Registration number: 03476201 (England and Wales)

Northern Powergrid Holdings Company

Annual Report and Consolidated Financial Statements

for the Year Ended 31 December 2023

Northern Powergrid Holdings Company
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Northern Powergrid Holdings Company
Company Information

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Northern Powergrid Holdings Company
Strategic Report for the Year Ended 31 December 2023

The directors present their annual report and audited consolidated financial statements for the year ended 31 December 2023 of Northern Powergrid Holdings Company (the "Company"), which have been drawn up and are presented in accordance with the Companies Act 2006.

Business model

The Company is the parent undertaking for the Northern Powergrid group of companies (the "Group") and its main subsidiary companies are Northern Powergrid (Northeast) plc ("NPg Northeast"), Northern Powergrid (Yorkshire) plc ("NPg Yorkshire"), Integrated Utility Services Limited, registered in the United Kingdom, ("IUS"), CalEnergy Resources Limited ("CE Resources"), Integrated Utility Services Limited, registered in the Republic of Ireland ("IUS Ireland") and Northern Powergrid Metering Limited ("NPg Metering").

NPg Northeast and NPg Yorkshire (together "Northern Powergrid") are distribution network operators ("DNOs") and hold electricity distribution licences granted by the Secretary of State. Northern Powergrid is regulated by the Office of Gas and Electricity Markets ("Ofgem"), which in turn, is governed by the Gas and Electricity Markets Authority ("GEMA"). Ofgem require the DNOs to operate within a regulatory framework known as a price control, the purpose of which is to protect the interests of end consumers by setting an upper limit on the amount the DNOs can charge for the use of their networks. The completion of the 2022/23 Regulatory Year (on 31 March 2023), represented the final year of the RIIO-ED1 price control, which became effective on 1 April 2015 and ended on 31 March 2023 (the "ED1 period"). 1 April 2023 denoted the start of the RIIO-ED2 price control, which will run for a period of five years to 31 March 2028 (the "ED2 period").

During the year, Northern Powergrid distributed electricity to approximately 3.9 million customers connected to the electricity distribution networks in the northeast of England and Yorkshire. Northern Powergrid's combined distribution networks (the "Network") include over 17,000 miles of overhead lines, 43,400 miles of underground cables and 823 major substations. Electricity is received from the National Grid's transmission system and from generators connected directly to the network and then distributed at voltages of up to 132 kilovolts.

The majority of revenue generated by Northern Powergrid is controlled by a distribution price control formula which is set out in the electricity distribution licence. The price control formula does not directly constrain profits from year to year, but is a control on revenue that operates independently of a significant portion of Northern Powergrid's costs. Allowed revenue is recovered from electricity suppliers via the application of Distribution use of System charges. These charges account for approximately 15% of the electricity end user's overall electricity bill. Northern Powergrid's opening base allowed revenue (excluding the effects of incentive schemes, volume or legislative driven adjustment mechanisms and any contract liabilities ("deferred revenue") from the prior price control) has been set and therefore provides Northern Powergrid with some stability in terms of its income for each Regulatory Year from 1 April 2023 through to 31 March 2028. Nominal opening base allowed revenues increased in line with inflation (as measured by the average of the United Kingdom's Retail Prices Index and Consumer Prices Index "CPI-H" in the month of April 2023, and as measured by CPI-H there onwards).

IUS and IUS Ireland provide engineering contracting services, CE Resources holds interests in hydrocarbon permits and renewables projects in Australia, Poland and the United Kingdom, and NPg Metering rents meters to energy suppliers.

As Northern Powergrid is the largest contributor to the Group in terms of revenue and profit, the Strategic Report predominantly concentrates on the performance and progress of those entities throughout the reporting year.

STRATEGY

The Group operates a strategy based on six core principles (the "Core Principles") which comprise Financial Strength, Customer Service, Operational Excellence, Employee Commitment, Environmental Respect and Regulatory Integrity. The Core Principles (which are applied by the Group's parent company, Berkshire Hathaway Energy Company ("Berkshire Hathaway Energy")), set out the basis on which the Group generates shareholder value over the longer-term and defines the standards by which the Group holds itself accountable. Each Core Principle is defined by a strategic objective which is linked to the commitments made in Northern Powergrid's business plan for the ED2 period (the "Business Plan").

Submitted to Ofgem in December 2021, the Business Plan (available via the Group's website) described the long-term strategy that Northern Powergrid would achieve during the ED2 period in order to support decarbonisation whilst delivering sustainable growth with regard to those with whom Northern Powergrid interacted and served.

Developed after a period of consultation with stakeholders, and in conjunction with the work of the Customer Engagement Group ("CEG"), which was established for the purpose of providing independent scrutiny and challenge to ensure that customers' interests were adequately reflected, the Business Plan focused on a number of output areas. The output areas, which link to the Core Principles, are described throughout the Strategic Report and include (amongst others) reliability and availability, climate resilience, decarbonisation, safety, vulnerable customers and customer service. These areas are supported by three enablers, being workforce resilience, innovation and data and digitalisation. The directors refer to the values established by the Core Principles and the commitments contained within the Business Plan when considering the consequence of decisions they make.

As Northern Powergrid delivers the strategy set out in the Business Plan, it will support the evolution from DNO to Distribution System Operator ("DSO"), to facilitate decarbonisation and take steps to achieve a fully integrated and flexible energy system.

The delivery of the Business Plan is supported by an annual business plan (the "Annual Plan") which is submitted to the Group's shareholder each financial year and is designed to phase progress towards the achievement of each commitment over the ED2 period. This ensures that the deliverables in both plans can be measured effectively by using a mix of financial and non-financial Key Performance Indicators ("KPI").

The Strategic Report focuses on each Core Principle and the performance of each KPI throughout the year in order to provide a summary of the success in achieving each strategic objective, progress made against certain Business Plan commitments and performance in relation to the Annual Plan.

FINANCIAL STRENGTH

Strategic objective: Strong finances that enable improvement and growth.

KPI	2023	As restated 2022
Operating profit	£276.3m	£439.1m
Cash from operating activities	£703.6m	£738.4m
Cash used in investing activities	£570.9m	£682.1m
Credit Rating (Standard & Poor's)	A	A

Business Plan commitment: To build on the strong financial base by delivering embedded efficiencies equivalent to 11% of forecast total expenditure during the ED2 period.

Performance during the year: The Group continued to maintain good control in respect of both its capital and operating costs by effectively managing the financial risks that could have had an adverse impact on its business. Our Efficient Output Delivery programme has now identified intiatives worth £298.1m relating to the ED2 period.

Revenue: The Group's revenue at £1,130.8 million was £18.1 million lower than the prior year due to lower distribution system revenues, including lower recovery of payments made under the supplier of last resort process, and lower gas revenue, partly offset by higher smart metering revenue, higher renewables revenue and higher contracting volumes.

Operating profit and position at the year-end: The Group's operating profit of £276.3 million was £162.8 million lower than the previous year, primarily driven by the impairment loss of £129 million, lower gross margin (£27.3 million) and higher vegetation management costs (£5.9 million) and higher business rates (£4.8 million). The statement of financial position on pages 38 and 39 shows that, as at 31 December 2023, the Group had total equity of £3,266.2 million (2022: £3,308.1 million). The decrease in net assets of £41.9m was driven by the £250m bond issue in the year, increasing loans and borrowings, partly offset by continued investment on the network increasing the value of Property, Plant and Equipment, and a reduction in the deferred tax liability resulting from the reassessment of the Energy Profits Levy. The directors consider the Group to have a strong financial position which, when coupled with the preference of Berkshire Hathaway Energy for operating with lower levels of debt than equivalent companies in the sector, creates a stable base for continued strong performance during the ED2 period.

On 15 December 2022, the Company redeemed its £200 million 7.25% bonds and on 20 July 2022, the Group repaid its £151 million EIB loan using the funds raised by the £350 million NPg Northeast bonds (at 3.25% maturing in 2052) that were issued in April 2022.

