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25th April 2022

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Dear Mr Duncan

Ref : Regulatory treatment of Customer Load Active System Services (CLASS) as a balancing service in the RIIO-ED2 price control consultation

Thank you for the opportunity to respond to Ofgem's minded to decision on the Regulatory treatment of CLASS as a balancing service in the RIIO-ED2 price control. Please find below E.ON's response.

## Summary

CLASS has been a contentious issue over the last two to three years and we are pleased to see Ofgem reengaging with the industry to discuss this topic. We are also pleased to see that Ofgem have taken the decision to delve deeper in the costs and benefits of CLASS through an Impact Assessment (IA). However, we are disappointed to see that the industry's many concerns over CLASS and its impact on the flexibility market do not seem to have been addressed and that Ofgem have reverted back to its original minded to decision from 2020 without the addition of any mitigations to tackle the very real issues highlighted by industry.

Whilst the IA looks to consider potential unintended consequences, long term issues of how non-CLASS flexible technology can continue to compete have either been ignored or not considered in their entirety. We would ask that Ofgem respond to these very real concerns before making a final decision and clarify what mitigations are being put in place to monitor and address these issues. We (and many other experienced flexibility providers) are convinced that allowing the minded to decision to proceed in its current form will drastically reduce investment in commercial flexibility for the best part of a decade, just when:

- Net Zero needs unprecedented levels of new flexibility to deliver the £10bn p.a. of customer value identified by the Smart System and Flexibility Plan 2021<sup>1</sup> : and

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<sup>1</sup> <https://www.gov.uk/government/publications/transitioning-to-a-net-zero-energy-system-smart-systems-and-flexibility-plan-2021>

- The British Energy Security Strategy has identified the need to ensure a more flexible, efficient system for both generators and users.

It is our preferred option to allow CLASS to participate in ESO balancing markets under DRS8 (such that DNOs are incentivised to take part and customers can benefit from the lower costs of flexibility), but with either a clear cap set on its market share in each balancing market by Ofgem or a transparent set of rules from ESO as to how it will ensure a diverse mix of flexibility technology is contracted with to deliver the necessary balancing services. Alternatively, another mitigation that we believe might work would be to have a breakpoint for another review should CLASS technology exceed 50% market share of any of the national balancing services. Without either of these mitigations, CLASS will flood the high value balancing markets making it impossible for non-CLASS technology to compete and thereby forcing flexibility investors to look to other jurisdictions. It will also disincentivise supply customers from considering demand side response or onsite generation.

We would highlight that one DNO<sup>2</sup> in its ED2 business plan is considering installing voltage reduction equipment on primary substations as a permanent energy efficiency measure i.e., reducing the voltage on the distribution network to minimum regulatory levels such that reinforcement on the network can be deferred as part of its business-as-usual activities. This would seem to us a much better use of voltage reduction techniques and the DNO in question believes that the customer benefit of voltage reduction as an energy efficiency measure is far higher than the customer benefit of voltage reduction as a balancing service provider (CLASS).

Even if demand for balancing services eventually outstrips what CLASS can provide, the market price will need to rise to exceptional levels to tempt investors and customers to reengage. Ofgem's minded to decision will threaten system security as investors will not be willing to instantly 'turn on' investment again when needed. We believe that this is a very real possibility and one that will cost customers significantly more in the long run. Therefore, we urgently request Ofgem to reconsider its lack of any protection from this situation occurring. We believe that Ofgem can achieve its objectives of reducing balancing costs for customers whilst protecting the markets from being dominated by CLASS through the simple measures as outlined above.

A further issue that is raised by this consultation is that of conflicts of interest between DSOs acting as local flexibility procurers (who will therefore be in receipt of commercial sensitive information regarding flexibility providers wishing to bid into local flexibility markets) and DNOs as national flexibility providers (who will be competing with the same commercial flexibility providers for whom the DSO has commercially sensitive data). We believe that this has the very real possibility of breaking trust in local flexibility markets and therefore point to this being another reason that CLASS should be constrained in its ability to bid into flexibility markets.

