



Making a positive difference
for energy consumers



RIIO-ED1 Network Performance Summary 2021-22

Introduction

This report presents a summary of the Electricity Distribution Network Operators' (DNO groups) output delivery and financial performance through RIIO-ED1 in the following areas:

1. Delivery against output targets in 2021-2022;
2. Expenditure in cost categories, the key drivers of any under/over spend against allowances and forecast spend across the RIIO-ED1 price control to date.
3. Latest estimates of Rate of Return on Regulated Equity (RoRE) based on forecast out-turn performance; and
4. An estimate of the average customer bill impact.

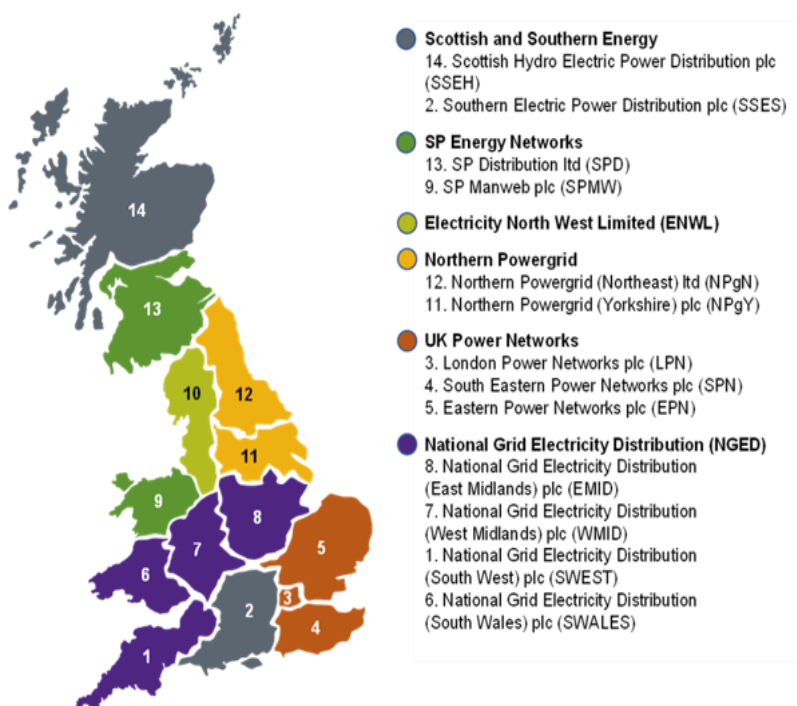
Key messages

Annual outputs: All DNO groups continue to perform strongly against output targets and are on track to meet or exceed these by the end of RIIO-ED1.

RIIO-ED1 performance: In 2021-2022, three of the six DNO groups overspent against their annual allowance and, across the price control to date, three DNO groups have overspent against their allowance. Three DNO groups expect to meet or exceed their allowance over the whole of RIIO-ED1.

RoRE: DNO groups' RoRE ranges between 8.3% and 11.2% over the RIIO-ED1 period.

Customer bill impact: Based on estimates, the average GB customer in 2022-2023 will pay £99 per year in real 2021-2022 price terms for electricity distribution costs.



Background to RIIO-ED1

DNOs are responsible for carrying electricity from the transmission network, and generation sources connected to their network, to network users. The six DNO groups and the areas in which they operate are shown on the map.

To ensure value for money for consumers, Ofgem regulates DNOs through periodic price controls. The price controls we set determine the amount of revenue DNOs can earn, and specify the levels of performance we expect DNOs to deliver.

The report covers the period up to 31 March 2022 when the impact of the COVID-19 pandemic remained present. We would like to acknowledge the collaborative arrangements that were put in place from March 2020 across all the energy networks to tackle the pandemic. These arrangements helped to maintain security of supply and high levels of system reliability, deliver essential services to consumers, while also ensuring safety for all. ¹

1. Outputs and Incentives

Annual output targets apply in four areas (connections; social obligations and customer service; reliability and availability; and environment) where performance can result in incentive rewards (or penalties under certain output areas). There is also a fifth output area, safety, which does not have an annual target; however, DNO groups are required to comply with legislation set out by the Health and Safety Executive (HSE).

