April 2026

DSO Benefits Quantification Methodology

nationalgrid DSO

Contents

Introduction

We are publishing our DSO Benefits Quantification Methodology ahead of our DSO Performance Panel report 2025/26 to provide clarity to stakeholders and the Panel regarding how our Benefits have been calculated. This year we have focused primarily on Realised Benefits and made changes to our methodology to align with the agreed approaches reached between all DSOs collaboratively.

For transparency we are also publishing an Excel workbook detailing the underlying calculations and assumptions.

DSO Benefits Framework

Benefits Categories

As with last year, we remain committed to following the agreement reached through the DSO Collaboration Group and continue to measure our Benefits in terms of Realised, Unlocked and Ambition. In accordance with feedback received from the Performance Panel, our focus throughout this methodology and our Panel Report for this year is on Realised Benefits, as we ensure that we are delivering tangible results for customers now and in the future.

In this methodology we will highlight our unlocked and Ambition Benefits in the Benefit Value sections for ED2 to date. Unlocked Benefits are those which, through our work this year, we have high confidence will be realised in future years. Ambition Benefits are those which we intend our work to deliver in the future, but with a lower degree of certainty compared to Unlocked Benefits.

Quantification Rules

This document will provide clarity on the assumptions used to quantify our impact, and detail the reference material used for any assumptions, aligned to the standardised ENA methodology and best practice.

Customer Benefits

Our DSO Panel report goes into detail on how we have attributed different Benefits to different stakeholder groups. This year we have 4 distinct stakeholder groups:

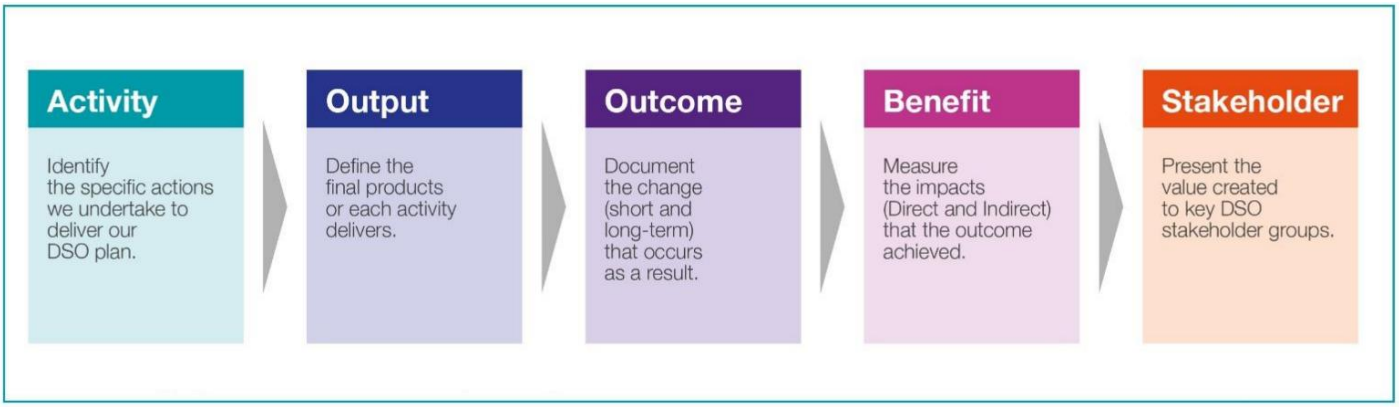
1. NGED Customers,
2. Wider GB Consumers (including Benefits which accrue through NESO),
3. Distributed Energy Resources and Flexibility Services Providers (DER&FSPs), and
4. Local Authorities.

These groupings are aligned with the common ENA appendix, where six common groups are identified. All six are included in our list, however we have decided to combine GB Consumers and NESO, and DER&FSPs as the benefits which flow through to these groups are highly aligned.

Where we discuss a benefit in this methodology, we will outline which stakeholder group it impacts upon in the Overview. There are some Benefits which will impact on multiple stakeholder groups in different ways. As the underlying approach to calculating the Benefit remains consistent in these instances, we will discuss both stakeholder groups together in this methodology, however we will clearly signpost where different calculations are used if necessary.

The Theory of Change Model

We continue to use the Theory of Change model to categorise all our DSO activities, clearly demonstrating the link to outcomes and benefits.



Previous years

The changes to our methodology in order to align with the decisions of the DSO Collaboration Group, and other changes designed to improve the accuracy of our Benefits calculations make comparison with previous year's published figures impossible. We believe it is crucial that the Performance Panel have the opportunity to scrutinise our performance on a year by year basis and have therefore applied this methodology retrospectively to all previous reported Benefits. Our Benefit specific sections include updated figures for previous years in line with the new methodologies.

Assurance

This methodology, and therefore the Benefits which flow from the methodology into our Performance Panel report, has been independently assured by Sia Partners.

Quantitative Summary

This table outlines our DSO Benefits for Y3 or RIIO-ED2. We have summarised these figures in terms of the Realised Benefit in Y3 as well as the Realised Benefit in RIIO-ED2 to date. All figures are reported in net terms, and are in a 2020/21 price base, in accordance with the DSO Collaboration Group agreement. Our approach to discounting to a common price base and costs are detailed further in this methodology document.

Activity	Y3 Realised Benefit (£m)	Cumulative RIIO-ED2 Realised Benefit (£m)	Cumulative RIIO-ED2 Unlocked Benefit (£m)	Cumulative RIIO-ED2 Ambition Benefit (£m)
Flexible Connections	132.03	132.03	0	137.45
DNOA Process	94.89	177.99	587.12	1036.62
Enhanced outage planning	22.08	31.49	0	0
Local Authority Engagement	9.08	13.41	70.88	0
MW Dispatch	6.54	13.04	0	187.58
Reinforcement Deferral	3.59	8.57	0	0
Technical Limits	2.57	7.70	1,487.49	695.24
Low Carbon Flexibility (Market Gateway)	0.43	0.82	0	0
Demand Turn Up	0.05	0.05	0	0
Enhanced Queue Management	0	0	11.28	0
Curtailment Reports	0	0	2.80	5.33
Uprating on replacement driven by Asset Condition	0	0	0.11	0
Curtailable Connections	0	0	0	363.56
Total	**271**	**385**	**2,160**	**2,426**

Overarching Methodologies

There are a number of methodologies which apply across all our Benefits, in accordance with the DSO Collaboration Group agreements.

Common Price Base

In order to improve the comparability and consistency of DSO Performance Panel reports, both year on year for each DSO and to other DSOs, the DSO Collaboration group decided to agree on using a common price base. This year, all of our Benefits are reported in a 2020/21 price base, in line with other industry documents.

To aid the Performance Panel in their role of scrutinising our DSO's performance, we have recalculated all Benefits from Years 1 and 2 to this common price basis.