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<sup>2</sup> [https://ed2plan.northernpowergrid.com/sites/default/files/document-library/Detail\\_on\\_our\\_CVPs.pdf](https://ed2plan.northernpowergrid.com/sites/default/files/document-library/Detail_on_our_CVPs.pdf)

## Questions:

**Question 1: Do you agree that the approach taken in our Impact Assessment is proportionate and balances the trade-offs between the scale of expected impacts and the cost of doing further analysis relative to the benefits such analysis may yield?**

One area that we believe has not been given sufficient focus in this Impact Assessment (IA) is the long-term impact on investment in non-CLASS balancing technologies and hence the long-term implications to balancing costs. Given the current level of overall tendering for the balancing products considered in the IA (secondary firm frequency response, dynamic containment and optional frequency response) of 1.75GW<sup>3</sup>, then the high CLASS deployment scenario (which could see 2.9GW of CLASS technology installed<sup>4</sup>) will have more than sufficient capacity to ensure that no non-CLASS flexibility technology will be required for several years. As the IA assumes that this level of CLASS installation could be in place by 2023, it would be impossible to justify investment in non-CLASS flexibility until response requirements are forecasted to exceed 2.9GW. Given that the ESO are looking to grow their response services (Dynamic Containment (DC), Dynamic Moderation (DM) and Dynamic Regulation (DR)) to 1GW each by 2025<sup>5</sup>, this implies that the higher priced response services will be 'locked out' to non-CLASS technology until 2025 at the earliest if the ESO awards tenders based on price alone.

We agree that in the short term this will deliver benefit to the customer, but in the long term the lack of access to higher value revenue streams will ensure that the business case for commercial flexibility technologies (such as demand side response (DSR) and on-site batteries) are unviable. We believe that this multi-year delay in viable non-CLASS projects will see flexibility investors move their focus away from the UK to other territories. When new non-CLASS capacity is required, investment will have shrunk to such a degree that it will take several more years to reinvigorate potential customers and investors again. It is at this point that balancing costs will have to rise significantly in order to attract investors and flexibility providers back into the market and hence drive-up costs for customers. We believe that this additional cost has not been factored into the NPV calculations of the IA.

We would ask Ofgem to consider placing constraints on the market share that CLASS can achieve or require NGESO to make transparent what level of market share a single technology should be allowed to have to retain system reliability. At the very least, we request that Ofgem put in place a review point should CLASS ever exceed 50% market share of any of the balancing services that it takes part in, putting in place a moratorium on further CLASS deployment until the results of the

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<sup>3</sup> [https://data.nationalgrideso.com/backend/dataset/502808b1-a492-42a1-a5b6-7fc07c5f258e/resource/0b4a9e3b-c0b4-4b67-b6d6-a6821998554d/download/ffr-mir\\_march\\_2022ext.pdf](https://data.nationalgrideso.com/backend/dataset/502808b1-a492-42a1-a5b6-7fc07c5f258e/resource/0b4a9e3b-c0b4-4b67-b6d6-a6821998554d/download/ffr-mir_march_2022ext.pdf)

<sup>4</sup> Through anecdotal discussions with many of the DNOs we believe that this is the most likely scenario to outturn

<sup>5</sup> <https://www.nationalgrideso.com/balancing-services/frequency-response-services/dynamic-containment>

review are published and approved by Ofgem. It is our belief that the current arrangement places the responsibility of a diverse technology mix solely on NGESO (see 4.120-4.127 of the IA) whilst also setting its cost efficiency requirements (see 2.12 in the consultation) that would make it difficult to choose a more expensive, but different technology. Ofgem need to be clearer as to the trade-off they expect NGESO to make in these circumstances or NGESO need to be transparent in how much of the market non-CLASS technology can expect to compete for. Without this clarity, non-CLASS flexibility providers will be second guessing NGESO's requirements. Therefore, it is our belief that NGESO or Ofgem should set a capped market share that any single technology can achieve and make this available. This cap can be dynamic and vary as overall market size changes.

**Question 2: Do you agree that our sensitivity analysis captures a reasonable range of uncertainty over the likely costs and benefits of deploying CLASS as a balancing service?**

Please see Question 1 for our concerns regarding the unviability of any non-CLASS viable projects for the next few years and its impact on long term costs. It is our belief that this risk has not been included in any sensitivity analysis.

