Making a positive difference
for energy consumers

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Dear Stakeholders,

Decisions on the ESO guidance documents for 2021-23

This letter sets out the Authority's decision to modify the Electricity System Operator Reporting and Incentives (ESORI) Arrangements Guidance Document (the 'ESORI Guidance') and the ESO Roles Guidance Document (the 'Roles Guidance') for 2021-23.

This letter explains our proposals and the changes we have made in response to the views stakeholders shared with us through our recent consultations. These changes will take effect from 1 April 2021 and will apply to the first RIIO-2 business plan cycle[1].

Background

In December 2020, we consulted on detailed changes to the Roles Guidance[2] and the ESORI Guidance[3] documents to align with our ESO RIIO-2 Final Determinations[4]. The Roles Guidance supports the incentive framework by describing the ESO's key activities and

[1] The business plan cycle is the period for which the Business Plan is applicable. The first business plan cycle (BP1) covers the incentive scheme starting on 1 April 2021 and ending on 31 March 2023. The following business plan cycle (BP2) will start on 1 April 2023.

[2] Statutory Consultation on the ESO Roles Guidance: https://www.ofgem.gov.uk/publications-and-updates/statutory-consultation-eso-roles-guidance

[3] Statutory Consultation on The Electricity System Operator Reporting and Incentives Arrangements: Guidance Document: https://www.ofgem.gov.uk/publications-and-updates/statutory-consultation-electricity-system-operator-reporting-and-incentives-arrangements-guidance-document

[4] RIIO-2 Final Determinations - ESO Annex: https://www.ofgem.gov.uk/publications-and-updates/riio-2-final-determinations-transmission-and-gas-distribution-network-companies-and-electricity-system-operator

setting out our expectations for how these activities should be performed. The ESORI Guidance describes the key stages of the incentives process, including the evaluation criteria and guidance on how we will assess the ESO's performance.

As part of our consultation on the ESORI Guidance, we also consulted on several detailed aspects of the reporting requirements and performance measures for the ESO. In particular, we sought views on the methodological details for two performance metrics for the ESO: the balancing cost metric (performance metric 1A) and the wind generation forecasting metric (performance metric 1C).

Stakeholder responses

We received two responses to our consultation on the ESORI Guidance and one response to our consultation on the Roles Guidance. We have published these responses on our website.

Overall, the responses were broadly supportive of our proposed changes to the ESORI Guidance. However, several key points were noted: the issue of streamlining reporting requirements, clarity around value for money reporting and the relative importance of the evaluation criteria. Annex 1 lists the detailed feedback we received and any further amendments we have made to the ESORI Guidance document in response to this feedback.

We also recieved feedback on several detailed aspects of the reporting requirements and performance measures outlined in the ESORI Guidance. Annex 2 provides further information on our decisions related to finalising the balancing cost metric (performance metric 1A) and the wind generation forecasting metric (performance metric 1C). Annex 3 lists the detailed feedback we received and our decisions on all other reporting requirements and performance measures. We have reflected all of these decisions in the redrafting of the ESORI Guidance document.

Overall, the ESO was broadly supportive of the expectactions set out in the Roles Guidance. The ESO highlighted a small number of areas for further consideration in its response. Annex 4 lists the detailed feedback received and any further amendments we have made to the Roles Guidance in response to this feedback.

Our decisions

After considering the stakeholder feedback we received to our consultation, we have finalised the ESORI Guidance and Roles Guidance (which are published alongside this letter).

The tables below outline our decisions on the balancing cost metric (performance metric 1A) and the wind generation forecasting metric (performance metric 1C).

Performance metric 1A. Balancing costs

Performance measure aspect	Our decision
i. The precise period of years and averaging used to define the benchmark	The preceding period of three years, with no weighting applied to the years. Period is refreshed annually.
ii. Any specific annual ex-ante adjustments to the benchmark	No ex-ante adjustments to the benchmark.
iii. The final detailed calibration of the ex-post monthly wind adjustment	Historic monthly outturn wind (TWh) and historic monthly balancing costs (£m) data is collected from the 36 month period prior to the assessment year. This data is used to establish the relationship between balancing costs and outturn wind. The historic 3-year average outturn wind for each calendar month is then used to estimate the initial non-adjusted monthly balancing cost benchmarks, which are summed to form the initial non-adjusted annual balancing cost benchmark. Each month, an ex post adjustment to the benchmark is made by using the actual monthly wind outturn.
iv. The reporting requirements	The ESO should report explicitly each month on key drivers of balancing costs, including any significant actions it has taken to reduce costs and the influence of external factors on costs. We consider this should include at least: • any major network outages,

	• any material changes in energy balancing prices, • volume of solar generation versus previous years, and • outturn demand compared to 2020-21 levels to provide greater transparency on the impacts of COVID-19.

