

3 October 2022

To : [REMA@beis.gov.uk](mailto:REMA@beis.gov.uk)

Dear Dan, Rob & BEIS REMA Team

## REMA Consultation Response

Sustainability First is a charity and think-tank focused on social and environmental issues in the energy and water sectors for over 20 years. We have informed policy development and regulation from an end-user perspective for a net-zero energy system, including on demand-side aspects of EMR, Open-Networks, Smart Systems Forum and Power Responsive. We have also worked on the detail of the RIIO-2 network price controls as members of the Ofgem Challenge Group and the company consumer engagement groups. Our work is shaped by a strong desire for an inclusive transition for consumers, communities and citizens alike – with a particular focus on fairness and equitable treatment, especially with regard to future developments in ‘smart’ energy services and retail. We welcome this opportunity to input to the first BEIS REMA consultation.

We see much to support as described in the consultation in terms of context, vision and objectives for electricity market design. The consultation sets out a well-made case for change. Namely that present market arrangements have enabled rapid growth in renewables and some development of demand-side services but that we are now at a point in the transition to a net-zero system where present incentives do not promote the ‘right’ supply-side technologies in right timescales (investment, operational) and in right places. The consultation sets out detailed questions about different market options, including a major role for future flexibility. The consultation asks for specific evidence on the options and on which Sustainability First is not best-placed to respond. In this cover letter however, and via our limited answers to the consultation questions (in a separate annex to this letter), **we raise some important questions from the end-user standpoint and some basic issues of principle – yet to be adequately addressed in the REMA process.**

REMA sets out multiple options to achieve an affordable, secure and carbon-free power system by 2035 – across wholesale markets, for location, for security of supply, for balancing, for operability. 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) and 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 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.**

We therefore wish to stress the following high-level points.

1. **REMA has major end-user 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<sup>1</sup>. 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’** - and that what is ‘fair’ and ‘equitable’ should be transparent and as far as possible agreed across key stakeholders<sup>2</sup> – and -
- **To establish a REMA End-User Forum.** We welcome the BEIS intention to engage with a wide range of stakeholders. To ensure that end-user voices and inputs are ‘heard’ and sustained through the likely long-haul of the REMA process we see the need for a dedicated End-User Forum<sup>3</sup>. This forum would support both BEIS and Ofgem in delivery of positive end-user outcomes, avoid unwanted ones, and actively help bridge to the expected BEIS Retail Strategy.

2. **REMA has major cost-implications yet to be understood – including for end-users.** BEIS anticipate a far larger electricity system to meet higher demand<sup>4</sup>. 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<sup>5</sup>.** 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). 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

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<sup>1</sup> Least-cost, Deliverability, Investor Confidence, Whole System Flexibility, Adaptability

<sup>2</sup> Sustainability First ‘Sustainability Principles’ project -

[https://www.sustainabilityfirst.org.uk/images/Sustainability\\_Principles\\_Framework\\_and\\_Strawman\\_Briefing\\_Nov\\_2021\\_FINAL.pdf](https://www.sustainabilityfirst.org.uk/images/Sustainability_Principles_Framework_and_Strawman_Briefing_Nov_2021_FINAL.pdf)

<sup>3</sup> 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, Ofgem and where appropriate the ESO would also ‘be at the table’.

<sup>4</sup> From 100 GW to 300 GW by 2035 (BEIS high demand scenario). BEIS envisage private investment of £280-400 billion by 2035.

<sup>5</sup> Main options to decouple gas (with many detailed variations) include market splitting, a green power pool, a requirement for renewable CfDs. Significant complexity underlies each option – including possible implications for end-users. At this point we do not have sufficient information as to main pros-, cons- and likely end-user outcomes to indicate a preferred option.

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**

3. **The BEIS vision for end-user outcomes in REMA acknowledges ‘winners’ but gives scant attention to potential ‘losers’.** In assessing the REMA options, **far more thought is needed 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 in particular and associated distributional impacts. These are first order questions which cannot simply be left to the Retail Strategy.** An early understanding of which end-user groups are most and least likely to benefit from different REMA options is critical, including whether mitigations might be needed if a particular option is pursued. Critically, these considerations apply to the REMA options – or package of REMA options - relating to :

- **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. 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<sup>6</sup>. **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 would be to mutualise certain common costs (as now for households) – but at the same time this could also dull hoped-for price signals for flexibility.
- **Locational Wholesale Prices** : REMA is exploring options for a shift away from a single national wholesale price to introduce a new locational element into wholesale pricing. The aim being 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

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<sup>6</sup> For example, GB Electricity Demand Project. Papers 12 and 8 -