Carbon Value Calculations

A key benefit which DSOs are able to provide is reductions in the carbon intensity of their grid through various DSO activities. We undertake five activities which result in carbon savings:

- Technical Limits,
- Flexible Connections,
- Enhanced Outage Planning, and
- Market Gateway facilitating low carbon flexibility.

The value which reduced carbon emissions are calculated in line with the DSO Collaboration Group and the agreed upon ENA methodology appendix, which is derived from HM Treasury Green Book figures. For the first four of the list above, the benefit associated with carbon savings is included in the Whole System Benefit calculation as it is accounted for in the headroom figures. Market Gateway facilitating low carbon flexibility benefits are calculated independently in a dedicated section of this methodology.

Our efforts this year have resulted in a reduction of 133.4ktCO2e, representing a large increase on previous years and bringing our ED2 total carbon reductions to 152.5ktCO2e.

Household Benefits

In order to better enable the Performance Panel to see the impact our activities have had, we have calculated the impact of our Benefits on a per household basis. Using the assumptions listed below, we can project the savings our activities have had on household expenses, for NGED customers and for GB customers more broadly. We have identified four economic recovery mechanisms which describe how our Benefits translate to Household Benefits.

DUoS Reductions

Benefits – NGED Consumers Direct

Any benefits which accrue to NGED Customers directly are reflected in a reduction in DUoS charges. In translating our Realised Benefits to Household Benefits, we [1] take 34% of our Realised Benefit to determine the amount of Benefit which is experienced by domestic electricity customers, and then further divide this figure by 8m, the approximate number of households within NGED Licence areas.

[1] Based on analysis conducted by the NGED Market Analytics team.

Electricity Retail Bill Reductions

Benefits – GB Consumers Direct, DER&FSP Direct and Indirect

The above benefits reduce the retail element of electricity bills through a variety of mechanisms, including reducing wholesale costs. For example, flexible assets operating for maximum system benefit have the effect of lowering wholesale prices by reducing peak system demand relative to an unflexed counterfactual, with benefits for peak wholesale prices.

In translating these Benefits to Household Benefits we follow the same methodology as above, as the impact felt by domestic billpayers. Where these benefits impact across the entirety of GB, we divide by 28m to arrive at a per household figure.

Council Tax Reductions

Benefits – LA Direct

Where our work has directly benefited LAs, such as through the production of Local Energy Action Plans, we represent our benefit as a reduction in council tax, as our activity has a direct positive economic impact on the LA. To properly reflect this impact on households, we researched the proportion of LA economic recovery which takes place through council taxation and found that around 46%[2] of LA revenue is derived from council tax receipts. To determine the Household Benefit associated with these Benefits, we therefore halve our Benefit reflecting this revenue structure and then divide by 8m as all of these Benefits are associated with NGED customers (all LAs we work with are within our Licence areas).

Wider economic benefits

Benefits – NGED Consumers Indirect (DNOA Process)

Our DNOA activities ensure that Connect and Notify, the process by which customers are able to get a new connection to the network is not paused when network capability is reached (this is detailed further in the DNOA specific methodology later in this document). Our DNOA Benefit methodology outputs a representative Gross Value Added (GVA) representation by calculating the value of the capacity we have added through DNOA activities. Whilst directly mapping the value of this output to household value is less straightforward than with a closely associated recovery mechanism (such as direct bill reductions via deferred reinforcement), households do benefit from the wider benefits to the economy. To translate these benefits into Household Benefits, we assume that 100% of the GVA from DNOA activities are realised as benefits to GDP (which is an underestimate as GVA=GDP-net taxes, therefore in our conversion we assume no taxes). We then base the Household Benefit on the report that 59% of economic growth eventually translates into household expenditure, based on the household expenditure proportion of GDP for 2025 as reported by the Office for National Statistics[3].

We do not attribute any of our Benefits which accrue to DER&FSPs or indirect benefits associated with Local Authorities in our Household Benefit calculations. Whilst we do believe that these Benefits will ultimately flow to households, we are not able to calculate this attribution with sufficient certainty to include in our methodology.

[2] According to UK Gov statistics for 2024-25 (Local authority revenue expenditure and financing: 2024-25 budget, England - GOV.UK

[3] Components of GDP: Economic indicators - House of Commons Library

Net Value

The DSO Collaboration group agreed that from this year forward it would be beneficial for all DSOs to report their benefits in net terms. To adhere to this agreement, we have estimated the costs associated with all of our activities that have associated Benefits which we are reporting in our Performance Panel report. To aid the Performance Panel in comparing year on year performance, we have calculated the costs in the previous two years as well, and have adjusted those year's Benefits.

Where an activity has multiple Benefits, we have assigned the cost to the primary driver of that activity. For example, our Enhanced Outage Management Planning has two Benefits, Whole System Benefits which accrue to GB consumers and Enhanced Earnings which accrue to DER&FSPs. The primary driver of the activity is to keep generation connected for longer to enable a more competitive wholesale market, therefore the cost has been assigned to the Whole System Benefits element of the activity.

This means that the numbers for Y1 and Y2 presented in this report may not align to the numbers presented in previous years' reporting.

Specific Methodologies

In this section we detail the way in which we have quantified all of the Benefits noted in our Y3 Performance Panel Report. The previous overarching methodology is applicable to all of these benefits, if there is any deviation it is noted in the specific methodology.

Each Benefit specific methodology is structured as follows:

1. **Overview** – Where we describe the activity we have undertaken.
2. **Counterfactual** – Where we outline our assumption of what would have happened without the DSO's activity, this is used as the baseline case from which Benefits are ultimately derived.
3. **Cost assumptions** – Where we describe the costs incurred to achieve the benefit, in line with the collaborative agreement to move from gross to net benefit reporting.
4. **Calculation** – Where we summarise the way we have calculated the Benefit.
5. **Benefit Value** – Where we outline the outcome of the calculation, the claimed Realised Benefit. We will also note the ED3 to date Unlocked and Ambition Benefits.

Some Benefits deliver for multiple customer groups in different ways (for example, Curtailable Connections deliver Benefits for DER&FSPs through enhanced earnings and also deliver Benefits for wider GB consumers through Whole System Benefits). In these instances, this methodology keeps the action grouped, however it shows which customer groups the Benefit accrues to and lays out the different approaches taken to calculation where necessary.

Where there are costs which are associated with the delivery of the Benefit, these are included in the Benefit Value section but are not included in the explicit calculation formulas as this would be unduly repetitive.

Common Calculation Factors

Throughout our methodology we use a number of conversions frequently, the details of which we have laid out below:

NERA

When considering the value our actions have had in providing Enhanced Earning opportunities for DER&FSPs, we use a methodology set out by NERA[4] which assigns a value to the capacity we have created. This year, after adjusting to a common price basis the values are £73/MWh for generation output, £0.255m/MVA/year for generation capacity and £0.333m/MVA/year for demand capacity.