Performance metric 1C. Wind generation forecasting

Performance measure aspect	Our decision
i. The period of historic data and averaging used to define the benchmark	A period of 5 years of historical data from 2016-2017 onwards.
ii. The expected annual improvement for the benchmark	5% improvement in accuracy over the 5-year historical average error.

Next steps

The ESO's regulatory and incentives framework for RIIO-2, including the updated Roles Guidance and ESORI Guidance, will come into effect from 1 April 2021.

We greatly appreciate the input stakeholders have contributed to the RIIO-2 design process and the contributions to scrutinise the ESO's Business Plan. If you have any feedback on the ESO's performance, including both positive examples and areas of concern, you can share views with us direct or arrange a time to discuss your views with us by sending an email to ESOperformance@ofgem.gov.uk.

If you have any questions on the contents of this letter, please contact us at the email address above.

Yours sincerely,

Grendon Thompson
Head of ESO Regulation

Annex 1 – Summary of ESORI responses received

Topic	Stakeholder feedback	Ofgem response
Streamlining reporting	It would be useful to ensure that reporting is streamlined where possible. This includes ensuring that the reporting required for the value for money criterion does not duplicate with the Regulatory Reporting Pack (RRP).	We share the desire to streamline the ESO's reporting requirements and to ensure that there is no duplication between the value for money incentive reporting and the Regulatory Instructions and Guidance (RIGs). We plan to work with the ESO to ensure the process is streamlined and will issue a consultation on the RIIO-2 RIGs process.
Process for developing the next Business Plan	We hope the Business Plan Guidance will clarify the requirements and timings for the second business plan cycle (BP2). In addition, we hope that an updated Roles Guidance for BP2 will be available in advance of the development of the second Business Plan.	Ofgem will publish the BP2 Guidance later this year. This guidance document will clarify the requirements and timings that the ESO will have to meet in the development of its second Business Plan. We will aim to publish any necessary updates to the Roles Guidance for BP2 in advance of the development of the ESO's second Business Plan to ensure that the ESO has clear upfront expectations on its roles.
Adjustments to cost benchmark	The two Red RAG capex projects relate to non-IT capex investments were incorrectly assessed under the Atkins assessment. It would be helpful to add the costs of these projects to the benchmark before the start of	Ofgem will review the information for the two non-IT capex investments and will consider the costs of these projects to the benchmark in a timely manner, in advance of the ESO producing it's first six-monthly report in October 2021.

	RIIO-2, such that the ESO can confidently incur this expenditure, and report against the benchmark in the first six-monthly report in October 2021.	
Relative importance of evaluation criteria	We would welcome guidance on which evaluation criteria are most important to each role. This would ensure that reporting is focused on the most relevant areas and give the ESO more clarity on how its performance would be assessed.	There is no explicit weighting applied to the evaluation criteria for each role as all of the criteria are equally important. The criteria are not separable in practice and must be considered holistically to understand the ESO's performance delivering its Business Plan in an uncertain and evolving energy system. It is important that Ofgem and the Performance Panel have discretion to consider areas of significant out- or underperformance when forming an overall view.
Innovation-funded activities	It is unclear exactly how Business as Usual (BAU) activities would be classified as 'innovation' and whether this categorisation would be necessary to highlight where we believe planned BAU activity is 'exceeding expectations'. It is also unclear exactly how Network Innovation Allowance (NIA) and Strategic Innovation Fund (SIF) funded projects would need to report into the incentives performance evaluation, and whether this would change depending on	We expect innovation to be a core part of the ESO's business-as-usual activities and for this to be demonstrated through the ESO's planned deliverables. The delivery of all outputs and outcomes, independent of the proportion of innovation funding, will be considered as part of the performance evaluation.