DNO group performance for each output is summarised below.

Connections

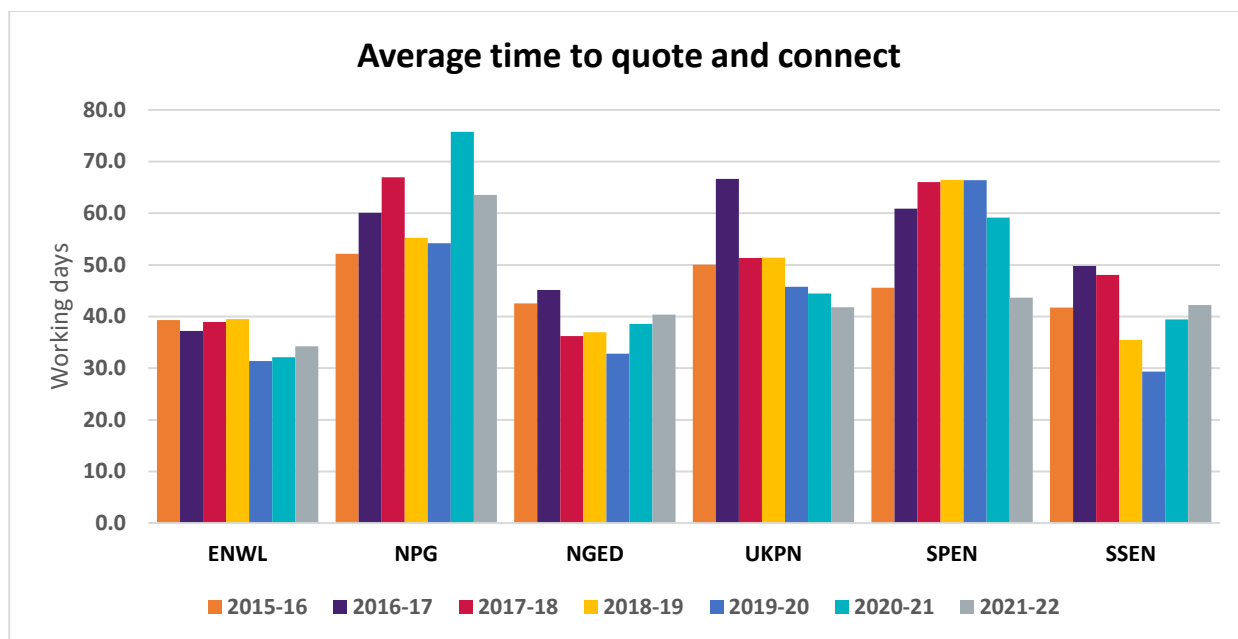
In 2021-2022, there is an improvement under the Time to Connect (TTC) Incentive compared to 2020-2021, with the majority of DNO groups outperforming their annual target. Under the Incentive on Connections Engagement (ICE), no penalties were applied in 2021-2022 as we were satisfied with the performance of all DNO groups. All DNO groups also met or exceeded the annual report target for Connections Guaranteed Standards of Performance (GSoP) where five DNO groups received a green RAG status and NPg received Amber status.²

Given the growth in connections requests and strategic challenges around securing timely and efficient connections to the grid, we are currently reviewing connection arrangements in Great Britain. Alongside the priority of accelerated network build, we are working with industry (Electricity System Operator (ESO), network companies and the Energy Networks Association) on short and medium term reforms to the connections processes at transmission and distribution which seek to reduce the time that it can take to secure a connection to the network.

¹ Western Power Distribution (WPD) became part of the National Grid Group following its acquisition in March 2021. It was renamed National Grid Electricity Distribution (NGED) from September 2022.