Headroom Project

A different calculation is required to consider the value capacity has to wider GB consumers via Whole System Benefits. We use the Headroom Project[5], an innovation project which we undertook to calculate the whole system value of network headroom. This year, after adjusting to a common price basis the value is £78/MWh

Capacity Factors

We frequently use Capacity Factors, which apply a quantitative adjustment for how frequently we foresee the capacity we have added being used. For example, if we enable the connection of a new solar farm, it would be impractical to claim the value associated with that capacity is used 100% of the time. We therefore adjust our benefits to reflect real world conditions, ensuring we are not overclaiming the benefits we provide.

[4] https://www.nera.com/experience/2023/recommending-improvements-in-regulation-to-better-incentivise-st.html?lang=en
[5] https://commercial.nationalgrid.co.uk/innovation/projects/headroom-whole-system-thinking

Flexible Connections

Overview

Flexible Connections are a non-firm type of connection that allow customers to connect to the network with a local Point of Connection instead of costly Extension Assets to a remote Point of Connection. Differing from Curtailable Connections where there will be eventual network reinforcement, Flexible Connections allow us to provide customers with faster and cheaper connections compared to a counterfactual of connecting to a remote Point of Connection.

This year, we decided to execute Flexible Connections through our DSO Curtailment team as the associated work best sits with the expertise in that team. This aligns with other DSOs that consider Flexible Connections within their DSO Benefits reporting.

Through delivering Flexible Connections, there are three distinct Benefits:

1. Acceleration – Enhanced Earnings: This Benefit accrues to DER&FSPs as by connecting through a Flexible Connection they are able to connect to the network sooner than under the counterfactual, allowing them to begin generating sooner and increasing their earning potential.
2. Acceleration – Whole System Benefits: By having more renewable generation connected to the network, we facilitate a more competitive wholesale market, which ultimately reduces the cost of operating the Whole System.
3. Avoided Extension Asset Costs: This Benefit accrues to DER&FSPs as by choosing a flexible connection, additional costs which may be experienced by connecting customers can be avoided as the need for additional assets is reduced via connecting to a closer local Point of Connection.

Counterfactual

The counterfactual would be a traditional connection to a remote Point of Connection, presenting higher costs to connect and delays.

Cost Assumptions

We have estimated that the costs associated with the necessary Active Network Management to enable Flexible Connections is £255/MW/year, resulting in a total cost of £70k this year.

Calculation

There are distinct calculations between these three Benefits. To Calculate both Acceleration elements:

- Capacity connected under flexible arrangements (MW)
- Acceleration Timescale – taken to be 2 years against the counterfactual of significant extension assets. We realise all 2 years of acceleration in the year of connection as we have a high degree of confidence that this is the amount of time we have accelerated the connection by
- Capacity Factor – taken to be 10%
- Unit Conversion - 8760 hours in a year.
- Capacity Value - £/MWh conversion (for Enhanced Earnings this is taken to be £73/MWh according to the Headroom Project, for Whole System Benefits this is taken to be £78/MWh according to the NERA Report on Generation Output)

$$Benefit = Flex\ Connection\ Capacity \cdot Acceleration \cdot Capacity\ Factor \cdot 8760 \cdot Capacity\ Value$$

To calculate the Benefit of Avoided Extension Assets, there is no calculation required as this is simply expressed as the entire value of avoided costs for the connecting customer.

Benefit Value

Realised benefits

	Acceleration – Enhanced Earnings - Net Realised Benefits (£m)	Acceleration – Whole System Benefits - Net Realised Benefits (£m)	Avoided Extension Asset Costs - Net Realised Benefits (£m)
Y1	0	0	0
Y2	0	0	0
Y3	39.12	41.86	51.05
ED2 to date	39.12	41.86	51.05

Unlocked and Ambition Benefits

There are no Unlocked Benefits associated with Flexible Connections. Our work to date in ED2 has resulted in £137.45m of Ambition Benefits relating to future connection schemes which may come forward to connect under Flexible Connections.

Distribution Network Options Assessment (DNOA) Process

Overview

Our DNOA Process is crucial for planning the network, ensuring the most cost effective options for network solutions are implemented. Our DSO System Planning teams perform strategic electrical network analysis to identify baseline and predict future distribution network constraints. These may arise from general load growth and include consideration of low carbon technologies such as EV charges, Heat Pumps and other incremental demand increases connecting via “Connect & Notify”.

Were we to not undertake this future customer behaviour modelling, then loads would grow until Connect & Notify installations were stopped on safety and/or asset grounds. This would then necessitate reinforcement prior to Connect & Notify resuming, which would lead to connections delays.

The DNOA Process outputs 5 different recommendations which we then put into action – these recommendations direct the most appropriate actions to take to avoid the need to suspend connections pending reinforcement.

Capacity added through Reinforcement

Our DSO System Planning Team consider the future constraints on the network and consider the most efficient options to minimise costs for consumers. Sometimes, the most appropriate action is to reinforce the network, however the scale of reinforcement is determined considering the future load growth of the network, which leads to efficiency gains. Where reinforcement is recommended as the best option through our DNOA assessment, there are three Benefits which arise – **Capacity added by Primary Reinforcement – Demand, Capacity added by Primary Reinforcement – Generation, and Capacity added by Secondary Reinforcement.** These Benefits have been split out as the value reinforcement recommendations Realise is different depending on the voltage level and the future connections it enables (demand vs generation).

Both Primary Reinforcement Benefits consider constraints up to ten years in the future, whereas Secondary Reinforcement looks at constraints around 18 months in advance.

DNOA outcomes recommending Flexibility

Where National Grid DSO predicts that load on assets may exceed their firm capacity, we may procure Flexibility to mitigate this, which increases the headroom available and has a similar effect to increasing the firm capacity. The amount of capacity added is taken as being the peak power of flexibility which we have dispatched per network constraint each year.

This Benefit differs from Deferring Reinforcement, as here we are considering the value added from Flexibility to enable Connect & Notify to continue, whereas when considering Deferring Reinforcement we are considering the reduction in financial obligations customers face due to reinforcement.

DNOA outcomes recommending operational mitigations

The third option considered through DNOA aside from Reinforcement and Flexibility is operational mitigations. By viewing upcoming constraints in the round, our DSO is able to conceive operational mitigations which circumvent the need for reinforcement. By considering alternatives such as splitting demand groups, we are able to remain compliant with Engineering Recommendations without the need for time consuming and expensive reinforcement schemes.

Counterfactual

The counterfactual to all DNOA outcomes would be to reinforce the network once a constraint materialises, pausing Connect & Notify until this reinforcement occurs.

Cost Assumptions

We have estimated that the costs associated with this Benefit are approximately £310,000 of staffing costs alongside £2.4m of Flexibility costs associated with contracting sufficient Flexibility to enable the DNOA outcomes.