Other losses: Other gains at £3.1 million was £1.7 million higher than the prior year gain of £1.4 million due to an increase on disposals of property, plant and equipment.

Finance costs and investments: Finance costs net of investment income at £95.6 million were £4.6 million lower than the prior year due to lower interest costs on bank overdrafts higher interest costs on bank overdrafts.

Taxation: The effective tax rate in the year was 1.8% (2022: 38.6%). Tax charge for the year was £3.2 million which was lower than the prior year charge of £131.3 million mainly due to the impact of the Energy Profits Levy and recognition of prior period tax losses. Details of the income tax expense are provided in Note 10 to the financial statements.

Share capital: The Company has one class of ordinary shares which carries no right to fixed income. There were no changes to the Company's share capital during the year.

Cash flow: Movements in cash flows were as follows:

- **Operating activities:** Cash flow from operating activities at £703.6 million was £25.6 million lower than the previous year, primarily due to lower profit before depreciation and amortisation, offset by favourable movements in working capital and receipt of customer contributions.
- **Investing activities:** Cash flow used in investing activities at £570.9 million was £111.2 million lower than the previous year, mainly due to lower capital deployed.
- **Financing activities:** Cash outflow from financing activities at £127.8 million was £73.3 million higher than the previous year, mainly due to dividends paid, partly offset by the net impact of proceeds and repayments of long-term borrowings.

Pensions: The Group participates in the Northern Powergrid Group of the Electricity Supply Pension Scheme (the "DB Scheme"), a defined benefit scheme. Further details of the Group's commitments to the DB Scheme and the associated deficit repair payments are provided in Note to the financial statements. The Group also participates in the Northern Powergrid Pension Scheme, which is a defined contribution scheme.

Insurance: As part of its insurance and risk strategy, the Group has in place insurance policies, which cover risks associated with employees, third party motor and public liability. The Group carries appropriate excesses on those policies and is effectively self-insured up to the level of those excesses.

CUSTOMER SERVICE

Strategic objective: Delivering exceptional customer service.

	NPg Northeast		NPg Yorkshire	
KPI	**2023**	**2022**	**2023**	**2022**
Broad Measure of Customer Satisfaction ("BMCS")	89.3%	88.3%	89.9%	87.5%
BMCS Rank (out of 14)	12	12	10	13
BMCS Power Cuts	88.6%	87.8%	87.3%	87.9%
BMCS General Enquiries	94.2%	94%	93.1%	93.3%
BMCS Connections	87.7%	86.2%	90%	85%

	Northern Powergrid	
	2023	**2022**
Stakeholder Engagement and Customer Vulnerability ("SECV") rank (out of 6)	6	6

Business Plan commitment: To provide a best in class customer service offering by being, clear, reliable, trustworthy flexible and proactive through a range of channels to suit stakeholder needs.

Performance during the year: In respect of BMCS, an independent market research company carried out telephone surveys with Northern Powergrid's customers to find out how satisfied they were with services related to unplanned or planned power cuts, quotations and subsequent connections, and general enquiries. NPg Yorkshire recorded an increase was recorded in overall satisfaction scores at 89.8% compared to the prior year (87.5%) and an improved overall BMCS rank of 10 out of 14. NPg Northeast recorded an increase in overall satisfaction scores at 89.3% compared to the prior year (88.3%) which had resulted in an overall BMCS rank of 12 out of 14.

To further enhance the service provided to customers, initiatives from Northern Powergrid's customer service improvement plan were implemented. This included introducing three new methods for customers to make contact (including instant and video messaging), the introduction of an on-site customer responder to support customers impacted by long duration power cuts and the provision of out of hours delivery for certain services such as service alterations.

In respect of overall performance during the ED1 period, significant progress was made in terms of the BMCS, with NPg Yorkshire achieving an increase in overall satisfaction from 84.1% at the start of the ED1 period to the 89.8% reported in respect of the 2023 financial year. In addition, NPg Northeast achieved an increase in overall satisfaction of 83.3% at the start of the ED1 period to 89.3% reported in 2023. However, it is acknowledged that as the other DNOs also continue to invest in customer service, even making incremental improvements in the BMCS ranking can be challenging. Regardless, Northern Powergrid will stive to achieve its Business Plan commitments during the ED2 period by continuing to focus on the ways it can improve the service it provides to its customers.

Activity scheduled in support of this includes the refinement of the on-site support offering to extend utilisation beyond long duration faults, continuing to embed connections management improvements across all teams and the development of a Priority Services Membership App to support customers before and during a power cut.

Connections to the network

Business Plan commitment: To reduce small work end-to-end connections lead times by 20% while offering more self-service options, greater support and more flexibility over delivery, including, support for smarter solutions and an expanded range of flexible connections.

Performance during the year: End-to-end lead time improvement continued to be challenging due to the significant increase in connections volumes as a result of low carbon technology uptake and additional applications. In response, Northern Powergrid implemented a new quotation system which allowed customers to obtain a quote online and increased operational delivery capacity. This was in addition to the quote on site option, single point of contact and AutoDesign tool that were implemented during the ED1 period.

In relation to Northern Powergrid's ICE commitments for the 2022/23 regulatory year, the 11 actions included in the service improvement work plan were delivered by 31 March 2023.

From a major connection perspective, transmission network connections continued to pose a significant issue due to long delays. Consequently, steps were taken by Northern Powergrid to proactively mitigate the problem where possible, including via the introduction of a new queue management processes and in collaboration with the electricity system operator ("ESO") and other network operators through the Energy Network Association's ("ENA") Strategic Connections Group, revised technical delegated limits were piloted at some of Northern Powergrid's grid supply points. This allowed interim non-firm solutions to be offered to customers, thereby reducing connections lead times by approximately six years.

Communication was also prioritised with regular 'Transmission System Congestion' webinars having been hosted alongside National Grid Electricity Transmission and National Grid ESO, to provide stakeholders with clear and transparent updates on Northern Powergrid's approach to identifying and implementing improved solutions. In addition, the availability and timeliness of information for customers was improved through a Project Progression portal, an online service that allows customers to look up their project to understand the status of the project and where it is in the connections pipeline.

Aside from transmission connections issues Northern Powergrid continued to see high volumes of connection applications, particularly at the extra high voltage level. In support of the increased appetite, plans are in place to improve customer service by minimising the time to quote, facilitated by introducing a new triage process which helps to prioritise quotations.

Corporate responsibility

Business Plan commitment: To build effective relationships with stakeholders whilst maximising the value of contact with customers, especially those who are vulnerable and hard to reach.

Performance during the year: In April 2023, Northern Powergrid put forward its SECV submission to Ofgem in respect of work undertaken during the 2022/23 Regulatory Year. The material provided an overview of activities and case studies in areas such as support for vulnerable customers, decarbonisation, safety, environment, customer service, reliability and availability.

Following the review by Ofgem's panel, Northern Powergrid achieved sixth place (of six) in the context of the DNOs (2021/22: sixth place (of six)). In response, an external assessment of the approach to engagement, fuel poverty provision and the support provided to vulnerable customers was undertaken and improvement plans were established. This was the last year of the SECV incentive as the measurement of stakeholder engagement in future years will be via issue specific incentives such as DSO and Consumer Vulnerability.

During the year, Northern Powergrid continued to develop engagement activity with a focus on supporting the implementation of the Business Plan. This included establishing new forums to facilitate decarbonisation and DSO engagement as well as enhancing existing relationships with local councils, Local Enterprise Partnerships and civic leaders. In support the Business Plan Engagement Groups delivered tailored engagement activities and respond to on-going feedback from customers and stakeholders.

As in recent years, the ongoing energy crisis and economic uncertainty exacerbated the challenges facing vulnerable customers. Accordingly, investment doubled and Northern Powergrid were able to a support over 20,000 customers who were facing fuel poverty. In addition, in conjunction with partners, work began to pilot a new service to provide advisory services, particularly for vulnerable customers, to decarbonise their homes.

