markets and so drive down average wholesale prices.

14. Do you agree that we should continue to consider a split wholesale market?

Significant complexity attaches to wholesale market design options to decouple gas price-setting from renewables - including possible implications for end-users – whether via market splitting, a green power pool or perhaps requiring all producers to have CfDs (including all existing renewable producers). At this point we do not have sufficient information on main pros- cons- and therefore the possible end-user outcomes to indicate a preferred option.

15. How might the design issues raised above be overcome for: a) the split markets model, and b) the green power pool? Please consider the role flexible assets should play in a split market or green power pool – which markets should they participate in? - and how system costs could be passed on to green power pool participants.

The split-markets model, the green power-pool and the role flexible assets should play also need to be assessed against potential outcomes for end-users.

For example, **both the split markets model and a green power pool could mean that certain end-users, not out of choice, may be locked into paying a premium for a largely firm supply if for whatever reason they cannot take advantage of retailer-offers that are based (on average) on lower-priced intermittent supplies. The kinds of premium to which some end-users could be exposed in retail tariffs if their needs must be met very largely via ‘firm’ supplies will need to be understood. This could be particularly problematic for I&C customers with loads that are largely non-flexible for much of the time and / or at particular times.**

16. Do you agree that we should continue to consider both nodal and zonal market designs?

See Qns 10 & 11

No to nodal. It is hard to see how the sheer complexity and / or likely post-code lottery of nodal pricing can be justified from an end-user standpoint – **in particular if nodal prices are to be applied to customer demand as well as to generation .**

From an end-user perspective, zonal pricing seems simpler and more readily understood – especially with respect to demand.

17. How might the challenges and design issues we have identified with nodal and zonal market designs be overcome?

See Qn 10.

From an end-user standpoint, the costs, benefits, trade-offs and likely outcomes of wholesale locational marginal pricing need to be assessed alongside introducing clearer locational signals via network charges - both transmission and distribution. That assessment should also split out treatment of (1) generation and (2) demand.

18. Could nodal pricing be implemented at a distribution level?

On the face of it nodal pricing at a distribution level seems undesirable from an end-user standpoint for reasons of both complexity and fairness.

See Qns 10, 11 and 17

19. Do you agree that we should continue to consider the local markets approach? Please consider the relative advantages and drawbacks, and local institutional requirements, of distribution led approaches.

Yes.

In a world of both large-scale and very small scale producers, and ever-increasing automation, **far more work is needed on the potential future role of the DSO at the transmission / distribution interface – including interactions with the ESO/FSO** – be that for balancing power flows at the regional level or real-time frequency and voltage management. In particular from an end-user standpoint, much more work is needed by both BEIS and Ofgem and the DNOs on what an optimal role for the DSO might look like - be that in operational and / or investment time-scales – whether as market enabler, market facilitator and / or distribution services provider.

Our recent thinking on future FSO and DSO roles is set out here³.

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[https://www.sustainabilityfirst.org.uk/images/publications/consultations/Response to Energy Future System Operator Consultation.pdf](https://www.sustainabilityfirst.org.uk/images/publications/consultations/Response_to_Energy_Future_System_Operator_Consultation.pdf)

And [https://www.sustainabilityfirst.org.uk/images/Sustainability First - Local Energy Institutions and Governance - Ofgem Call for Input - 6 June 2022 FINAL pdf.pdf](https://www.sustainabilityfirst.org.uk/images/Sustainability_First_-_Local_Energy_Institutions_and_Governance_-_Ofgem_Call_for_Input_-_6_June_2022_FINAL.pdf.pdf)

20. Are there other approaches to developing local markets which we have not considered?

See Qn 19 above.

Also, from an end-user standpoint, consideration is needed as to how far regional or community interests and individual end-user interests are likely to align or diverge over time.

21. Do you agree that we should continue to consider reforms that move away from marginal pricing? Please consider the relative advantages and drawbacks, and local institutional requirements, of distribution led approaches.

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22. Do you agree that we should continue to consider amendments to the parameters of current market arrangements, including to dispatch, settlement and gate closure?

Subject to the power system achieving net-zero at least-cost by 2035, from an end-user standpoint we see strong arguments to evolve the status quo to minimize disruption, including adaptations to settlement periods and to gate-closure.