Calculation

Capacity added through Reinforcement

There are four factors that are considered for calculating these Benefits:

- The net capacity increase.
- The expected utilisation of new capacity – this is taken as 56% at Primary and 40% at Secondary, based on the firm capacity utilisation at NGED.
- The assumed connection delays avoided – this is taken as three years at Primary and one year at Secondary. We realise all of these years of acceleration in the year of connection as we have a high degree of confidence that this is the amount of time we have accelerated the connection by,
- Capacity Value - £/MVA/year conversion (for Demand this is taken to be £333k/MVA/year and for Generation it is taken to be £255k/MVA/year, according to the NERA Report).

$$Benefit = Capacity\ Added \cdot Capacity\ Utilisation \cdot Avoided\ Delay \cdot Capacity\ Value$$

DNOA outcomes recommending Flexibility

- The net capacity increase.
- The expected utilisation of new capacity – this is taken as 90% as this is the amount of dispatched Flexibility which is useful in real-time.
- The assumed connection delays avoided – this is taken as one year.
- Capacity Value - £/MVA/year conversion (this is taken to be £333k/MVA/year, according to the NERA Report).

$$Benefit = Capacity\ Added \cdot Capacity\ Utilisation \cdot Avoided\ Delay \cdot Capacity\ Value$$

DNOA outcomes recommending Operational Mitigations

This is calculated on a scheme by scheme basis by comparing the cost of the new scheme with the original design, and multiplying by the TIM sharing factor.

Benefit Value

Realised benefits

	Primary Reinforcement – Demand - Net Realised Benefits (£m)	Primary Reinforcement – Generation - Net Realised Benefits (£m)	Secondary Reinforcement - Net Realised Benefits (£m)	DNOA Outcomes recommending Flexibility - Net Realised Benefits (£m)	DNOA Outcomes recommending Operational mitigations - Net Realised Benefits (£m)
Y1	0	0	6.17	13.38	0
Y2	46.83	0	11.81	4.92	0
Y3	70.47	0	19.24	5.18	0
ED2 to date	117.29	0	37.21	23.49	0

Unlocked and Ambition Benefits

Our activities to date in ED2 regarding all DNOA options assessments have Unlocked £587m of Benefits based on directed work we intend to complete. We also hold £1.04bn of Ambition Benefits regarding recommended interventions which are not currently in our reinforcement programme which may occur.

Enhanced Outage Planning Process

Overview

Historically, Outage Planning has been a function closely associated with the DNO-Control Centre (DNO-CC). For arranged outages that could lead to breaches of Network Capability in areas with significant distributed generation, the DNO-CC have been conservative in choosing to significantly curtail generators, often to zero. This has been a safe way of operating the network in lieu of more data.

The DSO Operations team use custom load surveys to assess specific outages in greater depth. This allows the maximum export for generators to be increased in some cases, whilst maintaining safe operating parameters.

The differences in generator export setpoints from the original DNO-CC assessments versus the new DSO Operations assessments are integrated for the duration of the outages. This gives the increase in network access, rather than an increase in generator output. We then multiply this by an assumed capacity factor.

This activity results in two distinct Benefits:

1. Whole System Benefits – *GB Consumers* - by keeping more generation connected to the network, we facilitate a more competitive wholesale market, which ultimately reduces the cost of operating the Whole System. This Benefit is only claimed where the generators are renewable.
2. Enhanced Earnings – *DER&FSPs* – by reducing curtailment of generators, they are able to remain generating for more time than would be the case under the counterfactual, increasing their earning potential.

Counterfactual

The counterfactual to having the DSO using customer load surveys and improved planning processes is the historic approach of curtailing generation.

Cost Assumptions

We have estimated the activities associated with Enhanced Outage Planning require £36k of staffing costs.

Calculation

There are three inputs to the calculation of this Benefit:

- Increased network access – In Y3 this was 835GWh for Whole System Benefits and 636GWh for Enhanced Earnings.
- Assumed capacity factor for increased network access – This has been estimated at 20%.
- Value conversion – for Whole System Benefits, this comes from the Headroom Project which assigns a value of £78/MWh. For Enhanced Earnings, this is taken from analysis by NERA providing a value of £73/MWh.

$$Benefit = Increased\ network\ access \cdot Capacity\ Factor \cdot Value\ Conversion$$

Benefit Value

Realised benefits

	Whole System Net Realised Benefits (£m)	Enhanced Earnings Net Realised Benefits (£m)
Y1	0.17	0.85
Y2	3.28	5.11
Y3	9.90	12.18
ED2 to date	13.36	18.13

Unlocked and Ambition Benefits

There are no Unlocked or Ambition Benefits associated with Enhanced Outage Management as this Benefit only includes outages managed over the past year.

Local Authority Engagement

Overview

We have a dedicated team who work on stakeholder engagement, especially with Local Authorities where we engage in a number of ways. We have identified three different Benefits which arise from our engagement with Local Authorities:

Reduced effort from Local Authorities to develop Local Area Energy Plans (LAEPs)

Our Stakeholder Engagement Team provide support and data which makes the LAEPs process more efficient, reducing costs for Local Authorities.

Societal Benefits from contribution to LAEP development

LAEPs are seen as vital for achieving local decarbonisation strategies. Our support ensures LAEPs have the necessary data for development and integration into capacity planning, crucial for realising decarbonisation benefits.

Reduced effort from LAs to develop other decarbonisation initiatives

Our engagement goes beyond developing LAEPs and includes helping implementation of other decarbonisation initiatives, reducing LA's costs via benefits-in-kind.

Counterfactual

The counterfactual is either a LAEP not being completed and associated inefficiencies, or the LA creating the LAEP alone, also increasing inefficiencies.

Cost Assumptions

We have estimated a cost of £840 per LAEP or other decarbonisation initiative which we are delivering for LAs based on staffing costs.

Calculation

Reduced effort from Local Authorities to develop LAEPs

To estimate this benefit we used a study from Energy Systems Catapult[6] where they estimate the difference between a structured and unstructured process for developing LAEPs, and the efficiency savings that this can bring per local authority. This is estimated at £330k per local area. Given that NGED provides access to expertise and data in support of the production of LAEPs, we assume the avoided cost per LA for this is equivalent to £320k.

We applied an optimism bias assumption (a reduction of the claimed benefit to account for the confidence in the proxy being used) of 15% to account for the lack of more recent research in this area.

Societal Benefits from contribution to LAEP development

Given the role electricity will play in decarbonisation efforts across GB, the support and engagement provided by NGED to ensure LAEPs have the right data to support their development as well as ensuring this data is then fed into their capacity planning process are crucial to successfully deliver LAEPs, and for the benefits to be realised from decarbonisation.

Sia Partners used results from a study by Innovate UK[7] which compares the estimated benefits of locally-tailored approaches to net zero delivery versus a place-agnostic approach which follows a nation-wide strategy, focusing specifically on buildings and transport. This gave an estimated a benefit of £44.61m per LAEP. We have used this data to estimate an average annualised per capita value of the additional societal gross benefit of a place-specific approach.

