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Dear Sir or Madam

Thank you for the opportunity to respond to the Supplementary Information and analysis to Ofgem's minded to decision on the Targeted Charging Review (TCR). Please find below E.ON's response.

Ofgem findings

1. **The original TCR impact assessment (IA) did not use the correct carbon appraisal values , using the National Grid Future Energy Scenarios (NGFES) cost of carbon rather than the BEIS appraisal values. The corrected system costs under the TCR reforms therefore increase by up to £0.23b although this does not change the IA conclusions.**

2. **The use of line loss factor classes (LLFCs) as a segmentation for allocating fixed residual charges is intended to mean using LLFCs aligned with industry wide DUoS tariff groups established in the CDCM.**

3. **The findings of the original TCR impact assessment (that under the full TCR reforms consumer benefits outweigh any additional system costs) are fully robust to the scenario where the capacity mechanism is not reinstated.**

4. **The conclusions of the BSUoS taskforce (that it is not feasible to charge any component of BSUoS in a more cost reflective and forward-looking manner that would effectively influence user behaviour) will be considered when the final decision is made on the TCR, including whether to proceed with partial or full BSUoS reform.**

E.ON Response

Carbon appraisal corrections

1. **E.ON is happy with the justification for correcting the carbon appraisal values used in the impact assessment (IA)**. E.ON recognises that the

correction increases the net present value of the system costs by between £0.03-£0.23b over the period 2019-2040 depending on which National Grid ESO Future Energy Scenario is used and which reforms are modelled. E.ON recognises that this correction does not change the conclusion that the TCR reform benefit to customers outweighs the additional costs to the system although E.ON also acknowledges that the IA is only supposed to indicate the direction and broad magnitude of any impacts of the reform.

Loss Load Factor Class (LLFC) definition clarification

2. **E.ON is also happy with the clarification around the definition of load loss factor class (LLFC).** Whilst E.ON did not have any specific concerns regarding the use of LLFCs, it is still important to robustly assess that LLFCs are the correct index to use over and above other industry indices. It is important to acknowledge that LLFCs were not designed to be used as a charging segmentation and therefore Ofgem must be confident that there will be no unintended consequences of using LLFCs.

Capacity Mechanism sensitivity analysis

3. The inclusion of a new scenario with no capacity market (CM) for the TCR IA is a sensible precaution, given the current suspension of the CM and Tempus's judicial review.

4. E.ON agrees with the assumptions that

    a. without a CM the market will continue to function such that reductions in capacity (from existing plant closing without the capacity payments to keep them open) are reflected in wholesale prices rising,
    b. investors treat these price increases/spikes as 'bankable' and
    c. should this not be the case that there will be further intervention by the Government to ensure a 'perfectly functioning' energy only market i.e. new capacity will be incentivised.

5. However, E.ON also agrees that wholesale price signals for new build will not be as strong as a capacity market and therefore not all the lost revenue from the CM will move to the energy market.

6. It is likely that the loss of load expectation (LOLE) will increase compared to the scenarios with a CM i.e. scenarios without a CM will not deliver the same level of overall capacity.

7. E.ON agrees that the cost impact of increased LOLE can be modelled using the current administrative cap for value of lost load (VoLL) set at £6k/MWh (less than the £17k/MWh used by BEIS in the CM) and therefore there will be overall capacity reductions.

8. E.ON notes that in the initial modelling, some technologies (such as CCGTs) relied on recouping losses associated with the TCR by increasing prices in the CM. Therefore, it is important to understand what might happen should this not be an option.

9. Without the CM, these technologies will have to recoup lost revenue through the wholesale market, driving up prices. The Frontier/LCP[1] analysis suggests that the impact of this wholesale increase will be to incentivise distribution connected peaking plant which is less affected by the TCR than CCGTs (which lose the TGR payments) and onsite generation (which lose embedded benefits). Peaking plant investment will grow by ~2GW compared to the no CM baseline whilst CCGT will decline by ~1.5GW and onsite generation will decline by ~4GW

10. However, findings by Aurora Energy Research[2] and Oxera[3] based on research of the original TCR scenarios, suggested that new embedded solar and onshore wind would be pushed out under the TCR reforms as they could not recoup lost revenues (due to embedded benefits) through the CM or CfDs. In the scenario without a CM, it is not clear whether these technologies will be a better investment than gas peaking plant (see Figure 1 for gross margins with a CM).