The costs and benefits of a fundamental shift from market self-despatch (as now) to central despatch by the ESO (the assumed follow-on / outcome of nodal pricing) would need full justification, including how this would sit with a more active DSO role (Qn 19) and best outcomes for end-users.

23. Are there any other changes to current wholesale market design and the Balancing Mechanism we should consider?

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Chapter 6**24. Are we considering all the credible options for reform in the mass low carbon power chapter?**

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25. How could electricity markets better value the low carbon and wider system benefits of small-scale, distributed renewables?

-

26. Do you agree that we should continue to consider supplier obligations?

Yes. This option is well worth exploring further.

A supplier obligation could create the much-needed bridge between wholesale and retail markets – and importantly help encourage end-user ‘pull’.

A supplier decarbonisation obligation would directly link the REMA supply-side and flexibility reforms with retail markets and therefore help to ‘pull-through’ market-led responses.

At the same time a supplier obligation could catalyse development of new and innovative retail business models likely to serve end-users well through encouraging flexibility and demand

reduction to reduce carbon emissions. Not only would the obligation therefore drive carbon reduction from the producer-side, but potentially also serve end-customers well on the demand-side, including vulnerable customers, by supporting supplier-led approaches to energy demand reduction and thermal insulation programmes.

We agree with the consultation text that a supplier de-carbonisation obligation offers advantages that few other options under consideration match, including through creating a strong incentive for market-led investment decisions. We also agree that with a decarbonisation obligation, suppliers would be incentivized to take-on a key role in shaping decisions about the capacity mix, ensuring more direct incentives for smaller-scale low-carbon technologies, demand-side flexibility and electricity demand reduction.

27. How would the supplier landscape need to change, if at all, to make a supplier obligation model effective at bringing forward low carbon investment?

A supplier obligation would reinforce the supplier-hub model, but at the same time should spur new innovative retail models better-incentivized to deliver on energy efficiency as well as flexibility. At the same time, this would signify very different retail models than those we have today, with wholesale markets underpinned by long-term supplier PPAs, firm counter-parties and a potential shift towards vertical integration to help offset supplier wholesale market risk.

Some years back serious consideration was given by DECC to a supplier obligation for average energy demand-reduction. Some years prior to that, work was also undertaken by government on a supplier obligation. At the time, lack of adequate customer metering was a challenge, but now with smart meters this kind of supplier obligation could potentially be far more workable and should certainly be actively explored in the context of the REMA reforms.

28. How could the financing and delivery risks of a supplier obligation model be overcome?

See Qn 27.

29. Do you agree that we should continue to consider central contracts with payments based on output?

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30. Are the benefits of increased market exposure under central contracts with payment based on output likely to outweigh the potential increase in financing cost?

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31. Do you have any evidence on the relative balance between capital cost and likely balancing costs under different scenarios and support mechanisms?

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32. Do you agree that we should continue to consider central contracts with payment decoupled from output?

A main underlying question here is how far CfDs for intermittent renewables should continue to be established on a basis which is commercially 'must-run'. Or, whether new CfDs for intermittent renewables should also factor-in the full costs that 'must-run' operation of

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intermittent renewables imposes on system operability, including balancing / constraint costs and ancillary service costs. Either way, the increased costs of operability must be transparent and broadly fair in how these are allocated and ultimately flow through to end-customers : either through more expensive balancing services / ancillary services. Or, through higher costs for developers in developing intermittent renewable power sources. Delivering a net-zero power system by 2035 remains key - but at the same time understanding what a 'least-cost' net-zero system in terms of balancing and ancillary services looks like for the long-run – including co-location of renewables and grid-scale storage - and the trade-offs involved in terms of costs and system operability – are key.

33. How could a revenue cap be designed to ensure value for money whilst continuing to incentivise valuable behaviour?

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34. How could deemed generation be calculated accurately, and opportunities for gaming be limited?

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Chapter 7

35. Are we considering all the credible options for reform in the flexibility chapter?

See questions 26-28 on how a supplier decarbonisation obligation could incentivise end-user flexibility.

36. Can strong operational signals through reformed markets bring forward enough flexibility, or is additional support needed to de-risk investment to meet our 2035 commitment? Please consider if this differs between technology types.