	how the proportion of innovation funding to BAU is used on specific projects.	
Adjustments to the incentive reward / penalty	There should be a more precise criteria to determine whether the Authority can make an adjustment to the incentive reward or penalty. As the text stands, this implies a highly subjective scheme, which undermines the clarity provided by setting out expectations in the Roles Guidance at the start of the scheme.	The Authority will not disregard any evidence; it will base its decision on all available evidence throughout the incentive scheme. The ESORI Guidance sets out the specific and limited cases where the Authority may adjust the reward or penalty. This is not to undermine the ex-ante clarity of the scheme but to use all the available evidence to reach the appropriate financial value for the ESO's performance under the incentive scheme. In addition, we believe the six-monthly scoring process will provide the ESO with greater predictability of the final reward or penalty.
Performance measure 1E. Transparency of operational decision making	We have published a methodology on the Data Portal to provide additional information to support the understanding of this regularly reported evidence. We also propose reporting three statistics in the incentives report on a monthly basis. This combination, accompanied by a narrative to describe the data, will offer greater clarity and insight.	We welcome the further details that the ESO will provide on the narrative to support this performance measure. We have included the three statistics the ESO plans to report in the drafting of the ESORI Guidance.

Performance measure 1H. Constraints cost savings from collaboration with network operators	We are concerned that the STCP 11.4 solutions are only a small component of customer value opportunities which do not reflect the extent to which the ESO has made savings for end consumers. We propose to continue to report the customer value opportunity as defined in the 2020-21 Forward Plan Addendum but provide an approximate £m saving with clearly stated assumptions.	We do not propose to alter this performance measure in response to stakeholder feedback. However, we recognise there are other solutions the ESO can deliver to create additional savings for consumers. The ESO should provide additional narrative on other solutions, such as outage planning actions, and the impact of these solutions on balancing costs. We have updated the drafting of the ESORI Guidance to reflect this.
Performance metric 2A. Competitive procurement	We are concerned that this metric does not provide a good representation of the ESO's performance in this area. For some services, any increase in competition will lower prices and result in reduced spend by the ESO. This results in a reduction in the percentage spend in competitive markets, leading to the conclusion that services are getting less competitive, when the reverse is true. For services procured over timescales of longer than a year, the metric will not reflect the competitive procurement that has taken place, meaning that the metric will not accurately reflect ESO	We do not propose to alter this performance measure in response to stakeholder feedback. We recognise the concerns raised; however, we believe this metric provides a strong and continual incentive for the ESO to ensure that it increases the competitiveness of its markets, in line with its ambition for 'Competition Everywhere' by 2025. In addition, we note that our assessment of the ESO's performance will include both the supporting narrative as well the numerical figure.

	performance until several years later.	
Performance measure 2C. EMR decision quality	We consider that, based on historic high performance, the 'exceeding' baseline is very difficult; and that the performance outcome is not entirely in the ESO's control. Given the narrow benchmark range proposed for Year 2, we remain of the view that our original proposal is more appropriate. We also suggest modifications to the disputes process to make it easier to make a 'correct' prequalification decision 'first time round', avoiding the disputes process altogether where possible.	We do not propose to alter this performance measure in response to stakeholder feedback. Following consideration of the response to the Draft Determinations, we decided to alter the EMR Decision Quality performance measure for the 2021-22 performance year. We consider that a phased approach to the quantitative expectations will allow flexibility for lessons learned in this area over time, and to incentivise continuous improvement. We will discuss any modifications to the disputes process where necessary.
Performance measure 2D. EMR demand forecasting	We are concerned that the measure as drafted is binary, which would result in exceeding / below expectations for performance over / under a single value. It would be more appropriate to include a dead band for performance, equating to meeting expectations.	We do not propose to alter this performance measure in response to stakeholder feedback. We do not consider the performance measure to be binary, as the performance against the quantitative expectations does not directly correspond to an exact financial penalty or reward. Furthermore, we will take into consideration the ESO's supporting information when assessing the extent to which the ESO exceeds, meets, or falls below expectations in this area.