This was supported by a refresh of the Social Issues Expert Group to the Northern Inclusive Energy Group. Comprised of a number of independent vulnerability experts from across health, housing and energy, the group aims to deliver support to vulnerable customers by shaping Northern Powergrid's social responsibility and consumer vulnerability policy.

In terms of additional activity, Northern Powergrid's Community Partnering Fund financed nine grassroots organisations across the region to deliver fuel poverty support to vulnerable households and the Net Zero Community Energy Fund supported eight organisations to a share of £50,000. Alongside, Northern Powergrid and all funded partners routinely promoted Priority Services Membership and shared energy efficiency materials and winter preparedness information to customers.

OPERATIONAL EXCELLENCE

Strategic objective: High-quality, efficient operators running a smart reliable energy system.

	NPg Northeast			
	2022/23		2021/22	
KPI	**Actual**	**Target**	**Actual**	**Target**
Customer minutes lost ("CML")	44.0	<50.9	46.33	<52.8
Customer interruptions ("CI")	46.9	<58.6	49.83	<59.2

	NPg Yorkshire			
	2022/23		2021/22	
KPI	**Actual**	**Target**	**Actual**	**Target**
Customer minutes lost	52.1	<51.8	43.64	<53.5
Customer interruptions	59.3	<60.9	51.07	<62.0

	NPg Northeast		NPg Yorkshire	
KPI	**2023**	**2022**	**2023**	**2022**
High voltage restoration time (minutes)	62.1	61.1	75.7	66.0

	Northern Powergrid	
KPI	**2023**	**2022**
Network investment	£473.5m	£442.9m

Business Plan commitment: To achieve 12% fewer unplanned power cuts and reduce the average length of unplanned power cuts by 25%.

Performance during the year: CML and CI are the KPIs set by Ofgem and used by the Northern Powergrid to measure the quality of supply and system performance. Both CML and CI are measured on a regulatory year basis. CML measures the average number of supply minutes lost for every connected customer due to both planned and unplanned power cuts that last for three minutes or longer. CI measures the average number of supply interruptions per every 100 connected customers due to planned and unplanned power cuts that last for three minutes or longer. Performance during the year was better than Ofgem's target for both CML and CI.

From a high-voltage restoration perspective, NPg Northeast averaged 62.1 minutes (2022: 61.2 minutes) and NPg Yorkshire's performance during the year averaged 75.7.0 minutes (2022: 71.1 minutes) after allowing for severe weather incidents and other exemptions.

In respect of the ED1 business plan commitments (to achieve 8% fewer unplanned power cuts and reduce the average length of unplanned power cuts by 20% during the ED1 period), Northern Powergrid outperformed the original targets by achieving 25.4% fewer unplanned power cuts and a reduction of the average length of unplanned power cuts by 29.5% (relative to the prior regulatory period).

Northern Powergrid invested £471.7 million during the year through its approved Network investment strategy (2022: £445.3 million), which has been designed to deliver improvements in Network performance and increase resilience. Various major projects were undertaken to reinforce the primary Network, refurbish transformers, rebuild overhead lines, remove and replace oil-filled cables, change deteriorated poles, replace switchgear and install and commission new remote-control points.

Further Network enhancements included the continued roll-out of the automatic power restoration system on the high voltage Network. At low voltage the implementation of next generation innovative low voltage technology devices continued with the addition of low-cost Network monitoring sensors which detect developing faults so that they can be proactively managed. Initiatives were also implemented as a result of the Reliability Improvement Plan including increasing the use of mobile generation to restore supplies.

In terms of storm response and winter preparedness, Northern Powergrid continued to implement and develop a range of improvements to its website capabilities, call volume capacity, active network management and Major Incident Management Plan ("MIMP") response procedures.

ADAPTING TO CLIMATE CHANGE

Strategic objective: Operate a highly reliable and resilient Network

Business Plan commitment: To adapt the Network and operations to build resilience against the effects of climate change.

	2022/23			2021/22		
KPI (Regulatory Year)	**Annual**	**Cumulative**	**Target**	**Annual**	**Cumulative**	**Target**
Flood Defences:						
High risk sites protected		100%	100%		95%	88%
Flood defence upgrades	1	127		0	125	
Major substation flood defences installed	3	83		7	81	
Vegetation Management:						
High voltage Network resilient to high winds (km)	23.2		135	16.5		544
Vegetation management clearance spans	27,710		32,073	29,469		29,328
Collaboration:						
Local Resilience Forums (LRFs)	60		28	35		28

Performance during the year: The climate is changing and, despite international efforts to reduce greenhouse gas emissions, it is expected to continue to change over the course of the century. The Group has taken steps to understand the risks and opportunities presented by climate change and has established initiatives in response such as for Northern Powergrid, an industry leading flood mitigation programme and a robust vegetation management programme.

In respect of performance against the KPIs established for the ED1 period, during the year, Northern Powergrid upgraded an additional high-risk site and installed three further substation defences. This resulted in all planned sites being fully protected with a combined investment on flood mitigation works of £0.52 million.

From a vegetation management perspective, £1.8 million was invested to clear spans and make the high-voltage Network more resilient. For the latter, the work entailed creating corridors between vegetation and the Network to accommodate the falling distance of trees. The target was reduced between 2022 and 2023 to provide greater capacity to focus on clearing vegetation from spans at all voltages, given any vegetation that is near the Network can have an impact during periods of high wind. However, in terms of volume of activity across both KPIs, performance was below target and accordingly, a recovery programme was implemented to ensure the backlog of work was expedited.

Collaboration with LRFs was positive with Northern Powergrid attending meetings with 60 quarterly tactical business groups for each of the seven LRFs in the operating areas.

Governance arrangements
In respect of the management of climate-related risks and opportunities, the Group has well-defined and mature governance arrangements in place, which are defined by its risk management policy and processes and are overseen by the Risk Advisory Board ("RAB") with the support of the Internal Audit function (see 'Risk Management' and 'Internal Control' for further details). Each subsidiary is responsible for the assessment and management of its own risks and opportunities, with risks then being reported via the processes set out below including being tracked and monitored at a Group level via the RAB.

As is the case for all types of risk across the Group, climate related risks and opportunities are identified, assessed and managed at a variety of levels with escalation points incorporated at various stages of the process.

Risks that are identified via Northern Powergrid's operational working groups are put forward to the Asset Serviceability Review steering group where appropriate actions and controls are monitored by senior management. Risks can then be further escalated to the Asset Risk Management Executive Review Group for further oversight by a subset of the Executive Leadership team.

When identified at a subsidiary or directorate level, risks are reviewed and monitored by the relevant Senior Management team and are escalated through the quarterly risk identification process run by the Internal Audit team. In all scenarios, where risks are identified as being above the Group's risk appetite, they are reported to the RAB.

The Group's risk management process (including for climate related risks) takes place on a quarterly basis and includes the Chair of the RAB reporting risks and opportunities to the board. In addition, an annual risk submission is made to the Group's shareholder, noting that Berkshire Hathaway Energy is routinely made aware of risks via regular dialogue with members of the Executive Leadership team and the board.

Given the significance upon the Group and its stakeholders, the board regularly considers climate related risks and opportunities via routine reporting and in-focus updates. Whilst always being guided by the Core Principles, the board is also cognisant of the impact of risks and opportunities on the Group's strategy and business model and, has regard to this when making decisions such as reviewing and approving business plans.

Risk Management
In terms of identification, climate related risks and opportunities are typically detected via a number of channels, including at the operational, subsidiary and directorate level (as outlined above), as a result of detailed risk assessments based on climate projections, by investigations into exceptional events, from reviewing the macro environment for trends, or via shared learning from other Berkshire Hathaway Energy subsidiary companies.

Regardless of the source, all risks are integrated into the Group's overall risk management process, are recorded within a central risk register and are categorised by likelihood and impact. Supplementary to this, all climate related risks are also recorded and tracked through the Group's climate risk register.