² Red, Amber and Green (RAG) ratings are not a measure of performance but an indication of whether the DNO is on track to meet certain objectives.

Figure 1: Average Time to Quote & Connect

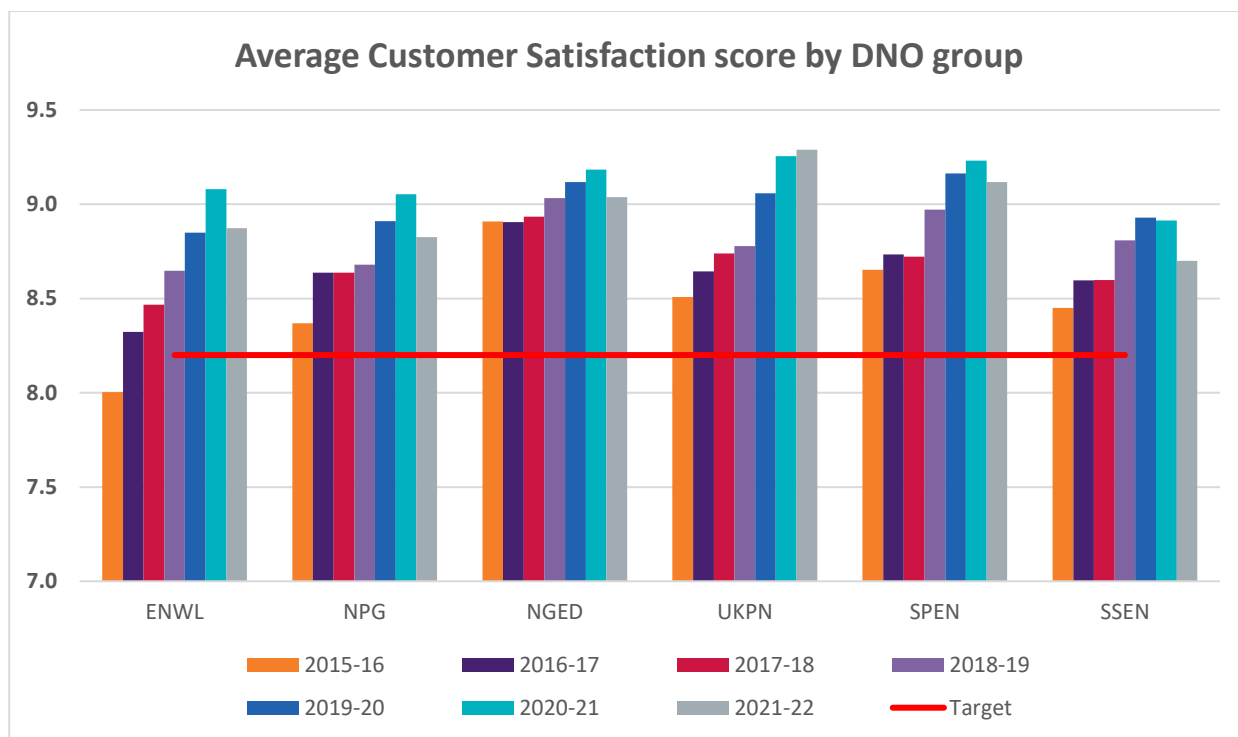


Social Obligations and Customer Service

All DNO groups met or exceeded the Customer Satisfaction Survey (CSS) targets, building on their performance in RIIO-ED1 to date. The industry average score is now 9 out of 10. All DNOs outperformed the target on complaints while two DNOs improved on their previous year’s performance (SSEH and SSES). Four DNO groups (ENWL, NPg, SPEN, SSEN) decreased their score under the Stakeholder Engagement and Consumer Vulnerability (SECV) Incentive; and only UKPN achieved a higher score than they did in 2020-2021.