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[6] Local Area Energy Planning: Supporting clean growth and low carbon transition. Energy Technologies Institute & Energy Systems Catapult, 2018.

[7] https://iuk-business-connect.org.uk/wp-content/uploads/2023/07/IUK-090322-AcceleratingNetZeroDelivery-SupplementaryEvidence.pdf

In order to estimate the potential value that can be attributed to NGED, we apply a range of variables aligned with Social Return on Investment (SROI), in particular:

- Success rate: Likelihood of the benefits being realised. Given that we expect most LAs to complete the LAEP process and for these to be implemented, this is assumed at 90%.
- Deadweight: Likelihood that the benefits will be realised without NGED's support. NGED's contribution is key given the role electricity will play in decarbonising these areas, hence without NGED's support there may be insufficient network capacity to allow for these climate measures. We therefore assume a low deadweight of 20%.
- Attribution: The proportion of benefits that can be attributed to NGED's support. There are many contributors to decarbonisation benefits being realised, and we have struggled to find literature allowing us to reference this. We have therefore made a conservative starting assumption of 1%, which we hope to better evidence as more research becomes available.
- Optimism bias: An estimate of whether benefits should be reduced to account for the level of confidence in the proxy. The higher the optimism bias, the lower the confidence we have in the source. We believe the source used is robust, however, provided we were unable to validate the proxies with other sources we have used a high optimism bias of 40%.

Reduced effort from Local Authorities to develop other decarbonisation initiatives

Based on the initiatives we have supported this year and the time allocated to them, we have estimated that we provide £15k of benefits-in-kind.

Benefit Value

Realised benefits

	Reduced effort from Local Authorities to develop LAEPs – Net Realised Benefits (£m)	Societal Benefits from contribution to LAEP development - Net Realised Benefits (£m)	Reduced effort from LAs to develop other decarbonisation initiatives - Net Realised Benefits (£m)
Y1	0.28	0	0
Y2	3.94	0	0.11
Y3	8.73	0.19	0.15
ED2 to date	12.95	0.19	0.26

Unlocked and Ambition Benefits

Our activities to date in ED2 have Unlocked £70.88m of Benefits, based on future contributions we plan on making to LAEPs and other decarbonisation initiatives. There are no Ambition Benefits associated with our LA Engagement work.

MW Dispatch

Overview

MW Dispatch is a curtailment service benefiting the transmission network, especially during summer outages. It allows NESO to contract DER connected to NGED's network across eight GSPs to rapidly reduce their output to zero.

NESO's control over DER enables more connections to occur before transmission works are complete. Benefits from MW Dispatch can stack with those from Technical Limits, as the latter operates through NGED's ANM system to a seasonal static limit, while MW Dispatch is actively managed by NESO. Some DER may be subject to both Technical Limits and MW Dispatch, however we only include schemes not subject to Technical Limits in this analysis to avoid any risk of double-counting. There are two distinct Benefits associated with MW dispatch:

1. Acceleration – Enhanced Earnings: This Benefit accrues to DER&FSPs as by connecting through a Curtailable Connection they are able to connect to the network sooner than under the counterfactual, allowing them to begin generating sooner and increasing their earning potential.
2. Acceleration – Whole System Benefits: This Benefit accrues to wider GB consumers, as by connecting additional renewable generation sooner than would have occurred under the counterfactual, they are able to begin generating, providing Whole System Benefits which drive down costs.

Counterfactual

The counterfactual is a world without MW dispatch, where the connections accelerated by this initiative cannot be made until transmission reinforcement occurs.

Cost Assumptions

We have estimated the staffing cost associated with MW Dispatch to be approximately £36,000 per year. All costs have been allocated to the Whole System Benefit side of the Benefit as this is the primary driver for undertaking the activity.

Calculation

There are four factors that are considered for calculating this Benefit:

- DER Capacity – the total export capacity which is subject to MW Dispatch.
- Capacity Factor – an assumed capacity factor which considers the effects of MW Dispatch, taken to be 10%.
- Unit conversion – 8760 hours in a year.
- Value - £/MWh conversion (for Enhanced Earnings this is taken to be £73/MWh according to the Headroom Project, for Whole System Benefits this is taken to be £78/MWh according to the NERA Report on Generation Output)

$$Benefit = DER\ Capacity \cdot Capacity\ factor \cdot 8760 \cdot Value$$

Benefit Value

Realised benefits

	Acceleration – Enhanced Earnings - Net Realised Benefits (£m)	Acceleration – Whole System Benefits - Net Realised Benefits (£m)
Y1	0	-0.4
Y2	3.17	3.36
Y3	3.17	3.36
ED2 to date	6.35	6.69

Unlocked and Ambition Benefits

There are no Unlocked Benefits associated with MW Dispatch. Our work to date in ED2 has resulted in £187.58m of Ambition Benefits representing future MW Dispatch assets which may become eligible for NESO use.

Reinforcement Deferral

Overview

One of the key priorities for a DSO is to optimise the way we add capacity to our network. Instead of immediately building new capacity, the cost of which is borne by billpayers, DSOs seek to manage the build programme with tools such as Flexibility. This has the effect of deferring reinforcement to future years. This approach reduces bills for NGED's customers through the Totex Incentive Mechanism (TIM) via reduced DUoS charges.

It is important to note that the TIM applies differently depending on if the reinforcement was part of a DNO's Business Plan or not.

- Where the reinforcement deferred was in our business plan, a 50% sharing factor is applied. This is because the base case is the reinforcement cost being recovered through DUoS, and outperformance is subject to the sharing factor.
- Where the reinforcement deferred was not in our Business Plan, 100% is claimed. This is because the base case is that DUoS will not cover the reinforcement. If we undertake this, then the customer pays no proportion of the reinforcement cost, effectively saving them 100% of the reinforcement cost, before the costs of Flexibility are considered.

We have reviewed all of our reinforcement schemes, in line with those reported to Ofgem under Regularly Reported Evidence 7 and have applied a methodology for calculating this benefit in line with the DSO Collaboration Group principles.

We do not believe it is proportionate nor accurate to claim that the entire value of deferring reinforcement is a Benefit felt by customers. Instead, we are claiming as a Benefit only the Weighted Average Cost of Capital (WACC) saved per year of the reinforcement being deferred, and we only realise each year as it occurs.

We also only consider the "slow money" element of deferred reinforcement[8]. This is the element that is recovered after an asset has been built each year from consumers, over the course of 45 years. Every year that reinforcement is deferred, we can be certain that this part of the cost has not been recovered through DUoS, and therefore a clear difference from the counterfactual. Reinforcement also has a "fast money" element, however, as we cannot be certain by how many years the reinforcement has been deferred, we do not believe it is appropriate to include this element as we cannot calculate the value of avoiding this charge without knowing how long it has been avoided for. We therefore believe that our assessment represents a credible lower bound for the Benefit being claimed.