Once identified, all risks (including climate related) are allocated to an owner and are assessed to determine if they are to be tolerated, influenced or mitigated. If the risk is to be mitigated, appropriate actions are developed to reduce or eliminate the impact of the risk over an appropriate timescale. As outlined above, all risks that are above the Group's risk appetite are monitored by the RAB and are allocated to a member of the Executive Leadership team to mitigate or manage. Climate related opportunities are typically reviewed by the Science and Technology Advisory Panel in conjunction with the Executive Leadership team ahead of scoping options to maximise the benefits and progressing to implementation as relevant.

Strategy

Following the publication by the Department for Environment, Food & Rural Affairs ("Defra") of the supplementary Green Book Guidance on 'Accounting for the Effects of Climate Change' in November 2020, a thorough assessment of the impact of climate change and severe weather upon Northern Powergrid was undertaken in collaboration with other gas and electricity network operators through the ENA. The results of the review and associated adaption, recovery and transform plans were published in the Group's 'Adapting to Climate' strategy in November 2021.

In line with Defra's recommended approach, the assessment was performed at the operational and asset base level and followed the specific guidance for projects, policies and programmes that have a lifespan that goes beyond 2035. This included using two climate scenarios to:

- Consider options which include all adaptation measures which would mitigate the known impacts of the 2°C scenario; and
- Make decisions based on the Group's risk appetite about whether to consider adaptation measures aligned with the 4°C global warming scenario.

Using outputs from the work that the ENA had commissioned from the Met Office, Northern Powergrid was able to identify potential climate related hazards including high temperatures, heavy rain, droughts, storms, sea level changes, snow, ice, wildfires and lighting - or a combination of these. The hazards were then reviewed against other variables such as regional climate change considerations (known events and topography), asset configuration and interdependencies on other national infrastructure to identify a range of impact scenarios.

The risk assessment was carried out across three timescales, short term: current climate, medium term: 2050's and long term: 2080's, for both the 2°C and 4°C scenario and was applied to each of Northern Powergrid's six operating zones. This allowed the Group to understand how each impact scenario affected geographic locations and over what period, so as to establish and prioritise the key areas of risk and identify relevant opportunities.

Climate change adaptation

From an overall business model and strategy resilience perspective, the risk assessments identified that there was no significant divergence in the climate projections, the impact scenarios or key risks themselves, were observed between the three timescales until beyond 2050.

Whilst this provides some comfort during the short term, adapting to climate change requires an understanding of how to better resist the challenges placed upon Northern Powergrid and the Group, how to absorb the impact to minimise it as when events do occur and how to utilise the opportunities this creates.

Accordingly, where the risk assessments identified that risks were more likely to occur (at any point over the three timescales) and/or that the impact was potentially greater, these were categorised as the highest priority risk areas and programmes covering bespoke adaptation, recovery actions and longer-term transformations were developed accordingly. It was identified that the highest priority risk areas included:

- Flooding presented by changes in precipitation rates and sea level rise; and
- Changes in growth rates and patterns of trees due to changes in temperature and precipitation.

Principal climate-related opportunities and risks arising in connection with the Group's operations

1. Physical risk: Precipitation (extreme prolonged rainfall) - long periods of above average precipitation or intense rainfall events resulting in flooding and erosion.

Assessment assumptions: data was used concerning the accumulation of rainfall over a month and where it exceeds the 90th and 95th percentile of today's climate, the Soil Moisture Deficit and for heavy daily rainfall events, the percentage changes in the 99th percentile of seasonal daily mean precipitation.

Findings: There was a large regional variation in how the frequency of climate related hazards were expected to change in future periods. However, in autumn and winter months, instances of prolonged rainfall, heavy daily rainfall events and heavy hourly precipitation were projected to increase across most of the UK. Assets located in coastal areas were more vulnerable to changes in sea level, notably in the Humber Estuary and Seal Sands.

Impact: Access issues, asset damage and reduced performance, predominantly as a result of Grid and Primary Substations being adversely affected.

Serious flooding in particular was likely to result in the most severe consequences, including the loss of electricity supply to thousands of people, as well as to other types of infrastructure. This in turn had the potential to lead to additional costs as a result of replacing or repairing damaged equipment, as well as increasing the number of customer interruptions, thereby having a negative effect on service and performance levels.

As set out in 'Operational Excellence', Network reliability is recorded via Ofgem's Interruptions Incentive Scheme ("IIS") through targets in relation to CML and CI. If IIS targets are exceeded, there is a reward. Conversely, in the event targets are missed, there is a penalty. In addition, if Guaranteed Standards or service levels that are agreed by Ofgem are failed, payments must be made to those customers affected. Therefore, unless there is an exemption applied for an extreme weather event, Northern Powergrid is susceptible to an increase in costs if service and performance levels reduce.

Mitigation: Flood defences programme - designed to comply with national guidance on how to improve the resilience of electricity substations to flooding.

Mitigation activity:
- Improve and maintain flood resilience through targeted adaptations in civil defences and install additional substation defences.
- Improve flood resilience at distribution substations, either by moving them out of the line of flooding risk or by implementing mitigation measures.

2. Physical risk: Temperature (extreme heat) - high temperatures that may reduce the performance and efficiency of assets.

Assessment assumptions: Thresholds to understand the frequency of days which constitute 'extreme temperatures' across the UK and how these may change under future climate projections were used. This included the frequency with which the daily maximum temperature exceeded 28°C, 30°C and 35°C and the frequency with which the daily maximum temperature exceeded 28°C for 3 consecutive days.

Findings: Trends in observational records confirmed that the UK climate is warming with high temperature thresholds being exceeded each year and expected to increase in line with Representative Concentration Pathway 8.5 (being the worst-case climate change scenario). Met Office climate projections identified that the frequency of hot summer periods is becoming increasingly common.

The rate of change for extreme heat was expected to be slower for cooler regions of the UK such as the North of England. However, by the 2060s the frequency with which extreme heat occurred in the North of England would be the equivalent to that of the warmest areas of the UK at the time of the assessment.

Impact: A reduction in the performance and efficiency of assets. This in turn has the potential to increase fault volumes, leading to additional costs being incurred as a result of repairs and maintenance, reduce service levels and customer satisfaction, and could cause delays to other work planned for delivery.

Whilst the likelihood of global temperature rise is accepted, the impacts on DNOs has not yet begun to be realised. Because of this, networks do not currently see any drivers to invest ahead of the need to offset risks.

Mitigation activity:
- Network and asset performance will continue to be monitored and will be modified once climate change begins to have a direct and longer-term impact.
- Standards and specifications will be updated to include projected changes in temperatures and ground movements.

3. Physical risk: Precipitation (storms) - Strong winds are a significant hazard, especially when experienced in conjunction with heavy rain.

Assumptions: As for Precipitation (extreme prolonged rainfall)

Findings: There was no clear evidence within climate projections that there would be a change in the frequency or power of storms. Accordingly, the risk of strong winds was assessed in line with the climate conditions at that time. It was also recognised that research into the effects of wind had been carried out between 2011 and 2015 under the Resilient Electricity Networks for Great Britain project and learnings had been incorporated into the Group’s specifications.

Impact: A number of storms have affected the Network since the initial risk assessment, notably storm Arwen. It is therefore recognised that storms can lead to operational failure of above ground assets, resulting in increased faults and loss of supply to customers, which in turn affects customer service. The potential for damage to telecommunications infrastructure, leading to the inability to communicate with staff in the field or control technology, can also impact repair efforts further.

Mitigation: Resilience programme - Maintain operational resilience and embed long-term resilience across the asset programmes, working with others to better understand future risks.

Mitigation activity:
- Utilise drones for storm damage assessments.
- Undertake collaborative exercises to test operational response.
- Major Incident procedures in place.
- Embed resilience across asset programme designs and specifications to deliver long-term synergistic resilience.
- Vegetation management programme (see below).