The customer satisfaction scores across all DNOs have decreased in 2021-22. The combined reward received by DNO groups under the three components of the Broad Measure of Customer Satisfaction (CSS, SECV & complaints) this year was £53.9m.

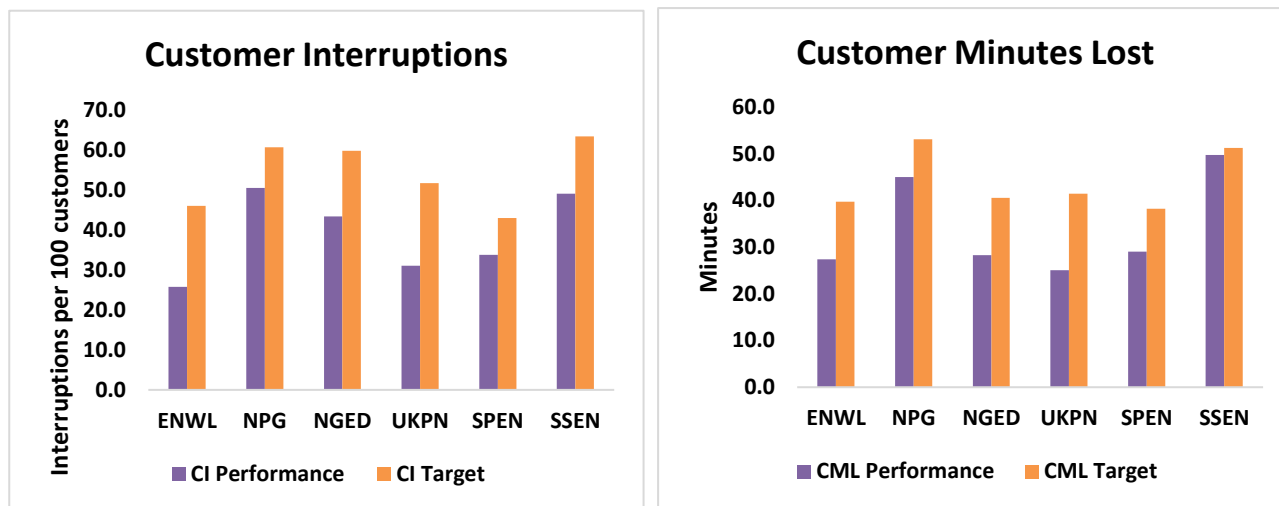
Figure 2: Annual Customer Satisfaction Score by DNO group



Reliability and Availability

All individual DNOs met their Interruptions Incentive Scheme (IIS) targets for unplanned and planned interruptions in 2021-2022. Over RIIO-ED1 to date, customer interruptions have fallen by 23% whilst the duration of interruptions has reduced by 18%. Based on their performance against the annual targets, DNO groups earned £174m under the IIS in 2021-2022 which is higher than their performance for 2020-2021 (£166.8m).

Figure 3: Annual Interruption Incentive Scheme performance by DNO group (Planned and Unplanned)



In 2021-2022 DNO groups:

- Spent £133m on resilience, bringing the total spent to date over RIIO-ED1 to £1,061m (under the allowance to date of £1,158m);
- Spent £2m improving service provision for the worst-served customers; and
- Paid out just over £0.62m for failing to meet minimum levels of service under the Guaranteed Standards of Performance (GSoP).

All individual DNOs continue to make progress towards meeting their targets under Network Asset Secondary Deliverables, and have delivered levels of monetised risk as a percentage of their target between 85% (NPGY) and 115% (WMID & SWALES).

Environment

In 2021-2022, DNOs' Business Carbon Footprint (excluding losses and contractors) decreased by 6.3% from 2020-21 but, there has been a decrease since the start of RIIO-ED1, by 15.6%. This year reported levels of sulphur hexafluoride³ emissions increased by 10.5% and there was an increase by 3.7% in total oil leakage from fluid filled cables.