Annex 2 – Summary of our decisions on performance metrics 1A and 1C

Performance metric 1A. Balancing Costs

Performance measure aspect	Our decision
i. The precise period of years and averaging used to define the benchmark	The preceding period of three years, with no weighting applied to the years. Period is refreshed annually.
ii. Any specific annual ex-ante adjustments to the benchmark	No ex-ante adjustments to the benchmark.
iii. The final detailed calibration of the ex-post monthly wind adjustment	Historic monthly outturn wind (TWh) and historic monthly balancing costs (£m) data is collected from the 36 month period prior to the assessment year. This data is used to establish the relationship between balancing costs and outturn wind. The historic 3-year average outturn wind for each calendar month is then used to estimate the initial non-adjusted monthly balancing cost benchmarks, which are summed to form the initial non-adjusted annual balancing cost benchmark. Each month, an ex-post adjustment to the benchmark is made by using the actual monthly wind outturn.
iv. The reporting requirements	The ESO should report explicitly each month on key drivers of balancing costs, including any significant actions it has taken to reduce costs and the influence of external factors on costs. We consider this should include at least: • any major network outages, • any material changes in energy balancing prices, • volume of solar generation versus previous years, and • outturn demand compared to 2020-21 levels to provide greater transparency on the impacts of COVID-19.

Decision rationale & stakeholder views:

i. The precise period of years and averaging used to define the benchmark

Stakeholders agreed with our preferred approach of using a two- or three-year period, without weighting, to define the performance benchmark for balancing costs. The ESO stated a preference for a two-year period of balancing cost data with equal weighting. The ESO stated that using a longer period would mean that the benchmark would be formed from costs which were incurred when the energy system was significantly different, particularly with the recent effects of COVID-19 on balancing costs.

We have decided to use a period of three years without applying weighting to the years, in line with AFRY's recommendation, which can be found in a technical annex alongside our Final Determinations[5]. We consider this period strikes an appropriate balance that will give us sufficient data to minimise the influence of outliers, whilst also reflecting the trends within balancing costs in recent years.

ii. Annual ex-ante adjustments to the benchmark

The ESO did not support the use of ex-ante adjustments to the balancing costs benchmark. The ESO noted that factors contributing to balancing costs are complex, and there is no simple and transparent model which adequately accounts for the interacting effects of each of these different factors.

We agree with the ESO that using a shorter period to derive the benchmark should avoid the need for adjustments. We also note that stakeholders have previously expressed their concerns with the adjustment factors used within the current scheme, particularly given the lack of transparency related to how these adjustment factors have been derived and applied. Due to the use of a shorter period to derive the benchmark and the noted transparency concerns, we have decided to not include any ex-ante adjustments to the benchmark.

iii. The final detailed calibration of the ex-post monthly wind adjustment

The ESO agreed with our proposal that wind conditions should be categorised at a national level and monthly resolution for the ex-post wind adjustment. The ESO also agreed with

[5] See Technical Annex - Part 1, AFRY 'ESO Balancing Cost Metric Report': https://www.ofgem.gov.uk/publications-and-updates/riio-2-final-determinations-transmission-and-gas-distribution-network-companies-and-electricity-system-operator

our proposal to use five years of historical wind data to determine the ex-post monthly wind adjustment. The ESO noted that data used to derive these load factors should be publicly available, for transparency.

The ESO expressed a preference for the option that would define discrete low / normal / high wind classifications and adjust monthly benchmarks by a pre-defined value when wind is outside of 'normal' conditions. The ESO reasoned this would be simpler than the option of using a continuous relationship. The ESO also disagreed that the ex-post wind adjustment should only impact on the constraint costs part of the benchmark. The ESO suggested this approach would add unnecessary complexity and would require additional processing to split out the different types of costs before applying the benchmark.

We agree with the ESO that this metric should be based on data that is publically available, and we expect the ESO to begin publishing the relevant data as soon as possible on its Data Portal. However, as we no longer propose to use load factors to set wind categories, we have decided to use three years of wind data, necessary to be in line with the agreed period for balancing costs.

We acknowledge the ESO's view that the option of defining discrete low / normal / high wind classifications allows for a simpler ex-ante presentation of the cost benchmarks. However, we believe this option's lack of accuracy will reduce the transparency of the ESO's balancing costs performance. In addition, transparency is further reduced as this option requires additional, subjective judgements about what level of wind output constitutes low / normal / high wind conditions and how to adjust for this. Therefore, we have decided to use the more accurate option of a continuous relationship, which will help provide greater overall transparency of ESO's balancing costs performance. We also believe this method will not produce additional complexity compared to using discrete classifications.

In addition, we have decided that the continuous relationship should be based on constraint costs and total monthly wind output. Our analysis shows that using constraint costs is significantly more accurate than using total balancing costs. We believe the complexity in the process required to consider only constraints costs, rather than total costs, is immaterial.