4. Physical risk: Temperature / Precipitation (gradual increase in temperature and rainfall) - warmer and wetter conditions may extend vegetation growing seasons, resulting in increased or accelerated growth of vegetation.

Assumptions: The length of the growing season was calculated using mean daily temperatures beginning at the start of a period of five successive days where the daily-average temperature was greater than 5°C and ending on the day before a period of five successive days when the daily-average temperature was less than 5°C.

Findings: The average growing season length had increased by approximately 30 days per year over the course of the last 60 years and was reported as being largely due to an earlier onset of spring. As a result, the combined effect of temperature and precipitation was likely to lead to increased vegetation growth.

Impact: Interference to overhead lines could cause a variety of power supply issues ranging from transient interruptions, due to vegetation touching the line, through to severe damage from trees, or parts of trees, falling onto the lines. This may result in increased levels of investment being required in order to maintain Network resilience, additional costs associated with maintenance and cutting cycles and performance and customer service related issues.

Under abnormal weather conditions there is also the potential for large scale power outages with some supply restorations taking many days.

Mitigation: Vegetation management programme - improving the resilience of the overhead Network under abnormal weather conditions using a risk-based methodology.

Mitigation activity:
- Undertake enhanced resilience cuts in line industry standards on the overhead network to comply with enhanced resilience requirements.
- Establish and maintain clearance corridors.
- Assess and tackle the issues anticipated from ash tree dieback through the management of affected spans.
- Undertake a vegetation clearance programme for substations and tower bases.
- Utilise Light Detection and Ratings (“LiDAR”) technology to ensure efficient targeting for vegetation management.

6. Transition risk: Transmission Related Connections Delays - see Principal Risks and Uncertainties

7. Opportunity: Innovation - participating in and leading innovation projects as a way of developing creative solutions to mitigate the risks of climate change and enhance responsiveness in the event an incident does occur.

A number of projects are planned for the ED2 period including:
- Optimising the use of LiDAR data in order to carry out more effective and efficient clearance and vegetation management by prioritising cutting responses;
- Reviewing the link between rainfall and underground cable faults to understand and quantify the risk;
- Research into substation design specifications and innovative materials to mitigate risks associated with high-temperatures and assets;
- Investigations to understand the performance limitations of outdoor control equipment during periods of extreme heat; and
- Estimate the extent of Ash tree dieback and its impacts on the Network.

Further detail of innovation supporting decarbonisation can be found in the 'Environmental Sustainability' section of the Strategic Report.

8. Opportunity: Decarbonisation - adapting and evolving the Network to facilitate the UK's net zero strategy.

There are many benefits associated with decarbonisation, not just for the Group, but for the areas the Group serves and the people who live and work there. This includes developing the Network to accommodate additional connections to enable more electric vehicle chargers to be installed, to allow greener heating solutions, to provide a mechanism for local electricity production and to facilitate the growth of renewable energy sources by offering greater flexibility.

Further detail of the initiatives underway to facilitate decarbonisation can be found in the 'Environmental Sustainability' section of the Strategic Report.

9. Opportunity: Collaboration - working with stakeholders including industry partners and energy networks to find solutions to mitigate the risk of climate change and improve resilience through collaborative work on interdependencies to reduce the risk of cascade failures across systems.

The Group works closely with its stakeholders and partners to share best practice, evolve new protocols, develop industry guidance and adopt measures to prevent or manage the impact of climate change. This includes working with Local Authorities and regional bodies to evolve their climate resilience and decarbonisation plans and collaborating on specific issues to generate practical solutions - such as with the ENA as outline above.

Initiatives planned in this area include collaboration with:
- Other regional infrastructure operators to identify and mitigate interdependencies.
- The Environment Agency and local authorities on the implementation of their regional flood risk management plans and establish support for these where appropriate.

Further information

Given the likely impact of climate related opportunities and risks on Northern Powergrid and its Network, various mitigation programmes have each been fully scoped and costed as part of the Business Plan submission to Ofgem for the ED2 Period, details of which can be found via the Group's website.

In addition to the information contained above, the Group has published a 'Climate Resilience Strategy' and an 'Adapting to Climate Change Report', the latter having been submitted to Defra in line with the requirements of the Climate Change Act (2008). The Group's most recent report was published as part of the third round in 2021 and included full details of the risk assessment in a supporting annex. A further update (which will coincide with a review of the Group's climate risks and opportunities) is due to be published in 2024. Copies of both reports can be found on the Group's website.

EMPLOYEE COMMITMENT

Strategic objective: High-performing people doing rewarding jobs in a safe and secure workplace

	2023		2022	
KPI	**Actual**	**Target**	**Actual**	**Target**
Occupational safety and health administration rate ("OSHA")	0.43	0.09	0.26	0.09
Preventable vehicle accidents	23	24	28	28
Lost time accidents	6	0	3	0
Restricted duty accidents	1	0	2	0
Medical treatment accidents	4	2	1	2
Operational incidents	10	7	12	7

KPI	**2023**	**2022**
Absence rate	3.35%	3.3%

Health and safety

Business Plan commitment: To maintain industry leading safety performance and reduce the accident rate by 50%.

Performance during the year: In common with the Berkshire Hathaway Energy group, the Group measures its safety performance in terms of the OSHA rate, which is a measure used to capture safety incidents down to minor levels of medical treatment. The Group failed to meet its target of 0.09 in 2023 having achieved an OSHA rate of 0.43 (2022: 0.26), which equated to 11 recordable incidents against a goal of two or fewer. Whilst the majority were relatively minor in nature (dog bites), three incidents involved minor burn injuries, and as such, an intervention plan was implemented. The Group had a disappointing year in terms of PVAs, with 25 recorded against a target of 24 or fewer. In terms of the six lost time accidents recorded, these predominantly comprised several trips, slips and lifting injuries. Mitigating actions were initiated accordingly.

In respect of the Business Plan commitment, improving safety performance remains a key priority and the way in which this is achieved is set out in Northern Powergrid’s health and safety performance improvement plan (“HSPIP”). During the year, the HSPIP focused on 58 initiatives in the areas of colleague safety, contractor safety, health and well-being and public safety. This included the continuation of driver training, the introduction of local safety improvement groups, the mobilisation of an assurance programme on high -risk activities and leveraging data from the vehicle telematics system to prioritise driver training.

The mental health and wellbeing of staff continues to form an integral part of the HSPIP. Existing support includes an independent employee assistance service, which is a confidential, self-referral counselling and information service to assist with personal or work-related problems and access to services including counselling and physiotherapy referrals.

During the year, Northern Powergrid successfully completed two external surveillance visits on its ISO 45001 accreditation for its occupational health and safety management system.

Employees

Business Plan commitment: To emphasise the importance of leadership and high standards of performance by engaging, collaborating and working with employees and their trade union representatives.

Performance during the year: Agile working continued to be successfully utilised, allowing eligible colleagues to adopt flexible ways of working with a renewed focus on collaboration and teamwork, whilst supporting retention and recruitment. Health, safety and wellbeing remained a key commitment with initiatives run in conjunction with services provided by an occupational health provider being further developed to cultivate a healthy workplace.

In relation to development, training sessions on topics which formed part of the Diversity, Equity and Inclusion plan were provided to further promote a more inclusive culture. Routine training also continued in key areas such as customer service, cyber security and management development. In addition, the Group's leadership offering was refreshed in line with the Berkshire Hathaway Energy Performance Management Framework which included a management development programme, leadership apprenticeships and an approach to identifying and developing individual contributors.

During the year, 68 new recruits (2022: 41) joined Northern Powergrid's workforce renewal programme. At 31 December 2023, the Group had 2,563 employees (2022: 2,527). There has been an increase in the total numbers since the prior year, specifically within Energy Systems, reflecting the strengthening of the DSO and data and digitalisation teams to deliver Business Plan initiatives.

Further information concerning how the Group is supporting gender diversity in the energy industry can be found in the Group's gender pay gap report via the Group's corporate website.