³ Sulphur hexafluoride is a gas used to insulate high-voltage circuit breakers, switchgear, and other electrical equipment. It is an inorganic, extremely potent greenhouse gas

Safety

DNOs continue to comply with the legislation enforced and regulated by the HSE. Overall, DNO groups continue to perform well in this area and respond appropriately to notices issued by the HSE.

2. Innovation

The Network Innovation Allowance (NIA) is designed to fund smaller scale research, development and demonstration projects. Each individual DNO receives an allowance for innovation projects in line with the NIA Governance Document. In 2021-22 DNO groups spent £24.4m (79% of that year's allowances), which was a decrease on the £26.6m spent in 2020-2021 (83% of that year's annual allowances). If successful, innovation projects will bring a variety of financial, operational, environmental and safety benefits.

The RIIO-1 Network Innovation Competition (NIC) is an annual competition that provides funding to a small number of large-scale innovation projects. The aim is to encourage DNO groups to innovate in the design, build, development and operation of their networks. These projects will generate learning for all DNOs and will also be made available to interested third parties. In 2021-22 two distribution projects received a total of £13.7m funding from NIC.⁴

In 2021-2022, NGED successfully applied for funding for the project Equinox, to release capacity flexibly through the use of heat pumps using an existing flexibility platform. Also, ENWL successfully applied for funding for the project BiTraDER, which aims to reduce constraints on the connection of flexible energy resources that limit availability for energy during critical periods by creating a market where they can be traded. This should reduce cumulative design margins and free up network capacity.

⁴ Further information is available in the project documentation published on our website:

<https://www.ofgem.gov.uk/publications/network-innovation-competition-2022-decision-document>

3. Totex Performance and Drivers

Network companies are incentivised to outperform their RIIO-ED1 totex allowance. Through the totex incentive mechanism (TIM), any underspend compared to the totex allowance is shared between the individual DNO and its customers. The efficiency sharing rate is symmetrical for any overspends: the network company is exposed to any shortfall and the remainder is passed onto customers by increasing allowances to be recovered through network charges. DNO group performance against totex (and the associated sub-categories), as well as the customer bill impact and Return on Regulated Equity (RoRE),⁵ is summarised below.

Totex

Performance on totex varies across DNO groups, with half of the DNO groups underspending to date; performance to date ranges from a 3.5% overspend to a 12% underspend (see table 1). Three DNO groups currently anticipate an underspend across RIIO-ED1 (ranging from -1% to -11%). Through the TIM customers will receive £406m of the £933m underspend to date.

The combined value of total expenditure for the DNOs over RIIO-ED1 is currently forecast to be £31.8 billion; an overall forecast underspend of 2.5 % (See table 2).

Table 1: DNO group cumulative expenditure against allowance to date

<i>£m, 2021-22 prices</i>	<i>(Cumulative to date – 2015-16 to 2021-22)</i>			
	<u>Allowance</u>	<u>Expenditure</u>	<u>Difference</u>	
	£m	£m	£m	%
ENWL	2,085	1,917	-168	-8.1%
NPg	3,425	3,435	10	0.3%
NGED	7,782	7,635	-147	-1.9%
UKPN	6,838	6,020	-819	-12.0%
SPEN	3,699	3,828	129	3.5%
SSEN	4,128	4,189	61	1.5%
Total	27,957	27,023	-933	-3.3%

⁵ The financial return achieved by shareholders in a licensee during a price control period from its out-turn performance under the price control.