Overall, to better support the wider understanding of the benchmarks for this metric, we have included a further detailed explanation of how the continuous relationship has been calculated in the ESORI Guidance.

iv. The reporting requirements

The ESO agreed with the proposal to include references to key monthly drivers of balancing costs. The ESO also suggested several additional reporting details to include in its reporting on balancing costs. We have set out in the table above the key reporting requirements we expect the ESO to report on for balancing costs. However, we welcome the additional details the ESO plans to include in the narrative around its monthly balancing cost performance.

Performance metric 1C. Wind Generation Forecasting

Performance measure aspect	Our decision
The period of historic data and averaging used to define the benchmark	Based on average errors over a period of 5 years of historical data immediately preceding the assessment year (updated annually).
The expected annual improvement for the benchmark	5% improvement in accuracy over the 5-year average error.

Decision rationale & stakeholder views:

The ESO supported our proposal to use five years of historical data to set wind generation forecasting benchmarks. We believe this strikes the right balance between accounting for the recent energy system changes (e.g., growth in wind generation capacity) whilst providing sufficient data points to create robust averages to inform the benchmarks.

The ESO did not support an annual improvement for this metric. The ESO detailed that wind output is increasingly influenced by market as well as weather conditions, which are outside of its control. The ESO suggested that, to improve forecasts, it requires additional detailed information from wind generators or, alternatively, the ESO suggested wind generators provide the ESO with their own forecasts.

We recognise the external factors affecting the ESO's ability to forecast wind generation. However, we expect the ESO's investments in its underlying systems, processes, and modelling techniques should improve the accuracy of all its forecasts. We therefore expect similar levels of forecasting improvement for wind as for demand, and so have set a similar expected annual improvement for the benchmark (ie 5% improvement over the 5-year average).

Annex 3 – Other aspects of the ESO's incentives reporting and performance measures and our decision

Consumer benefit reporting

Performance measure aspect	Our decision
The precise presentation of consumer benefits	The ESO should report against the delivery schedule for each of its activities outlined in its original Business Plan cost benefit analysis (CBA), focusing predominantly on areas not picked up by performance metrics or regularly reported evidence. The ESO should also include justifications for any changes to the plan and a description of any sensitivity factors which may have impacted the benefits calculated in the original Business Plan CBA. For any new activities not covered by the original Business Plan CBA, case studies should be presented detailing the consumer benefit from these activities.

Decision rationale & stakeholder views:

The ESO proposed that reporting against consumer benefits should take the form of reporting progress against the delivery schedule (linking to the specified measures of success). This should include: referring to the relevant regularly reported evidence and performance metrics, providing descriptions and justifications for any changes to the plan, and a description of any sensitivity factors which may have impacted the originally assumed consumer benefit. The ESO noted it should not be necessary to re-perform the cost benefit analysis set out in the original Business Plan CBA document as this would create a disproportionate reporting burden.

We agree that it would not be proportionate to require the ESO to replicate its Business Plan CBA every six months. Therefore, we have agreed with the ESO's proposal as the reporting described above should be sufficient to demonstrate whether the ESO is on track to deliver the benefits it had originally assumed.

Allocation of non-role specific costs in the cost benchmark

Performance measure aspect	Our decision
The precise methodology to use to allocate Capex, Business Support Costs (BSC), and Other Price Control Costs	We have decided on an allocation methodology for non-role specific costs. Where possible, costs have been allocated to the role that they are most related to. Where this is not possible, costs have been split 1/3 per role. This methodology is detailed in Table 5 of the ESORI Guidance.
Whether the role specific benchmark should adjust for changes in relative spend each year	No annual change to the role specific benchmark.

Decision & stakeholder views:

The ESO proposed a method of allocating non-role specific costs, with IT&T in the Capex and BSC categories directly allocated to roles where these costs could be mapped to a specific role. The ESO proposed that the remaining IT&T costs and all other Capex, BSC and Other Price Control Costs should be split 1/3 per role.

We agree with the ESO's proposal. We believe that this allocation methodology strikes the right balance between directly allocating costs to a role where possible and retaining a simple, transparent allocation methodology that keeps the focus on demonstrating value for money across all ESO costs.