Employee engagement:
The board and senior management team continue to keep employees and trade union representatives informed of and involved as appropriate in developments that may impact them now or in the future. This approach has been chosen as the most effective way of interacting with employees due to the combination of collectively bargained and personal contract holders. In support of this process, the Director of People and Change routinely reports to the board and the Health and Safety Committee to ensure that the views of employees are considered and to facilitate the discussion of and any subsequent decision making in respect of employee related concerns or issues.

Consultation for collectively bargained employees is agreed with trade union representatives in the form of a constitutional framework. In addition, all employees are consulted to establish their views and identify key priorities using employee engagement surveys.

During the year, the President and Chief Executive Officer, members of the board and senior management team provided regular updates on financial, organisational, safety and customer service performance. The executive directors continued to engage directly with employees during operational and office-based site visits, and induction events. Communication with employees was delivered via various channels including group wide text messages and virtual meetings to quickly disseminate key information concerning safety and MIMPs, alongside regular briefings, line manager conversations, meetings with trade union representatives in addition to utilising the Group's intranet.

The Berkshire Hathaway Energy code of business conduct ("Code of Conduct")
The Group has adopted the Code of Conduct, which details the commitment to ethics and compliance with the law, provides reporting mechanisms for known or suspected ethical or legal violations, and establishes minimum standards of behaviour expected of all employees. In support of this, a "speaking up" process is in place enabling all employees to raise concerns of unethical acts, malpractice or impropriety (including bribery or corruption), and an anonymous help line operated by an independent company is also available. All colleagues complete an annual online training programme covering the requirements of the Code of Conduct. This also requires all employees to declare any conflicts of interest and unspent criminal convictions.

Employment of disabled persons
The Group's policy is to provide all protected groups, including disabled people, with equality at work in respect of employment, training, career development and promotion, having regard to their aptitudes and abilities. Should any member of staff become disabled during their employment, the Group will make reasonable adjustments, wherever possible.

ENVIRONMENTAL RESPECT

Strategic objective: Leaders in environmental respect and low carbon technologies.

	2023		2022	
KPI	**Actual**	**Target**	**Actual**	**Target**
Total oil/fluid lost (litres)	22,827	<26,500	22,549	<35,388
SF6 gas discharges (kg)	107.19	<49.0	125.78	<76.5
Environmental incidents	2	<5	8	<6

KPI	**2023**	**2022**
Energy consumed (KWh)	43,348,763	43,699,674

	2023		2022		
Business carbon footprint	**Tonnes**	**Per km²**	**Tonnes**	**Per km²**	**Scope**
Fleet fuel use	3,934	0.31	3,897	0.32	1
Other (including fugitive emissions)	2,658	0.23	3,532	0.31	1
Total scope 1	*6,592*	*0.54*	*7,429*	*0.63*	
Building electricity use	1,585	0.12	1,557	0.12	2
Substation electricity use	4,143	0.34	4,041	0.34	2
Total scope 2	*5,728*	*0.46*	*5,598*	*0.46*	
Business fuel use	2,051	0.16	1,920	0.16	3
Contractor emissions	20,222	1.64	16,300	1.31	3
Total scope 3	*22,273*	*1.80*	*18,220*	*1.47*	
Total carbon footprint (tonnes)	34,592	2.84	31,248	2.55	

Note: KWh energy consumed relates to depot energy and fleet fuel usage.
The chosen business carbon footprint intensity ratio is based on Northern Powergrid’s licence area which equals 25,296 km.
The methodology adopted to calculate energy and business carbon footprint data is based on science-based targets which are aligned with international standards, those required by Defra and BEIS and is compliant with ISO 14064-1:2006 which is consistent with the GHG Protocol Corporate Standard
Scope 3 reporting includes contractor operational transport fleet - diesel, operational transport fleet - petrol and fuel consumption from plant, aviation and mobile generation only.

Business Plan commitment: To reduce our business carbon footprint by 20% and reduce oil loss by 15% during the ED2 Period.

Performance during the year: The volume of SF6 gas loss during the year combined with an increase in contractor works and associated emissions, resulted in Northern Powergrid’s overall carbon footprint increasing to 34,592 tonnes (2022: 31,248 tonnes). Whilst this was disappointing, significant progress has been made over the ED1 period, with Northern Powergrid’s carbon footprint having reduced by 36%, well ahead of the original 10% reduction commitment. In terms of scope 3 emissions, Northern Powergrid has committed to collect data for all applicable scope 3 emissions categories in order to enhance a more robust, multiyear baseline. This will inform the actions taken to implement meaningful and actionable steps to further reduce emissions resulting from Northern Powergrid’s operations.

In support of the target to further reduce oil and fluid loss, the 2023 annual environmental improvement plan included a transition to a blended strategy of both asset replacement of fluid-filled cables and enhanced tracer applications to facilitate earlier interventions. Nonetheless, the 2023 loss of fluid did increase year-on-year with a loss of 22,827 litres (2022: 22,549). The increase was primarily a result of a single failure on one of Northern Powergrid's largest oil filled cable assets.

The remuneration of a number of the Group's employees, including certain members of the Executive Leadership team and Executive directors are directly linked to performance against KPIs including those concerning climate change adaptation. The Group has not set any internal carbon prices or any climate-related opportunity metrics.

To maintain the policy of environmental protection and legal compliance, Northern Powergrid continues to assess environmental risks and mitigate threats through programmes of work such as fluid-filled cable replacement, undergrounding overhead lines in areas of outstanding natural beauty, installing flood defences, implementing secondary containment in high-risk substations and removing equipment containing polychlorinated biphenyl from the network. Whilst prevention is paramount, in the event Northern Powergrid's activity does result in a leak or spill, the services of an appointed 24-hour a day environmental response consultancy is used to minimise the effects of any incident.

The Group takes its environmental responsibilities seriously and has a proven track record of lowering emissions and minimising the wider environmental impact of Network activity. Reducing the level of internal carbon footprint is a key priority and consequently, plans have been developed to achieve the ambition to become carbon net neutral by 2040 across Northern Powergrid's controllable emissions. Controllable internal sources of emission are captured through Ofgem's Regulatory Reporting Process and include operational fleet, company car miles, other business travel and office, depot and substation energy use. Northern Powergrid's supply chain also contributes to the overall carbon footprint as contractors are used to undertake work on the Network and deploy generators to support customers during power cuts.

Initiatives in place to reduce internal sources of emission include increasing the number of ultra-low emission or zero emission vehicles to 40% of the Group's fleet of vehicles by 2028 and the adoption of science-based targets. The fleet vehicle target was aligned to stakeholder ambition levels and was therefore designed to balance costs, technology readiness and charging infrastructure availability.

In respect of Northern Powergrid's wider environmental impact, plans have been developed to achieve zero waste to landfill by 2035 and to divert 90% of waste from all of Northern Powergrid's operations by 2028. Northern Powergrid's Network operations are the largest source of waste generation, with waste arising from excavations and other operations representing 99% of all of the waste that is produced. Steps taken to enhance performance in this area include the recycling of materials, with Northern Powergrid planning to recycle and reuse 85% of total materials by 2028. This target incorporates the increased volume of waste that will be produced as a result of delivering Northern Powergrid's Network investment plans and decarbonisation objectives.

Issues relating to the assessment and classification (as hazardous or non-hazardous) of material arising from unplanned utility excavations, prior to transport from site and disposal, pose a significant challenge to Northern Powergrid's objective to reduce waste to landfill. The utilities industry is currently working with Streetworks UK and the Environment Agency to develop and implement a new industry-wide risk-based approach to managing waste arising from excavations to combat these issues.

From a supply chain perspective, Northern Powergrid will continue to work closely with suppliers to reduce packaging and ensure environmentally friendly alternatives are used where possible. In support, an embodied carbon model will be used to support investment decisions including the sourcing of raw materials. At office locations, the use of waste segregation facilities will be increased, and office supplies will wherever possible be low carbon, plastic free and fully recyclable or reusable.