Table 2: Forecast DNO expenditure against allowance across RIIO-ED1

<i>£m, 2021-22 prices</i>	<i>Current RIIO-ED1 company forecast</i>			
	<u>Allowance</u>	<u>Expenditure</u>	<u>Difference</u>	
	£m	£m	£m	%
ENWL	2,381	2,211	-170	-7.1%
NPg	3,923	3,938	15	0.4%
NGED	8,897	8,810	-87	-1.0%
UKPN	7,712	6,861	-851	-11.0%
SPEN	4,180	4,365	185	4.4%
SSEN	4,713	4,838	125	2.6%
Total	31,807	31,024	-783	-2.5%

Total Load Related costs

Overall spend to date under this category is significantly under allowance (-34%). Expenditure on network reinforcement is around 44% less than the allowance to date across all DNOs. Drivers for this underspend include: economic conditions creating uncertainty in demand for electricity; schemes that have been deferred or cancelled in response to consumers requirements; and an increase in energy efficiency measures and innovative solutions used by DNOs. For the DNOs all of these factors have deferred the need to invest in the network.

The combined value of load related expenditure for the DNOs over RIIO-ED1 is currently forecast to be £3.32 billion: an underspend of 29%. We expect this underspend to decrease in the remaining years of RIIO-ED1 due to increased demand for low carbon technologies, including Electric Vehicles (EVs) and heat pumps.

Non-Load Related Capex

Asset Replacement and Refurbishment: To date, all DNO groups have underspent on replacing and refurbishing equipment at an average of 19%. The main drivers behind the underspend include: schemes/projects being delayed or deferred; negotiating contracts with commercial incentives to deliver efficiencies; IT Transformation Programmes and innovative techniques being used to minimise costs.

Other non-Load Related Capex: To date spending in these areas across all DNOs is around 8% less than the allowance. Two DNO groups have underspent and four have overspent. UKPN has the largest underspend (22%), whilst ENWL and SSEN have overspend 17% and 21%, respectively. The combined spend on non-load related capex for all DNO groups across RIIO-ED1 is forecast to be £9.33 billion: an underspend of 13%.

Network Operating Costs (NOCs)

DNO groups have collectively overspent on NOCs by around 11% to date. The main areas of expenditure under this category are Faults (19% overspend to date), Tree Cutting (7% underspend to date), and Inspections and Maintenance (8% overspend to date). The main driver of overspend on Faults has been on responding to faults caused by extreme weather conditions (for example, high winds, floods and high ambient temperature) and by activities impacted by additional contractor costs to maintain continuity of cover during COVID-19.

The combined spend on NOCs across all DNO groups over RIIO-ED1 is forecast to be £7.25 billion: an overspend of 12%.

Operational Support Cost/Closely Associated Indirects (CAIs)

Five DNO groups have overspent on allowances for operational support to date; one of those by 31% (SPEN). DNOs made efficiencies including savings on vehicles and transport costs: implementing fleet vehicle telematics as a key initiative to reduce fleet mileage in the period to-date. DNOs have invested in operational support to achieve wider totex efficiencies which, combined with the tight price control settlement, has made it difficult to achieve cost efficiencies in this category.

The combined forecast spend on CAIs across RIIO-ED1 is £6.91 billion: an overspend of 12%.

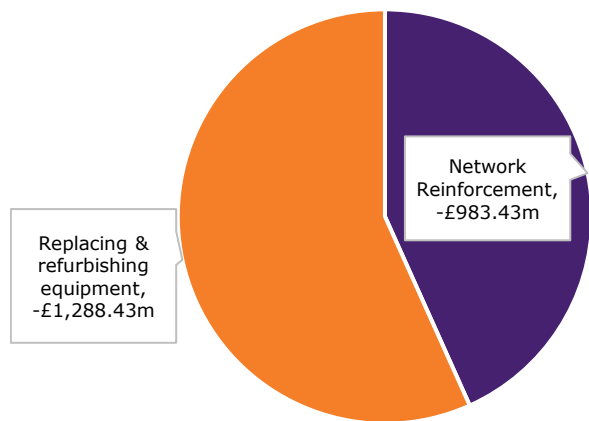
Business Support Costs (BSC)

Three DNO groups have overspent their allowance on business support costs over RIIO-ED1; one by more than 60% (SPEN). The main driver for overspend is higher costs than those forecasted at the start of RIIO-ED1. Underspend in other DNO groups is partly due to the phasing of expenditure over the price control period, and efficiency savings.