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

and ‘What is Fair ? -

[https://www.sustainabilityfirst.org.uk/images/publications/other/Sustainability\\_First\\_Future\\_Energy\\_Market\\_Discussion\\_Paper\\_September\\_2019.pdf](https://www.sustainabilityfirst.org.uk/images/publications/other/Sustainability_First_Future_Energy_Market_Discussion_Paper_September_2019.pdf)

demand. From an end-user standpoint LMP (locational marginal pricing) is a controversial option and potentially also hugely complex. Importantly, there are also other potentially effective ways to drive 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 and nodal - introduce different levels of complexity and new costs from an end-user standpoint. Not least, for current individual consumers, regions and communities major questions of fairness arise if significant cost-penalties are to be introduced into retail tariffs for simply happening to be located in a ‘wrong’ place from the standpoint of the electricity system. Our recent submission to Ofgem on Locational Marginal Pricing discusses these issues of fairness and complexity in more detail<sup>7</sup>. Zonal pricing seems 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 and / or likely post-code lottery of nodal pricing can be justified from an end-user standpoint, especially if nodal prices are to be applied to customer demand as well as to generation<sup>8</sup>.**

- **Market splitting / green power pool** : some 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 supplier-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 should their needs 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 of day.

4. **The approach adopted in REMA raises basic questions of principle – including for end-users.** The consultation raises basic questions around the overall approach to the reform process. For example, how far the reforms should be incremental or major, the pace of reform, the role of markets vs administered solutions, the pros- and cons- of more or less complexity relative to hoped-for outcomes, whether centralised or decentralised options should prevail and last but not least in the REMA context what ‘fairness’ looks like in practice.

In considering the REMA options from an end-user standpoint – and important - how these are best packaged together – it will be extremely important to understand which end-user groups need particular consideration / attention (e.g to benefit from renewable prices, to not disbenefit by location, potential new vulnerabilities). Likewise, to drive flexibility, the extent of eventual cost-reflection in retail tariffs and how far with universal half-hourly settlement certain system costs could for the future become ‘optional’ for the end-user and therefore potentially avoided

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<sup>7</sup> [https://www.sustainabilityfirst.org.uk/images/Ofgem\\_Call\\_for\\_Input\\_on\\_Locational\\_Pricing\\_240622.pdf](https://www.sustainabilityfirst.org.uk/images/Ofgem_Call_for_Input_on_Locational_Pricing_240622.pdf)

<sup>8</sup> 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/>

at the individual level. Or, how far certain system costs would continue to be treated as common and therefore mutualised across the general household customer base. Furthermore, from an end-customer viewpoint, there would also be questions as to how such costs would most fairly be recovered from them in practice (e.g. as volumetric charges, fixed charges or capacity-related charges). Likewise, the potential to create new vulnerable customer groups, including for example for customers at the tail-end of the smart meter roll-out, and what mitigations might be needed.

These are all fundamental questions of principle and need very careful thought from an end-user standpoint. Our suggestion of adding a **sixth criterion of 'end-user fairness' or equitable treatment** to assessment of the REMA options could certainly help guide thinking. We also see **our proposed End-User forum playing a useful part in helping BEIS & Ofgem to factor-in end-user interests as they develop their own thinking around these major in-principle decisions.**

5. **The REMA process and consideration of REMA options must tie directly and transparently to real-world end-user outcomes in retail markets.** The BEIS vision for positive end-user outcomes in REMA turns largely on price-signals for 'flexibility' and 'smart'. REMA outcomes for end-users must therefore very clearly join-up with the expected 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.** In this regard two specific REMA options stand-out well in terms of their direct links to future retail markets and the potential to offer positive end-user outcomes - and on which we very much hope more work will be taken forward in REMA. These are :
  - **A supplier obligation for carbon reduction** – this REMA option would directly link the REMA supply-side and flexibility reforms with retail markets and therefore help to 'pull-through' market led responses - including via PPAs with zero-carbon producers – to the end-user side. At the same time this kind of 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 deliver on carbon reduction on the supply-side, but potentially could 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. **This option is well worth exploring further.** 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.
  - **Electricity demand reduction incentives** – we are glad to see that incentives for electricity demand reduction are 'in scope'. However, BEIS have yet to spell out how consideration in REMA of new incentives for electricity demand reduction will link either with the Ofgem Strategic Innovation Fund challenge on energy efficiency, or more important, with

government wider work to deliver energy efficiency programmes and measures, including the ECO and other programmes for thermal insulation. Our suggested End-User forum could support BEIS in looking at ideas put forward through the REMA process for electricity demand reduction incentives.

Yours sincerely

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cc

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