Counterfactual

The counterfactual in this case would be to not use Flexibility and instead reinforce the network earlier.

Cost Assumptions

This benefit is made possible by the capacity added through Flexibility, and therefore all costs associated are allocated to that Benefit as that is the work which enables reinforcement deferral.

Calculation

There are 4 inputs to the calculation:

- **Reinforcement deferred** – the total value of reinforcement deferred in £m
- **Slow money %** - Reinforcement is recovered in both fast and slow money on a 20/80 split. For example if a DNO build £1m of reinforcement, £0.2m could be recovered immediately, and the remaining £0.8m would be recovered over 45 years. We only claim benefits on the 80% slow money element as this is the part which has certainty.
- **WACC** – taken as 4.8% in accordance with the TIM. Actual values vary slightly by licence area.

[8] As set out in Ofgem's ED2 Final Determinations - https://www.ofgem.gov.uk/sites/default/files/2022-11/RIIO-ED2%20Final%20Determinations%20Finance%20…

- **TIM Sharing Factor %** - for reinforcement which was in our Business Plan being deferred this is set at 50%, for reinforcement which was outside of our Business Plan being deferred this is set at 100%, in accordance with the DSO Collaboration agreed methodology.

Benefit Value

Realised benefits

	Net Realised Benefit – Included in ED2 Business Plan (£m)	Net Realised Benefit – Excluded from ED2 Business Plan (£m)
Y1	2.06	0.09
Y2	2.43	0.41
Y3	3.11	0.48
ED2 to Date	7.59	0.98

Unlocked and Ambition Benefits

There are no Unlocked or Ambition Benefits associated with Deferral as this Benefit only considers works which has actually been deferred. As we are unable to state with certainty for how long a scheme will be deferred, we do not claim any Benefit for future years, as noted previously in this methodology.

Example

This year, through using Flexibility on our network, we decided to defer a planned £10m reinforcement on our network which was included in our Business Plan. The Realised Benefit associated with this decision would be:

$$Realised\ Benefit\ = 10 \cdot 0.8 \cdot 0.048 \cdot 0.5 = £0.192m$$

Were this reinforcement to take place in Y5, we would claim a further £0.192m in Y4 (as under the counterfactual of reinforcing, £0.192m would be recovered through DUoS each year following the reinforcement).

Technical Limits

Overview

Technical Limits are designed to expedite the connection of DER that require work at the transmission level before they can be energised through the conventional approach. Through the use of Active Network Management, these connections can take place earlier, avoiding waiting for transmission reinforcement. This is especially valuable as the timescales for transmission reinforcement can be lengthy, sometimes over ten years, as opposed to distribution reinforcement which typically takes between one and five years.

In recognition of the long delays at the transmission level, NESO and the UK Government launched Connections Reform. This has severely impacted our ability to execute our planned Technical Limits connections schedule, as we await updated offers from the transmission network. We have still managed to progress our work in this area and expect Benefits which we signposted in last year's Performance Panel submission to be Realised over future years.

There are two distinct Benefits associated with Technical Limits:

1. Acceleration – Enhanced Earnings: This Benefit accrues to DER&FSPs as through our Technical Limits schemes they are able to connect to the network sooner than under the counterfactual, allowing them to begin generating sooner and increasing their earning potential.
2. Acceleration – Whole System Benefits: This Benefit accrues to wider GB consumers, as by connecting renewable generation sooner than would have occurred under the counterfactual, they are able to begin generating, providing Whole System Benefits which drive down costs.

Counterfactual

Without Technical Limits, connecting customers would have to wait for transmission works to be completed, delaying their connection.

Cost Assumptions

We have estimated that the costs associated with this Benefit are approximately £80k through a combination of staffing costs and the necessary Active Network Management to enable Technical Limits estimated at £255/MW/year.

Calculation

There are five factors that are considered for calculating this Benefit:

- Accelerated DER export capacity.
- Capacity-weighted average acceleration of DER.
- An assumed capacity factor, considering the effects of ANM, taken to be 10%.
- Unit conversion – 8760 hours in a year.
- Capacity Value - £/MWh conversion (for Enhanced Earnings this is taken to be £73/MWh according to the Headroom Project, for Whole System Benefits this is taken to be £78/MWh according to the NERA Report on Generation Output)

$$Benefit = DER\ Capacity \cdot Average\ Acceleration \cdot 8760 \cdot Capacity\ Factor \cdot Capacity\ Value$$

Benefit Value

Realised benefits

	Acceleration – Enhanced Earnings - Net Realised Benefits (£m)	Acceleration – Whole System Benefits - Net Realised Benefits (£m)
Y1	1.28	1.29
Y2	1.28	1.29
Y3	1.28	1.29
ED2 to date	3.83	3.87

Unlocked and Ambition Benefits

Our activities to date in ED2 regarding Technical Limits have Unlocked £1.49bn of Benefits based on future schemes we intend to connect. We also hold £695m of Ambition Benefits regarding future schemes which may connect.

Low Carbon Flexibility (Market Gateway)

Overview

In the majority of cases, the flexibility used by our DSO is either Generator Turn Up (GTU) or Demand Turn Down (DTU). Typically, GTU used comes from gas power plants, and DTU comes from domestic assets such as EV chargers. Using the agreed carbon conversions which have been developed through the DSO Collaboration Group, we are able to calculate the carbon intensity of the Flexibility that we use, noting that carbon is only emitted from Flexibility that is delivered (that is to say that a gas plant needs to actually run to produce carbon).

As our Flexibility portfolio continues to see an increase in renewable assets, we are able to reduce the overall carbon emissions associated with the dispatch of Flexibility. The amount of carbon which we save through the use of our Market Gateway assets has increased in each year of RIIO-ED2. With the increase in domestic assets relative to gas peaking plants, we have increased the amount of carbon emissions avoided from 771tCO2e in Y1 to 2082tCO2e in Y3.

Counterfactual

The counterfactual against using our low-carbon Market Gateway assets is using Open Cycle Gas Turbines to provide the Flexibility necessary.

Cost Assumptions

All costs associated with Flexibility have been assigned to the DNOA process recommending flexibility, as this is the primary driver for Flexibility work.

Calculation

There are five factors that are considered for calculating this Benefit:

- Gas carbon intensity, from HM Treasury Green Book Table 2a and assuming 32% efficiency.
- Marginal grid intensity, from HM Treasury Green Book Table 1 generation-based figures.
- Delivered Flexibility, from C31E data.
- Total Flexibility emissions, from C31E data.
- Carbon prices, from HM Treasury Green Book Table 3 Central estimates.

$$Benefit = \big((Gas\ Carbon\ Intensity - Marginal\ Grid\ Intensity) \cdot Flexibility\ Delivered - Total\ Flexibility\ Emissions\big) \cdot Carbon\ \mathrm{Pr}\,ice$$

Benefit Value

Realised benefits

	Net Realised Benefits (£)
Y1	0.16
Y2	0.23
Y3	0.43
ED2 to date	0.82

Unlocked and Ambition Benefits

There are no Unlocked or Ambition Benefits associated with Market Gateway as this Benefit only considers the reductions in carbon emissions that have been achieved over the past year.