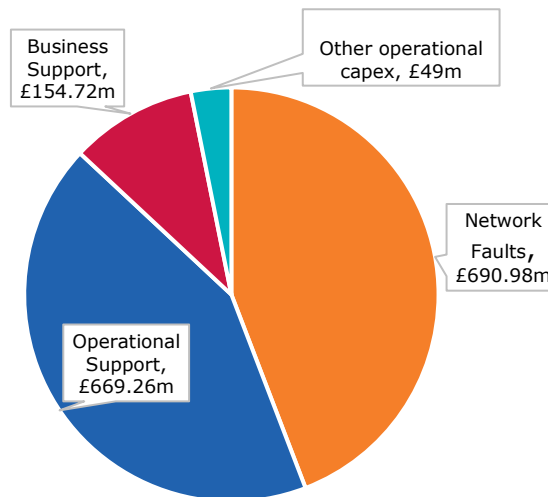
The combined spend on BSC across RIIO-ED1 is forecast to be £3.55 billion: an overspend of 7%.

Figure 4: Six largest cost categories: Underspend and overspend to date⁶

Underspend to date (-£2,271.86m)



Overspend to date (£1,564.30m)



Green Recovery Scheme

Following the COVID-19 pandemic during 2020 and 2021, Ofgem engaged the energy industry to consider and progress actions that could facilitate a green economic recovery while accelerating the delivery of decarbonisation benefits to energy consumers. Significant opportunities were identified by Ofgem and the networks under an overall “Green Recovery programme”. Following a shortlisting process we accepted over £300m worth of investment to be delivered across all DNOs.⁷

The regulatory arrangements for the DNO Green Recovery Scheme are separate to the development of the new price controls (RIIO-ED2) starting on 1 April 2023. We continue to review DNOs progress of delivery through our annual reporting in RIIO-ED1 and into RIIO-ED2. Any costs that we consider to be non-compliant with the scope of the agreed Green Recovery proposals will be removed from the approved funding mechanism and moved in to the DNOs Totex.

⁶ This is the collective industry picture of spend. It does not necessarily reflect the expenditure pattern for individual DNOs.

⁷ <https://www.ofgem.gov.uk/publications/decision-riio-ed1-green-recovery-scheme>