**Question 3: Do you agree that it would not be proportionate for Elexon to work with industry to develop a solution to adjusting supplier imbalance positions via the Modification process in response to CLASS activations at this stage?**

We agree that the impact on supplier imbalance positions is not sufficient to develop an industry process within the existing settlement system, but we do wish to highlight that BSC code modification P415 ('Facilitating access to wholesale markets for flexibility dispatched by Virtual Lead Parties')<sup>6</sup> is very similar to CLASS in that a non-supplier is taking action on a final demand asset that then puts a supplier out of pocket. For P415, the proposal is that the virtual lead party compensates the supplier for this. Therefore, by requiring the DNO to make a compensation payment to the supplier directly (without the need for an industry system change) would ensure that both flexibility providers are being treated in a similar (and fair) manner.

**Question 4: Do you agree with our assessment that there is no evidence that competition is currently being distorted or impeded by the participation of CLASS?**

We do agree that there is no evidence to date that competition is being distorted by CLASS participation, but it is our belief that this is due to the low levels of DNO participation currently. ENWL is the only DNO making use of CLASS and they have only installed a maximum of 100MW of CLASS technology. As demonstrated in Question 1, this currently makes up about 6% of the markets that CLASS has been participating in. At this level of market share it is not likely that the market can be distorted. However, with no constraint on the level of CLASS allowed to participate, we can clearly see a situation where CLASS's market share quickly becomes dominant and therefore not only distorts the market but dominates it completely.

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<sup>6</sup> <https://www.elexon.co.uk/mod-proposal/p415/>

We think it is disingenuous of Ofgem to suggest that CLASS will only contribute a maximum of 43% of the current balancing services (Table 11 of the IA). This has spread the maximum CLASS capacity (2.9GW) equally across all balancing markets when DNOs will clearly take a commercial decision to concentrate on the highest revenue markets that it is technically capable of participating in. This will 'lock out' non-CLASS flexibility from these higher revenue streams, making it far more difficult to attract investment. As stated in Question 1, it is our belief that investors will look to other jurisdictions and the UK will have lost an opportunity to grow the necessary flexibility portfolio it needs to balance the required intermittent renewable generation. In the long term, it will cost the UK more to attract back investors and reengage customers which the IA completely fails to address.

**Question 5: Do you think existing safeguards (including licence obligations and competition law) against DNOs taking advantage of their DNO role in the context of participating in the balancing markets with CLASS are sufficient?**

Whilst it is not our primary concern, we do believe that more should be done to remove any perceived conflict of interest between the DNO as flexibility purchaser at local level and flexibility provider at national level. An alternative to prohibiting CLASS from national balancing markets would be the further legal separation of DSO and DNO activities such that the DSO (who procures flexibility at a local level and who will therefore be privy to commercial sensitive data about commercial flexibility providers) cannot share this information with the DNO with whom the commercial flexibility providers will be competing with for national balancing services. We note the current Call for Input for Local Energy Institutions and Governance<sup>7</sup> which covers this very question and as such we would ask that there is joined up thinking between this decision and any decision that is made regarding DSO/DNO ownership.

**Question 6: What additional measures do you think would be effective and proportionate to address actual or perceived conflicts of interest with respect to CLASS?**

See Question 5

**Question 7: Do you agree that our minded-to position provides the most efficient incentive for CLASS's participation in balancing services?**

From the point of view of a DNO, Ofgem's minded to decision sends a very strong price signal to invest in CLASS technology. It can make a unregulated return on development of an asset with little or no risk (due to the high level of certainty of undercutting all commercial flexibility providers). Also, the profit sharing of the minded to decision is significantly more profitable for a DNO than any profit sharing that a commercial flexibility provider can expect (most commercial profit-sharing percentages are significantly below the totex efficiency sharing rate of ~50%).

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<sup>7</sup> <https://www.ofgem.gov.uk/publications/call-input-future-local-energy-institutions-and-governance>

**Question 8: Do you agree that requiring CLASS in the price control would not promote efficient investment signals in CLASS and could distort competitive outcomes?**

We agree that requiring CLASS to participate in the balancing markets via the price control mechanism would distort markets even more than the minded to position with even less risk residing with the DNO.

**Question 9: What additional reporting or monitoring in RIIO-ED2 could be valuable to assess the ongoing impact of CLASS? Please explain how Ofgem, the DNOs or any other party would be required to support the proposed measure.**

It is our belief that whilst Ofgem have not found any direct evidence of CLASS causing issues with customers assets (due to fluctuating voltage levels), that DNOs ought to be required to inform its customers when they have activated CLASS assets on the network (this could be through their website). This will help customers ascertain whether voltage fluctuations might be correlated with any problems that they are experiencing with their assets and hence whether the use of CLASS is causal.