Demand Turn Up (DTU)

Overview

NGED's network is subject to both demand constraints and generation constraints, which if managed through flexibility services require different solutions. Traditionally, the focus of DSOs has been to resolve demand constraints, dealing with this by either reducing demand through Demand Turn Down (DTD) or through Generation Turn Up (GTU). Whilst this has been the prevailing focus previously, over the past two years we have worked on resolving generation constraints, focusing on using flexible assets to increase demand through DTU.

DTU incentivises customers to increase their electricity demand, typically through reducing the unit pricing at the meter at the times when an increase in demand would be advantageous to the system. We are particularly proud that a portion of customers who are signed up to provide DTU services are on the Priority Services Register, the database which documents customers who are particularly vulnerable should there be a supply interruption.

There are two distinct Benefits associated with DTU:

1. Acceleration – Enhanced Earnings: This Benefit accrues to DER&FSPs as by using DTU, they are curtailed less than under the counterfactual, allowing them to continue generating and increasing their earning potential.
2. Acceleration – Whole System Benefits: This Benefit accrues to wider GB consumers, as by curtailing renewable generation less than would have occurred under the counterfactual, they are able to continue generating, providing Whole System Benefits which drive down costs.

Counterfactual

Without DTU, generators already connected would have to be curtailed, reducing their generating opportunities.

Cost Assumptions

We have estimated that the costs associated with this Benefit are approximately £13,000 of procurement costs.

Calculation

There are three factors that are considered for the calculation of this Benefit:

- The amount of DTU capacity Dispatched (MWh)
- Conversion factor – taken to be 90%, aligning with capacity added by Flexibility.
- Capacity Value - £/MWh conversion (for Enhanced Earnings this is taken to be £73MWh according to the Headroom Project, for Whole System Benefits this is taken to be £78/MWh according to the NERA Report on Generation Output)

$$Benefit = DTU\ Dispatched \cdot Conversion\ Factor \cdot Capacity\ Value$$

Benefit Value

Realised benefits

	Acceleration – Enhanced Earnings - Net Realised Benefits (£m)	Acceleration – Whole System Benefits - Net Realised Benefits (£m)
Y1	0	0
Y2	0	0
Y3	0.3	0.2
ED2 to date	0.3	0.2

Unlocked and Ambition Benefits

There are no Unlocked or Ambition Benefits associated with DTU as this Benefit only considers the dispatch which has actually occurred in previous years and is not forecasted.

Enhanced Queue Management Processes

Overview

Last year a DER scheme applied for a 132 kV connection to NGED's network. This triggered a new supergrid transformer (SGT) in the Modification Offer (Mod Offer) from NESO, as a response to the Modification Application (Mod App) that included the connection of the scheme. The cost of the SGT would have been borne by the connecting customer.

A subsequent Mod App with more DER then led to NGET proposing wider transmission upgrades. This left the scheme in a difficult position, as they would have had to pay for a new SGT without any long-term certainty of the network they would be connected to.

National Grid DSO worked with NGET to identify attrition ahead of the scheme and provided updated historic loading data in the Week 24 submission to NESO. Together these were sufficient for NGET to issue an Approval to Vary (ATV), allowing the scheme to connect to the site and thus avoiding the cost of the new SGT.

This was the first time National Grid DSO has tried such an approach. This could form the basis for more work along these lines in future.

Counterfactual

The cost of building the new SGT (£11.28m in 2020/21 prices)

Cost Assumptions

We have estimated the activities associated with Enhanced Queue Management Processes require £36k of staffing costs.

Calculation

There is no need for a calculation, the Benefit is the cost of the counterfactual which is avoided by our DSO's intervention.

Benefit Value

Realised benefits

The benefits of Enhanced Queue Management Processes have not yet been realised and are therefore not included in our Realised Benefit figures.

Unlocked and Ambition Benefits

Our activities to date in ED2 have Unlocked £11.28m of Benefits as we are confident that this cost reduction will be realised in due course.

Curtailment Reports

Overview

This year we have begun offering curtailment reports to DER looking to connect to our network, allowing them to see the scale and frequency of curtailment they may face if they choose to connect. This provides these market participants with crucial insights that allow them to plan and operate more efficiently. These reports are produced by our DSO and offered at no charge to the participant. We believe that by reducing market uncertainty we will lower the cost of capital for generation and thus facilitate a more competitive market.

Counterfactual

The cost of contracting an external party to produce a report, estimated at £5,000 per report.

Cost Assumptions

We have estimated the activities associated with Flexible/Curtailable Connections require £110k of staffing costs. We have assigned these costs here as the Curtailment Reports are the first step in these processes.

Calculation

There is no need for a calculation, the Benefit is the cost of the counterfactual which is avoided by our DSO providing Curtailment Reports.

Benefit Value

Realised benefits

The benefits of Curtailment Reports have not yet been realised and are therefore not included in our Realised Benefit figures.

Unlocked and Ambition Benefits

Our activities to date in ED2 have Unlocked £2.8m of Benefits as we are confident that at least 582 reports will be generated in the coming years. We also hold £5.33m of Ambition Benefits.

Uprating on replacement driven by Asset Condition

Overview

When network assets are being changed due to their condition, NGED is incentivised to replace them as cheaply as possible in order to outperform our ED2 Allowed Totex. This generally means replacing assets with units of the same capacity, however this approach does not account for future load growth. Whilst a like-for-like replacement may be the most appropriate course of action in accordance with standard price control measures, this can be inefficient if upcoming load growth will necessitate a network upgrade in the near future.

This waste can be avoided by using load projections from the DSO's System Planning Forecasting team to predict the maximum load over the expected lifetime of the replaced assets and then size the replacements accordingly.

To determine the benefit of this improved efficiency, the costs of investing twice at the relevant trigger years, corresponding to the load predictions from System Planning are converted to a net present value using the Common Evaluation Methodology, which is used for comparing Flexibility against reinforcement works. This is compared to the net present value of the cost of investing with just the larger unit once, and this process repeated for each relevant reinforcement scheme. We are able to use this approach as we have sufficient confidence in the year in which reinforcement will occur in the future, contrary to Reinforcement Deferral where the future reinforcement date is not known.

Counterfactual

The counterfactual would be to simply replace the asset with a like-for-like asset and not account for future load growth.

Cost Assumptions

We have estimated that the costs associated with this Benefit are approximately £36,000 of staffing costs.