Customer bill impact

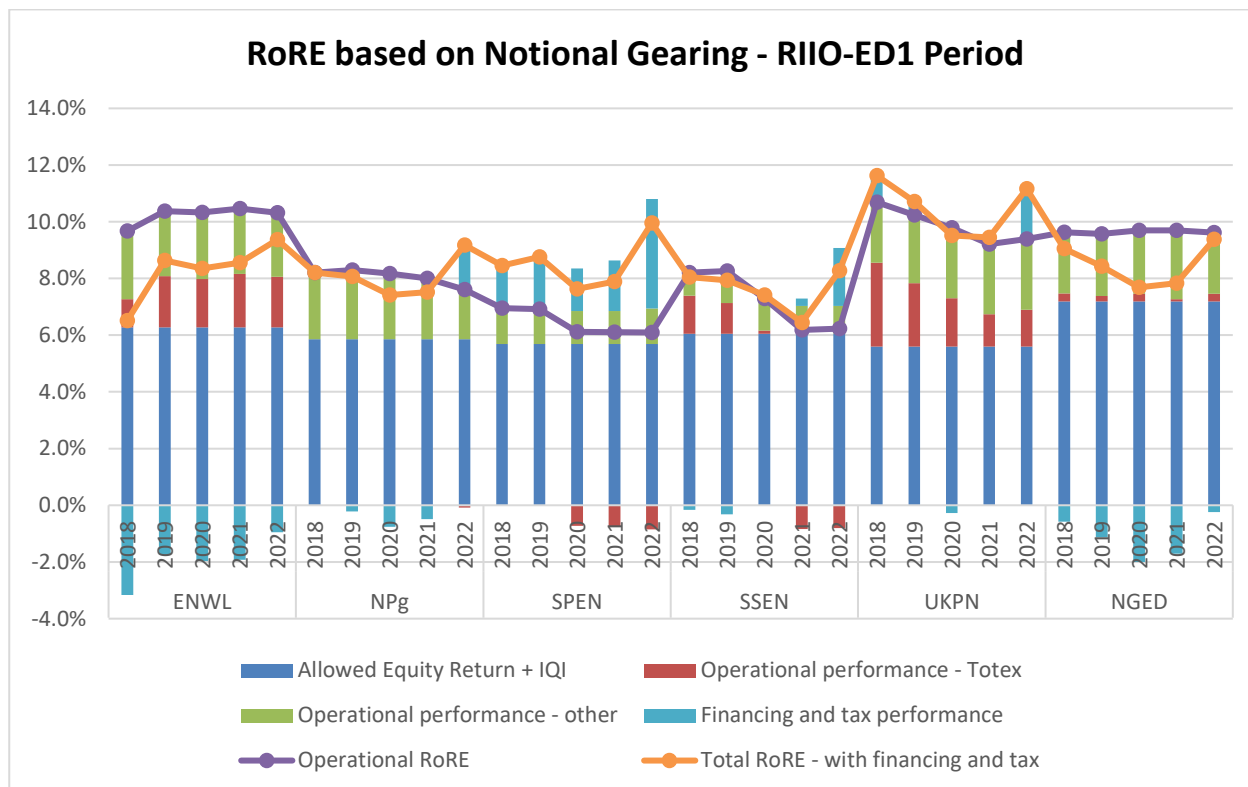
Our Tariff methodology provides an estimate of the overall cost of domestic energy bills. This includes estimates of the proportion of the overall cost of energy which is attributable to electricity distribution costs. The methodology uses an average electricity demand applied uniformly across all regions and over time.

Our latest bill assessment using this methodology estimates that the average GB customer in 2022-23 will pay £99 per year in real 2021-22 price terms for electricity distribution costs. Charges vary depending on the region in which a domestic consumer resides: ranging from £80 in London to £125 in the North of Scotland.

4. Rate of Regulatory Return on Equity (RoRE)

RoRE is made up of several components. The allowed equity return is the return on equity that a company would earn if their expenditure and allowance matched and there were no other incentives. Operational performance (totex) compares the totex allowance to a company's actual totex expenditure and any underspend or overspend is then shared between the company and consumer through the Totex Incentive Mechanism. Operational performance (other) accounts for a company's overall incentive performance. Putting these three component parts together produces operational RoRE. Financing and tax performance is added to produce total RoRE.

We have calculated a current RoRE range between 8.3% and 11.2%. This is based on our own assessment of the value of DNO groups' current forecast performance at the end of RIIO-ED1. A summary of our assessment of the DNO groups' RoRE performance is shown in figure 5 (comparing this year to last year) and table 3 below.

Figure 5: RoRE based on Notional Gearing – RIIO-ED1 period


Accompanying this report is a regulatory financial performance annex that sets out our assessment of DNO groups' regulatory financial performance. Our assessment is based on information the companies have submitted to Ofgem using the new regulatory financial performance reporting (RFPR) process.

Table 3: RoRE based on Notional Gearing – RIIO-ED1 period based on 2021/22 RFPR submissions

	ENWL	NPg	NGED	SPEN	SSEN	UKPN
RIIO-ED1 operational RoRE	10.3%	7.6%	9.6%	6.1%	6.2%	9.4%
Financing and tax performance	-0.9%	1.6%	-0.2%	3.9%	2.0%	1.8%
Total RoRE	9.4%	9.2%	9.4%	10.0%	8.3%	11.2%