Performance metric 1B. Demand forecasting

Performance measure aspect	Our decision
Whether our indicative performance benchmarks are appropriate, considering additional data from March 2020,	5% improvement in accuracy based on average errors over a period of 5 years of historical data immediately preceding the assessment year (updated annually). We will not apply additional expected improvements to certain months (the smoothing approach over the two-month ramp period either side of Summer).

developments with COVID-19 and any further evidence from the ESO	

Decision rationale & stakeholder views:

The ESO does not believe that a requirement of a 5% improvement year-on-year is realistic for demand forecasting, due to the uncertainty caused by the economic consequences of both COVID-19 and Brexit. The ESO also commented that the approach to use percentage errors is not appropriate as the drivers of this error (distributed wind capacity, distributed solar capacity, capacity of other distributed generation sources) are all increasing. The ESO, supported the increase in the historical period to calculate the benchmark to five years.

We recognise the uncertainty caused by COVID-19 and Brexit; however, we expect the ESO's investments in its underlying systems, processes, and modelling techniques should improve the accuracy of its demand forecasts. We further note that the ESO's performance against this metric during the summer of 2020-21 was significantly improved versus their historical average for the same months. We therefore will set the expected annual improvement for the benchmark at 95% of the average errors over the historical period of five years preceding the assessment year, to be updated annually.

In addition, although we previously proposed to use a smoothing approach to apply further improvements to months between summer and winter, we have decided to not apply this method to the benchmark. After further analysis of the data on errors, we found that this would not be an optimal solution. We believe that using a monthly benchmark, based on the average errors over a historical period of five years, is better suited to the demand profile.

Regularly reported evidence 1F. Zero Carbon Operability (ZCO) indicator (previously known as the System Zero Carbon Penetration indicator)

Performance measure aspect	Our decision
Whether the draft methodology outlined in our Final Determinations is appropriate	We will measure the proportion of zero carbon transmission connected generation that the system can accommodate. Therefore, the ZCO indicator is defined as:

	$$ZCO\ (\%) = \frac{(Zero\ carbon\ transmission\ connected\ generation)}{(Total\ transmission\ connected\ generation)} \times 100$$ Zero carbon generation is defined as electricity generation that produces zero carbon emissions at the point of generation. This includes hydropower, nuclear, solar, wind and pumped storage technologies. We are retaining the three-part methodology as set out in our Final Determinations.
The appropriate reporting frequency	Part 1: In the ESO's first quarterly report and the End of Scheme report only Part 2: Quarterly, presenting data at a monthly granularity Part 3: Annually

Decision rationale & stakeholder views:

The ESO proposed to rename this regularly reported evidence as the "Zero Carbon Generation Proportion" to provide a better definition of the data provided. We have decided upon the name "Zero Carbon Operability (ZCO) indicator" to maintain focus on the ESO's zero carbon operability by 2025 ambition.

The ESO believed that the denominator of the ZCO indicator equation should be total generation rather than total demand. We have changed the equation for clarity as our aim is to measure the proportion of zero carbon generation across the transmission system, which reflects the ESO's operational actions in the Balancing Mechanism.

The ESO agreed with our suggestion that biomass, CHP, and interconnectors should be excluded from the ZCO indicator after further discussion. This ensures consistency of the definition of zero carbon between regularly reported evidence 1F (ZCO indicator) and 1G (Carbon intensity of ESO actions).

For Part 1 of the methodology, the ESO suggested defining the approximate maximum ZCO limit using a reasonable approximation of likely operating conditions, rather than a best or worst case. This would be informed by scenario analysis to determine the approximate maximum ZCO limit that the system could accommodate. We agree with this suggestion and have amended the methodology in the ESORI Guidance to reflect this. For Part 2, we

have agreed with the ESO's suggestion to report on a quarterly basis for consistency with other reporting. The ESO noted a preference to not report on Part 3 in its incentive reports as the details will be met by the ESO's Operability Strategy Report. We share the ESO's desire to avoid duplication in reporting. Therefore, we believe the ESO should include an explicit cross-reference to the relevant sections of its Operability Strategy Report under Part 3 to ensure full transparency under this measure whilst streamlining reporting.