In addition to the measures outlined above, to safeguard the environment from its direct activity, Northern Powergrid also operates a habitats programme which is aimed at protecting natural habitats and increasing the variety and variability of species and ecosystems at 200 of the Group's major sites.

At this time, Northern Powergrid has no plans to use carbon offsetting to achieve its targets in the ED2 Period. Instead, the focus is on reducing physical carbon emissions, on the basis that additional investment in the Network to enable decarbonisation offers much better value to customers than incremental spend on carbon off-setting Northern Powergrid's emissions. However, at an initiative level, where ad-hoc opportunities exist, Northern Powergrid may pursue these accordingly.

From an environmental compliance perspective, Northern Powergrid and IUS operates a United Kingdom Accreditation Service scheme for environmental management and is certified to the environmental management systems standard ISO 14001:2015 which is designed to enhance environmental performance, fulfil compliance obligations and achieve environmental objectives, all of which contribute to the achievement of Northern Powergrid's KPIs. A full recertification assessment was carried out in October 2023 with two environmental certification standards - the ISO 14001 Environmental Management System and the Energy and Utility Skills Competence Management Scheme (CMS) for waste management (including the transition to an updated version of the CMS standard).

Northern Powergrid's carbon footprint reporting framework is certified under the Certified Emissions Measurement and Reduction Scheme for compliance with ISO 14064-1:2006. A full re-certification audit commenced in November 2023, with final re-certification to follow in early 2024 once a re-baseline and incorporation of system losses into our reporting is complete and verified.

To date, the Group's performance against a number of stretching KPIs to reduce carbon usage and minimise the effects of the Group on stakeholders and the environment has been positive. However, it is acknowledged that becoming carbon neutral by 2040 and working with suppliers and partners in order to accomplish this, is not without its challenges and risks. Accordingly, Northern Powergrid will continue to evolve its ambitions and enhance the implementation of environmental plans throughout the ED2 Period. The phased targets associated with waste to landfill, recycling, noise pollution and biodiversity and additional descriptions of all key measures can be found in annex 1.4 of the Business Plan, a copy of which can be found via the Group's website (our business plan). Additional reporting against these targets will be included in the 2023/2024 Regulatory Accounts, given it is the first full Regulatory Year period, for which the KPIs have been developed.

Environmental Sustainability

Strategic focus: Enable significant growth in customers connecting low carbon technologies, support all pathways to net zero emissions and significantly reduce our own carbon footprint.

Performance during the year: As the country takes action to reduce carbon emissions in line with the net zero target by 2050, the way in which electricity is produced and used is expected to have a substantial impact on the Network over time. Accordingly, in the year, Northern Powergrid engaged with Ofgem to secure the funding to support its DSO strategy and therefore, act as a key facilitator in the country's net zero transition by placing decarbonisation at the heart of its investment and actions.

As the volume and total capacity of decentralised energy generation grows and given the greater range of load and generation technologies now connected to the Network, Northern Powergrid continued to develop and action innovative solutions that will reduce the need for traditional and potentially expensive reinforcement.

In the past year, Northern Powergrid engaged with the market for flexibility by tendering for flexibility services on the Network, successfully placing two contracts for services. At these sites, customers change their energy consumption and generation patterns as an alternative to Northern Powergrid carrying out Network reinforcements, thereby facilitating a more efficient and greener Network. And to better understand how to prepare the Network for the future needs of its customers and the potential pathways to net zero, Northern Powergrid published its updated Distribution Future Energy Scenarios (available via the Group's corporate website).

From an innovation perspective, Northern Powergrid runs a portfolio of projects in the priority areas of customer vulnerability, resilience, and decarbonisation. In 2023 Northern Powergrid initiated the Community DSO project, funded through £12.5 million of Network Innovation Competition funding awarded by Ofgem. The project will deliver trials of smart local energy systems to explore how consumer energy resources and flexibility can be utilised in communities, thereby providing more efficient solutions to decarbonisation, resilience for rural communities and opportunities for consumers and vulnerable customers to participate in and benefit from flexibility markets.

Decarbonisation continues to become more central to Northern Powergrid's strategy, and the way in which Northern Powergrid contributes more broadly to the evolution of the energy industry and the stakeholders with whom it interacts. Northern Powergrid has been progressive in its ambition to reduce its own business carbon footprint. However, there is greater opportunity to contribute to decarbonisation through Northern Powergrid's key role in facilitating regional decarbonisation by fulfilling the functions of DSO. This means investing in people, processes and systems in order to actively manage the Network and to optimise the use of assets and generated energy in the region.

As part of Northern Powergrid's Business Plan, several strategic objectives shaped the development of the accompanying DSO strategy. This included 'flexibility first', involving deploying flexible solutions as an alternative to Network reinforcement, 'whole system collaboration' in order to engage with the wider market on whole system energy solutions, 'data and digitalisation', to facilitate solutions in areas such as open data, 'openness and transparency' to collaborate in joint planning with our stakeholders and, finally, fostering a 'workplace and workforce fit for the future', to build regional and national skills.

Collectively, these objectives have been developed to achieve a number of outcomes and benefits. Northern Powergrid is delivering its plans for DSO to enable open energy data sharing, transform the way decisions and plans are made, support the development of new flexible energy markets, increase customer and Network flexibility and facilitate a whole system energy system. Northern Powergrid's Energy Systems directorate centralises responsibility for delivering DSO plans and has progressed, growing a team responsible for these functions throughout 2023.

In conjunction with this activity, with the support of the CEG, Northern Powergrid established the DSO Review Panel ("DRP"), for the purpose of making its decisions transparent and to allow the independent members to comment on and challenge Northern Powergrid's major investment decisions.

REGULATORY INTEGRITY

Strategic objective: Trustworthy, fair and balanced.

KPI: Completion of a quarterly regulatory compliance affirmation process.

Business Plan commitment: To manage the Group's business to the highest behavioural standards and adhere to a policy of strict compliance with all relevant standards, legislation and regulatory conditions.

Performance during the year: In order to assure compliance with distribution licence and other regulatory obligations, Northern Powergrid operates a regulatory compliance affirmation process, under which ownership of approximately 2,400 regulatory obligations is assigned to 80 responsible managers. Those responsible managers are required to review compliance with the relevant obligations on a quarterly basis and report on any identified non-compliances or perceived risks which are then addressed by members of the senior management team. To minimise the risk of Northern Powergrid breaching its licence conditions and other statutory requirements (which could lead to financial penalties), the board reviews the outcomes of each exercise. Each quarterly regulatory compliance affirmation process was completed satisfactorily during the year.

Northern Powergrid submitted its annual Data Assurance Report to Ofgem in March 2023, which included risk assessments of the regulatory returns to be submitted during the Regulatory Year ahead (April 2023 to March 2024), together with a report detailing the assurance work actually carried out in the Regulatory Year ended 31 March 2023 and the findings of that work.

In March 2023, Northern Powergrid was granted permission from the Competition and Markets Authority (the "CMA") to appeal against the licence modifications that gave effect to the ED2 price control. The appeal related to two specific grounds:
1. The misallocation of allowances that is inconsistent with efficient costs; and
2. The approach to determining rewards for the Business Plan Incentive.

The CMA upheld Northern Powergrid's appeal on the first ground and sent that part of Ofgem's decision back to Ofgem for reconsideration and redetermination. The CMA dismissed Northern Powergrid's second ground of appeal.

Ofgem reconsidered its analysis of the allocation of allowances and, on 2 November 2023, issued the statutory consultation proposing the changes to be made to the special conditions of Northern Powergrid's electricity distribution licence in order to, in Ofgem's view, give effect to the CMA's decision.

Northern Powergrid submitted its response to the statutory consultation on 29 November 2023 and, having considered that response, Ofgem issued the statutory notice formally modifying the special conditions of Northern Powergrid's electricity distribution licence on 13 February 2024. Northern Powergrid confirmed to the CMA that it would not appeal Ofgem's redetermination.