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37. Do you agree we should continue to consider a revenue cap and floor for flexible assets? How might your answer change under different wholesale market options considered in chapter 5 or other options considered in this chapter?

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38. How could a revenue cap and floor be designed to ensure value for money? For example, how could a cap be designed to ensure assets are incentivised to operate flexibly and remain available if they reach their cap?

-

39. Can a revenue (cap and) floor be designed to ensure effective competition between flexible technologies, including small scale flexible assets?

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40. Do you agree that we should continue to consider each of these options (an optimised Capacity Market, running flexibility-specific auctions, and introducing multipliers to the clearing price for particular flexible attributes) for reforming the Capacity Market?

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41. What characteristics of flexibility could be valued within a reformed Capacity Market with flexibility enhancements? How could these enhancements be designed to maximise the value of flexibility while avoiding unintended consequences?

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42. Do you agree that we should continue to consider a supplier obligation for flexibility?

Yes. See questions 27, 28, 29 and 35.

43. Should suppliers have a responsibility to bring forward flexibility in the long term and how might the supplier landscape need to change, if at all?

Yes as per questions 9, 27-29 & 35 above.

However, among end-users there will be both winners and losers from flexibility – and this needs to be far better understood. BEIS indicates that price-signals for flexibility will deliver benefit at both the individual level - plus lower system costs overall (wholesale, avoided network costs). While considerable end-user upside should be expected from flexibility at scale, no account is taken in the consultation of the potential downside for those consumers and end-users who, for whatever reason, are not able to be flexible at high-cost times and therefore may face higher relative costs. **This needs far more thought and is possibly the biggest REMA question for end-users.**

Over many years Sustainability First has researched demand-side flexibility for both households and I&C customers – including what it means to be a smart consumer in practice – and especially what it may mean in terms of fairness, likely winners and losers and distributional impacts once flexibility at scale⁴.

The consultation does not discuss how far end-users who are non-flexible may end-up shouldering an ever-larger share of their own system costs that might be either peak- or capacity-related, especially in a world of universal half-hourly settlement. One mitigation / trade-off would be to mutualise certain common costs (as now for households) – but this could also dull hoped-for price signals for flexibility.

44. For the Clean Peak Standard in particular, how could multipliers be set to value the whole-system benefits of flexible technologies? And how would peak periods be set?

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⁴ For example, Sustainability First GB Electricity Demand Project. Papers 12 and 8 -

<https://www.sustainabilityfirst.org.uk/publications-gb-elec-demand>

and Sustainability First 'What is Fair ? -

https://www.sustainabilityfirst.org.uk/images/publications/other/Sustainability_First_Future_Energy_Market_Discussion_Paper_September_2019.pdf

Chapter 8**45. Are we considering all the credible options for reform in the capacity adequacy chapter?**

See Qn 8 above on the need to far better understand through a comprehensive impact assessment the costs and benefits of the REMA options. This certainly applies to the different capacity options under consideration in REMA – including the relative cost-efficiency and supply security benefits from an end-user perspective of the market and non-market options including a possible Strategic Reserve.

An up-to-date understanding of the value placed by different customer segments (value of lost load - VoLL) on a secure and resilient power supply – including future customers in a largely electric world - will be important in assessing the benefit-cost ratio of the different capacity options.

46. Do you agree that we should continue to consider optimising the Capacity Market?

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47. Which route for change – Separate Auctions, Multiple Clearing Prices, or another route we have not identified – do you feel would best meet our objectives and why?

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48. Do you consider that an optimised Capacity Market alone will be enough for ensuring capacity adequacy in the future, or will additional measures be needed?

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49. Are there any other major reforms we should consider to ensure that the Capacity Market meets our objectives?

As per Qn 45.

An up-to-date understanding of the value placed by different customer segments (value of lost load - VoLL) on a secure and resilient power supply – including future customers in a largely electric world - will be important in assessing the benefit-cost ratio of the different capacity options.

50. Do you agree that we should continue to consider a strategic reserve?

Full costs and benefits of a Strategic Reserve need evaluation before this option ruled-out

51. What other options do you think would work best alongside a strategic reserve to meet flexibility and decarbonisation objectives?