Regularly reported evidence 1G. Carbon intensity of ESO actions

Performance measure aspect	Our decision
Whether the draft methodology outlined in our Final Determinations is appropriate	We are retaining the methodology set out in our Final Determinations. The ESO will measure the approximate gCO_2/kWh of actions taken, considering the proportion of total CO_2 emissions on the system which are a result of ESO actions.
The appropriate reporting frequency	Monthly

Decision rationale & stakeholder views:

The ESO proposed to use its carbon intensity forecast methodology to estimate carbon intensity factors for each fuel type and interconnector import. The ESO also intends to report monthly gCO_2/kWh data, aggregated from settlement period data. The full data will be available on the ESO's Data Portal.

We support the ESO's proposal to calculate an estimate of carbon intensity factors. We expect the methodology to remain consistent for the entirety of the BP1 cycle.

Regularly reported evidence 2B. Diversity of service providers

Performance measure aspect	Our decision
The precise format and presentation of data on diversity in markets, including how this can enable stakeholders to clearly track market trends over time	The ESO should report on total contracted volumes (mandatory and tendered), with the supporting narrative providing more detail about the % of the service that is procured through mandatory means. The data should be reported at a monthly granularity, which can be aggregated for each quarter to align with quarterly reporting.

	For Black Start services, the ESO should provide the data bilaterally to Ofgem, due to the potential security risks involved in publishing this information. If possible, the ESO should provide data on the diversity of available contracted volumes for Black Start services.

Decision rationale & stakeholder views:

The ESO listed assumptions to be used in validation checks of the units measured. We welcome this inclusion in the ESO's methodology to ensure transparency for stakeholders. We have decided the ESO should report on contracted volumes as this captures the full diversity of service providers that have been paid to be available to provide a service, not just those that are utilised. The ESO should also report on total volumes but may include additional details on the split between mandatory and tendered volumes in the supporting narrative.

The ESO proposed not to report on Black Start services for security reasons. We agree that there is a potential security risk. We will require the ESO to provide this information on a bilateral basis with Ofgem to ensure that the ESO is making progress on the competitive procurement of Black Start services in line with its 'Competition Everywhere' ambition. If possible, the ESO should provide data on the diversity of available contracted volumes for Black Start services, so as to account for providers that may only be available 50% of the time annually.

Regularly reported evidence 2E. Accuracy of forecasts for charging

Performance measure aspect	Our decision
Whether this measure should focus on the overall charge or the subcomponents of charges that the ESO has most influence over (eg forecasts of MWh annual demand)	This measure will focus on the overall charge.
Which charges this should apply to (eg	TNUoS and BSUoS

just Transmission Netowrk Use of System (TNUoS) or also Balancing Services Use of System (BSUoS)	
The appropriate reporting frequency	TNUoS charges – Annually BSUoS charges - Monthly

Decision rationale & stakeholder views:

The ESO commented that stakeholder evidence, rather than regularly reported evidence, should be used to assess the accuracy of TNUoS forecasts in this area. However, as drafted, the ESO proposed that this measure should also include BSUoS forecasting. The ESO noted the importance of accurate BSUoS forecasting to industry, despite the fact that often factors outside of the ESO's control contribute significantly to performance. The ESO also suggested the appropriate reporting frequency for BSUoS forecasting would be monthly to continue to provide transparency for stakeholders.

We agree with the ESO that this performance measure should include forecasts for both TNUoS and BSUoS charges, however, any feedback received from stakeholders on TNUoS forecasting should be captured under the stakeholder evaluation criteria. The ESO should report on TNUoS charging at the mid-scheme and end of scheme stages to provide a best estimate of performance. We expect this can be updated, if needed, at the quarterly stages.

Regularly reported evidence 3A. Future benefits from operability solutions

Performance measure aspect	Our decision
The appropriate approach to calculating and presenting benefits	We are retaining the methodology set out in our Final Determinations.
The scope of solutions to include	We are retaining the methodology set out in our Final Determinations.

Decision rationale & stakeholder views:

For the approach to presenting benefits, the ESO suggested only reporting the ZCO benefit under regularly reported evidence 1F (ZCO indicator), to avoid double counting. The ESO also noted that the other measures of benefit may not be relevant to each project or available at a certain time or only practical to include a rough estimate. In addition, the ESO proposed to continue to report on the contracted MW capacity of Distributed Energy Resource (DER) connections for Regional Development Programme (RDP) projects to provide a more complete picture of progress on the RDPs.

We share the ESO's desire to avoid duplication in reporting. We are therefore happy for the ESO to report ZCO benefit under regularly reported evidence 1F (ZCO indicator). However, we do not think the ESO needs to provide additional reporting on contracted MW capacity of DER connections for RDP projects, as the existing performance measure should capture the ESO's performance in this area.