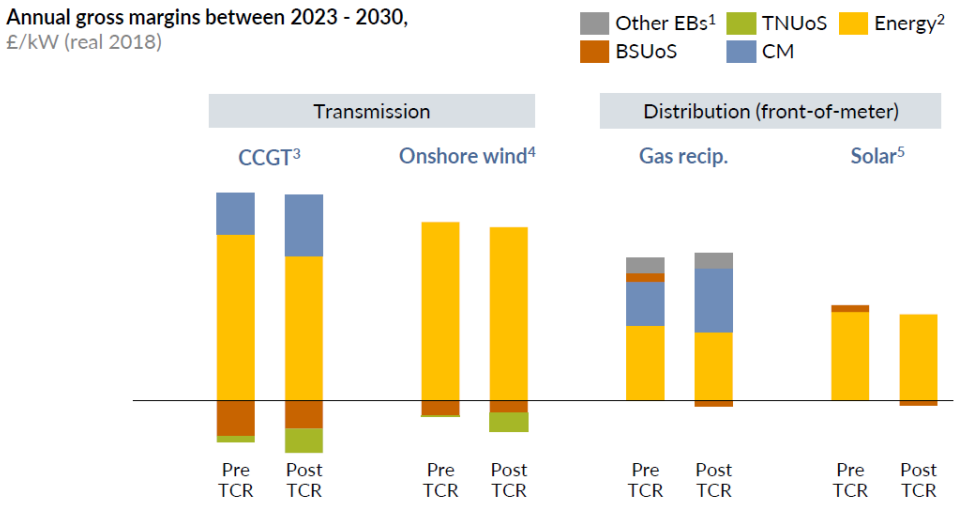

Figure 1 - Gross margins for various generating technologies pre TCR and post TCR (Source: Aurora Energy Research)

11. Whilst the Aurora paper does not publicly suggest an overall impact on consumer and system costs, the Oxera paper suggests that for the

1 https://www.ofgem.gov.uk/system/files/docs/2019/06/wider_system_impacts_without_a_capacity_market.pdf

2 https://www.auroraer.com/wp-content/uploads/2019/05/Aurora-TCR-Public-Report-May-2019.pdf

3 https://www.oxera.com/wp-content/uploads/2018/01/Ofgem%E2%80%99s-Targeted-Charging-Review-A-review-by-Oxera.pdf

'Community Renewables' National Grid Future Energy Scenario, the system cost impact of replacing embedded renewables with alternative technology could outweigh the consumer benefit of the TCR reforms (whilst the 'Steady Progression' scenario retains the Frontier/LCP conclusion that the increase in system costs does not outweigh the consumer benefit).

12. Without the CM, the Oxera conclusions may change as alternatives to embedded renewables may become more uneconomic with the removal of the CM.

13. Therefore **E.ON recommends that the TCR reform IA looks to address the issues raised by Aurora and Oxera in terms of embedded renewables being disincentivised by the TCR reforms (and possibly being replaced by fossil fuelled technologies), revisiting all scenarios considered so far.**

BSUoS taskforce findings

14. E.ON is in full agreement with the BSUoS taskforce findings in that
    a. BSUoS does not currently provide a useful forward-looking signal
    b. BSUoS could in principle deliver cost reflective charges for four elements of the charge.
    c. It is not feasible to charge the four elements identified in b. in a more cost reflective and forward-looking manner that would effectively influence user behaviour and that all of BSUoS ought to be treated on a cost recovery basis.

15. As the taskforce recommended that BSUoS be treated as a cost recovery charge, it is important that its charging methodology is incorporated into the residual charging reform of the TCR and that all customers are subject to their fair share of the charge and cannot avoid it.

16. As per E.ON's response to the Nov 18 TCR consultation, we believe that the two preferred options for residual charge recovery (fixed charges (£/meter) and capacity charges (£/kW)) are broadly similar. However, we reiterate that the division of the residual charges between segments i.e. residential, commercial, industrial is a subjective decision which should be taken by BEIS. With the inclusion of BSUoS to this methodology, this policy decision becomes even more important.

17. E.ON's main concern remains around the division between forward-looking network charges and residual network (and balancing) charges. It is vital that all forward-looking charges are captured in the Access and Forward-Looking Charge SCR such that consumers and generators are given as strong a signal to change behaviour/decisions to support the network as possible and that the residual component only seeks to 'top-up' this charge to ensure the RIIO revenues are delivered.