Calculation

There are four factors that are considered for calculating this Benefit:

- The cost of like-for-like replacement,
- The cost of an upgraded unit
- The year where the upgraded unit will become necessary, according to DFES projections
- The Common Evaluation Methodology, used for calculating the net present value of the two options:

$$Benefit = NPV\ of\ investing\ twice\ -\ NPV\ of\ investing\ more\ upfront$$

Benefit Value

Realised benefits

The benefits of Uprating on replacement driven by Asset Condition have not yet been realised and are therefore not included in our Realised Benefit figures.

Unlocked and Ambition Benefits

Our activities to date in ED2 have Unlocked £0.11m of Benefits based on future planned work. There are no Ambition Benefits associated with Uprating on replacement driven by Asset Condition.

Curtailable Connections

Overview

Curtailable Connections are a non-firm type of connection that allow customers to connect to the network ahead of the reinforcement necessary for their full capacity being completed. Differing from Flexible Connections, Curtailable Connections have a Curtailment Limit, representing the maximum annual amount of curtailment the scheme can experience before receiving compensation.

Through delivering Curtailable Connections, there are two distinct Benefits:

1. Acceleration – Enhanced Earnings: This Benefit accrues to DER&FSPs as by connecting through a Curtailable Connection they are able to connect to the network sooner than under the counterfactual, allowing them to begin generating sooner and increasing their earning potential.
2. Acceleration – Whole System Benefits: This Benefit accrues to wider GB consumers, as by connecting additional renewable generation sooner than would have occurred under the counterfactual, they are able to begin generating, providing Whole System Benefits which drive down costs.

Counterfactual

The counterfactual would be delays waiting for reinforcement to occur.

Cost Assumptions

We have estimated that the costs associated with the necessary Active Network Management to enable Curtailable Connections is £255/MW/year, resulting in a total cost of £60k in future years should Curtailable Connections come forward.

Calculation

There are five factors that are considered for calculating this Benefit:

- Capacity connected under flexible arrangements (MW)
- Acceleration Timescale – taken to be 2 years against the counterfactual of waiting for reinforcement.
- Capacity Factor – taken to be 10%
- Unit Conversion - 8760 hours in a year.
- Capacity Value - £/MWh conversion (for Enhanced Earnings this is taken to be £73/MWh according to the Headroom Project, for Whole System Benefits this is taken to be £78/MWh according to the NERA Report on Generation Output)

$$Benefit = Curtailable\ Connection\ Capacity \cdot Acceleration \cdot Capacity\ Factor \cdot Capacity\ Value$$

Benefit Value

Realised benefits

The benefits of Curtailable Connections have not yet been realised and are therefore not included in our Realised Benefit figures.

Unlocked and Ambition Benefits

There are no Unlocked Benefits associated with Curtailable Connections. Our work to date in ED2 has resulted in £363.56m of Ambition Benefits relating to future connection schemes which may come forward to connect under Curtailable Connections.

Appendix – Independent Assurance

We have appended the independent assurance of our methodology received from SIA partners as justification of our approach.

April 28, 2026

Cathy McClay
Managing Director
National Grid DSO
Distribution
Avonbank, Feeder Road
Bristol
BS2 0TB

Dear Ms. McClay,

We are pleased to provide this letter of assurance covering our independent review of NGED's approach to quantifying benefits for Year 3 of the RIIO-ED2 DSO incentive.

Scope of Assurance

As agreed, our scope was to conduct an independent review of NGED's quantification of benefits stemming from DSO activities, that would then be reported in the DSO Incentive Panel Submission for Year 3 of RIIO-ED2. The objective was to assess whether the calculations conducted by NGED on DSO benefits are robust, aligned with best practice for benefit measurement, and consistent with the ENA DSO Collaboration Forum approach. The assurance included:

DSO benefits methodology

- Assessment of the strength of evidence supporting attribution of benefits to DSO activities.
- Review of the robustness of the methodology for each DSO benefit calculated against best practice methods, including HMT Green Book, Social Return on Investment and Theory of Change.
- Evaluation of the suitability of benefit proxies, where relevant.
- Assessment of alignment with the ENA DSO Performance Panel. Collaboration Forum approach (Common appendix to accompany all DSO performance panel submissions – April 2026 | Version 2).

DSO benefits calculation

- Review of calculations to confirm consistency with the defined methodology as per the above criteria. This did not include verification of the accuracy of underlying data inputs from DSO activities, which were sourced by NGED's team.
- Ensure that benefits are not double counted when attributable to different stakeholder groups.

Assurance Approach

Sia worked closely with NGED's DSO team, reviewing multiple iterations of two key documents:

- The methodology document (Word format)
- The calculation model (Excel format)

The outputs from both documents have been used in NGED's Year 3 DSO Performance Panel Report (April 2026). We did not review the final report and therefore have not verified the consistency between the reviewed outputs and the published figures.

Assurance Outcome

Based on our review of NGED's approach to DSO benefit quantification and supporting evidence, it is our view that the methodology and calculations are robust, of high-standard, and aligned with both best practice and the ENA DSO Collaboration Group approach. Our key findings are summarised below:

DSO benefits methodology

The methodology documents reviewed provided sufficient evidence and detail to justify the DSO benefits included, the applied methodology and how this aligns with best practice, including the use of suitable proxies where benefits cannot be measured directly. Where there is risk of double counting, NGED clearly articulates its rationale for inclusion. We find the methodology to be aligned with the ENA DSO Performance Panel Collaboration Forum Appendix in the following areas:

- Use of common stakeholder groups
- Application of a Theory of Change framework where outputs and benefits are differentiated
- Use of universal SMART principles to define DSO benefits
- Categorisation of benefits as Direct and Indirect
- Applying standardised approaches for three DSO outcomes:
    - 1. Accelerated DER connections, 2. Deferring reinforcement, 3. Outage management and optimisation
- Applying standardised approaches for core methodology elements:
    - 1. Price Base, 2. Inflation data, 3. Discounting of benefits, 4. Alignment of carbon prices and conversion factors, 5. Matching of carbon and societal benefits, 6. Net vs gross, 7. Publishing assumptions, 8. Definition of social Value, 9. Inclusion of 'wider' societal benefits
- Applying standardised approaches for benefit specific methodology elements:
    - 1. Benefit description, 2. Benefit duration, 3. Measurement of counterfactual, 4. Sharing of network benefits with customers
- Use of common language as defined

DSO benefits calculation

The calculation model is consistent with the defined methodology, and details clear year-on-year performance, with no evidence of double counting.

In summary, we are pleased to provide assurance that NGED's approach to the calculation of DSO benefits is robust, aligned with best practice and consistent with the ENA DSO Collaboration Forum approach.

We wish you every success with your upcoming DSO Incentive Performance Panel submission.

Yours sincerely,

Ryan Shellard

Associate Partner, Energy & Utilities