Regularly reported evidence 3B. Consumer value from the NOA

Performance measure aspect	Our decision
The appropriate method used to calculate consumer value in the annual NOA	We are retaining the methodology set out in our Final Determinations.

Decision rationale & stakeholder views:

Stakeholders were happy with the existing performance measure. We are therefore retaining the methodology as set out in our Final Determinations.

Regularly reported evidence 3C. Diversity of technologies in NOA processes

Performance measure aspect	Our decision
The final reporting details, including whether the ESO should present the data on diversity in NOA processes on an aggregated or disaggregated basis	We are retaining the methodology set out in our Final Determinations.

Decision rationale & stakeholder views:

Stakeholders were happy with the existing performance measure. We are therefore retaining the methodology as set out in our Final Determinations.

Annex 4 – Summary of Roles Guidance responses received

Role	Stakeholder feedback	Ofgem response
1	The ESO was broadly supportive of our guidance, but requested the following changes: *Activity 1a: System operation* *Output: Maintaining security of supply:* • The ESO disagreed with some of the language that was used to frame the guidance, and also proposed some editorial corrections. • The ESO asked for clarification on whether "high IT system availability" should be interpreted as "better than historical average". *Activity 1b: System restoration* *Output: Restoration on service procurement:* • The ESO proposed that "if they can meet the technical criteria" should be added to 'exceeds expectation'.	We have accepted the ESO's proposed revisions to the Role 1 guidance, and have made changes accordingly. We would like to clarify that "high IT system availability" should be interpreted as comparable with, or better than, historical averages.
2	*Activity 2a: Market design* *Output: Signalling procurement needs:* • The ESO proposed to refer to the Operability Strategy Report rather than System Needs and Product Strategy (SNaPS). *Output: Coordinated procurement across the whole system (beyond 2023):* • The ESO suggested that it may not always be beneficial for service requirements to be same between	We accept the ESO's proposal to refer to the Operability Strategy Report rather than SNaPS. We also modified the guidance for the output: *Coordinated procurement across the whole system,* based on the ESO's suggestion. We will not be accepting the ESO's proposal to amend guidance for the output: *Making accurate prequalification decisions*. However, upon review, we have amended the guidance in the 'Exceeds

	ESO and DNO services, and proposed to include "where appropriate" into this guidance. *Activity 2b: Electricity Market Reform* *Output: Making accurate prequalification decisions:* • The ESO do not believe that it is appropriate to set a higher bar for the "very few errors made or decisions overturned" for Contracts for Difference compared to the Capacity Market (CM). *Output: Monitoring compliance with rules:* • The ESO requested clarification of the definition of "any potential" and stated that if it is defined too broadly, it could lead to instances in which the ESO would notify Ofgem about issues that upon examination turn out to be compliant.	expectations' column referring to CM prequalification to: • "*Performance in line with the exceeds expectations benchmark of Regularly Reported Evidence 2C (EMR decision quality)*" We do not propose any changes to the output: *Monitoring compliance with rules*. We have previously discussed this expectation with the ESO, and will continue to do so in future where required and necessary.
3	*Activity 3b: Operational strategy and insights* *Output: Producing analytically robust scenarios and long-term forecasts* The ESO broadly agreed that this is an important area to consider and that the focus should be on how looking at previous FES work actually helps improve the forecasting accuracy in the future. However, the ESO also outlined its concerns around the expectation to perform ex-post analysis between 'forecasts' and 'real world' outcomes due to the number of variables	We accept the ESO's proposed changes to our expectations around the output: *Producing analytically robust scenarios and long-term forecasts*. We believe that it now strikes an appropriate balance between the additional workload and the benefits of performing such analysis. We also confirm that we share the ESO's understanding of "improvements to model outage planning in year-round".

	involved in the process. The ESO expanded on this by explaining that the number of variables means it would be necessary to re-run the scenario analysis changing each variable one by one to understand the impact. *Activity 3c: Optimal network investment* *Output: Identifying network needs and solutions (beyond 2023)* The ESO sought to clarify that the exceeds expectation of "improvements to model outage planning in year-round" is not a reference to conducting outage planning activities on network development timescales but rather ensuring that when we look at long-term network development, we improve the way we consider the impact outages could have on future network needs.	