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52. Do you see any advantages of a strategic reserve under government ownership?

Potentially yes if it leaves the rest of the market to operate 'normally'. Worth exploring further, subject to 'least cost'

53. Do you agree that we should continue to consider centralised reliability options?

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54. Are there any advantages centralised reliability options could offer over the existing GB Capacity Market? For example, cost effectiveness or security of supply benefits? Please evidence your answers as much as possible.

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55. Which other options or market interventions do you consider would be needed alongside centralised reliability options, if any?

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56. Do you agree that we should not continue to consider decentralised reliability options / obligations? Please explain your reasoning, whether you agree or disagree.

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57. Are there any benefits from decentralised reliability option models that we could isolate and integrate into one of our three preferred options (Optimised Capacity Market, Strategic Reserve, Centralised Reliability Option)? If so, how do you envisage we could do this?

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58. Do you agree that we should not continue to consider a capacity payment option? Please explain your reasoning, whether you agree or disagree.

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59. Do you agree that we should not continue to consider a targeted capacity payment / targeted tender option? Please explain your reasoning, whether you agree or disagree.

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60. Do you agree with our assessment of the cost effectiveness of a targeted capacity payment / targeted tender option, and the risk of overcompensation? If not, why not?

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Chapter 9: Operability

61. Are we considering all the credible options for reform in the operability chapter?

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62. Do you think that existing policies, including those set out in the ESO's Markets Roadmap, are sufficient to ensure operability of the electricity system that meets our net zero commitments, as well as being cost effective and reliable?

See Qn 32

63. Do you support any of the measures outlined for enhancing existing policies? Please state your reasons.

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64. To what extent do you think that existing and planned coordination activity between ESO and DNOs ensures optimal operability?

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65. What is the scope, if any, for distribution level institutions to play a greater role in maintaining operability and facilitating markets than what is already planned, and how could this be taken forward?

As per Qns 19 & 20 above. In a world of both large-scale and very small scale producers, and ever-increasing automation, **far more work is needed on the potential future role of the DSO at the transmission / distribution interface – including interactions with the ESO/FSO – be that for balancing power flows at the regional level or real-time frequency and voltage management. In particular from an end-user standpoint, much more work is needed by both BEIS and Ofgem plus the DNOs on what is an optimal role for the DSO - be that in operational and / or investment time-scales – whether as market enabler, market facilitator and / or distribution services provider.**

Our recent thinking on future FSO and DSO roles is set out here⁵. Also on local energy institutions and governance.

Also, from an end-user standpoint, consideration is needed as to how far regional or community interests and individual end-user interests are likely to align or diverge over time.

66. Do you think that the CfD in its current form discourages provision of ancillary services from assets participating in the scheme? If so, how could this best be addressed?

See Qn 32

67. Do you think it would be useful to modify the Capacity Market so that it requires or incentivises the provision of ancillary services? If so, how could this be achieved?

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68. Do you think that co-optimisation would be effective in the UK under a central dispatch model?

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Chapter 10: Options across multiple market elements

69. Do you agree that we should not continue to consider a payment on carbon avoided for mass low carbon power?

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70. Do you agree that we should continue to consider a payment on carbon avoided subsidy for flexibility?

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[https://www.sustainabilityfirst.org.uk/images/publications/consultations/Response to Energy Future System Operator Consultation.pdf](https://www.sustainabilityfirst.org.uk/images/publications/consultations/Response_to_Energy_Future_System_Operator_Consultation.pdf)

And [https://www.sustainabilityfirst.org.uk/images/Sustainability First - Local Energy Institutions and Governance - Ofgem Call for Input - 6 June 2022 FINAL.pdf](https://www.sustainabilityfirst.org.uk/images/Sustainability_First_-_Local_Energy_Institutions_and_Governance_-_Ofgem_Call_for_Input_-_6_June_2022_FINAL.pdf)

71. Could the Dutch Subsidy scheme be amended to send appropriate signals to both renewables and supply and demand side flexible assets?

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72. Are there other advantages to the Dutch Subsidy scheme we have not identified?

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73. Do you agree that we should continue to consider an Equivalent Firm Power auction?

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74. How could the challenges identified with the Equivalent Firm Power Auction be overcome? Please provide supporting evidence.