Further information concerning the outcome of the appeal process can be found via the CMA website.

PRINCIPAL RISKS AND UNCERTAINTIES

The Group operates a structured and disciplined approach to the management of risk as part of its overall risk management policy and in support of its financial reporting practices. A system is in place to facilitate the identification of new and emerging opportunities and risks, including those associated with the achievement of the Group's strategic objectives and Core Principles. This includes regular reviews of the macro environment as well as risks that arise from within functional business areas (see the non-financial and sustainability information statement for further detail).

Once identified, key risks and their respective controls and mitigation plans are continually assessed and formally reviewed on a quarterly basis by the RAB in order that they are managed to an acceptable level in accordance with the Group's risk appetite. The Group's risk appetite is determined by a process based on risks, issues and consequences. The level of tolerance varies in accordance with the pursuit of objectives and with caution or acceptance adopted depending on whether risks can be influenced or mitigated fully, partly or not at all. The RAB routinely reports its findings to the board to ensure the directors are sufficiently appraised of the risk exposure associated with the pursuit of Group's long-term strategy.

The risk management programme includes regular reviews of the crisis management, disaster recovery and major incident plans. To determine the level of disaster preparedness and responsiveness against threats to business continuity, risk management plans and processes are periodically tested. This self-evaluation approach is reinforced by that of the Berkshire Hathaway Energy group, which benchmarks risk management activities across its business units and shares significant lessons learned. The business continuity and disaster recovery plans were fully tested as a result of the Covid 19 Pandemic, and whilst adaptation and flexibility was required, operational performance remained resilient and employees continued to perform their duties safely.

Principal Risks

During the year, two additional risks were added to the risk register, being transmission connection delays and the outcome of the regulatory price control. No other notable changes have taken place. The Group's principal risks are not ranked or prioritised in any particular order. Given the sensitivity and ever-changing nature of risks, the board has elected not to disclose the risk appetite associated with each risk.

Cyber security

Unauthorised access or compromise of the Information Technology or Operational Technology networks, resulting in loss of Network control and availability. Unauthorised access or loss of large volumes of data or sensitive data.

Mitigations:

- Robust cyber security risk mitigation programme is in place.
- Accreditation under the ISO 27001 Information Security standard for operational, customer, employee and financial information.
- Compliant to the Network Information Security Directive and the Basic Cyber Assessment Frameworks.
- Compliance with the Centre for Internet Security Critical Security Controls.

Regulatory and policy positioning

Decisions taken resulting in negative impacts to our business model.

Mitigations:

- Robust cyber security risk mitigation programme is in place.
- Accreditation under the ISO 27001 Information Security standard for operational, customer, employee and financial information.
- Compliant to the Network Information Security Directive and the Basic Cyber Assessment Frameworks.
- Compliance with the Centre for Internet Security Critical Security Controls.

Network resilience

Loss of the operational network due to significant weather events, targeted physical attack or catastrophic asset failure resulting in sustained or widespread loss of essential supply.

Mitigations:

- Major incident and crisis management policies, plans and governance arrangements are in place.
- An industry mutual aid agreement exists.
- Grid resilience programme and audits.
- Robust procurement processes.
- Vulnerable site protocols.

Safety
Fatality or serious harm caused to an employee or a third party.

Mitigations:

- Overseen by the Health and Safety Committee.
- Safety Health and Improvement Plan and associated policies and procedures.
- Health and Safety training, enhanced audit programme and inspection regimes are in place.
- ISO45001 safety management system in place.

Environment
Failure to prevent Network assets from having a significant negative impact on the environment.

Mitigations:

- Programme to reduce fluid loss and the Group's business carbon footprint and remove assets containing polychlorinated biphenyl from the Network.
- Environment improvement plan, Environment Action Plan and science-based targets.
- Path to carbon neutrality by 2040.
- Incident response, waste management and habitat protection programmes.
- ISO14001 environmental management system in place.
- Additional climate related risks are disclosed in the non-financial and sustainability information statement.

Resource Availability
Access to and availability of skilled resource resulting in an inability to deliver work programmes.

Mitigations:

- Mix of direct labour and contracted resource is used.
- Workforce renewal programmes in place to recruit and retain employees.
- Ongoing training and development builds internal capability.
- Employee engagement and health and well-being initiatives and a diversity, equality and inclusion plan are in place.
- Good relationships with trade unions representatives.

Transmission Related Connections Delays
Significantly delayed connection delivery timescales due to transmission constraints.

Mitigations:

- Overseen by a steering group.
- Connection lead times are routinely monitored.
- Change programme in place to improve customer connection lead times and customer communication.
- Part of an industry work programme through the ENA.

Regulatory Price Control Outcome
A regulatory settlement that is insufficient to provide fair and balanced outcomes.

Mitigations:

- Optimising price control reopener mechanisms.

- CMA Appeal process.
- Continued dialogue and engagement with Ofgem.
- Robust budgetary and financial position.

Efficiency and output performance
Failure to maintain cost and output performance competitiveness in the industry.

Mitigations:

- Robust business planning process.
- Financial controls in place including detailed review of actuals against budget, competitive tendering process, and capital expenditure approvals process.
- Monthly executive business performance review.
- Comprehensive "Efficient Output Delivery" programme.

Financial risks
The exposure to interest rate, tax, liquidity and treasury risks.

Mitigations:

- Monitored by the treasury department.
- The Group is financed by long-term borrowings at fixed rates and has access to short-term borrowing facilities at floating rates of interest.
- As at 31 December 2023, 99% of the Group's long-term borrowings were at fixed rates and the average maturity for these borrowings was 18 years. The Group uses interest rate swaps to mitigate exposure to uncertain future interest rates.
- Financial covenant monitoring is in place.
- Regulatory adjustments control the effect of taxation changes.

Internal control
A strong internal control environment exists within the Group to support the financial reporting process, the key features of which include regular reporting, a series of operational and financial policies, investigations undertaken by internal audit and a stringent process for ensuring the implementation of internal audit recommendations. In addition, the Group utilises comprehensive business planning procedures, regularly reviews KPIs to assess progress towards its goals, and has a strong internal audit function to provide independent scrutiny. Financial controls include centralised treasury operations and established procedures for the planning, approving and monitoring of major capital expenditure.

The RAB monitors the effectiveness of internal controls and reports on its findings to the board and Berkshire Hathaway Energy. As part of the statutory reporting process, the Group's external auditor reviews and tests a number of internal controls and reports their findings and recommendations for improvements to the board.

Controls which are applicable to financial decisions are governed via a schedule of delegations of authority which are approved by the board (and applies to the Group) for the purpose of enabling the senior management team to make decisions up to certain financial limits, above which point the decision making reverts to the directors. These limits reflect the board's level of risk appetite and are reviewed on an annual basis.

In accordance with Berkshire Hathaway Energy's requirements to comply with the US Sarbanes-Oxley Act, the Group undertakes a quarterly risk control assessment confirming that the effectiveness of the system of internal controls have been reviewed during the year. A self-certification process is in place, in support of this review, whereby certain senior managers are required to confirm that the system of internal control in their area of the business is operating effectively. Consequently, the directors believe that a robust system of risk assessment and management is in place.

The Group does not have a specific human rights policy. However, in accordance with the Core Principles, it remains fully committed to operating ethically and responsibly and with fairness and integrity. This is implemented through the policies and procedures it has in place which are applicable to all stakeholder groups and encompasses employees' health, safety and welfare, dealings with customers (particularly those who are vulnerable), the impact of the Group on the environment and the contribution to sustainability.

To ensure that the Group maintains the highest level of ethical standards in the conduct of its business, Berkshire Hathaway Energy's Code of Conduct has been adopted (See 'Employees'). The Group has robust procedures in place to meet the requirements of the Bribery Act 2010. Every employee must undertake training in respect of the Group's anti-corruption and anti-bribery policy each year.

Section 172(1) statement

Decision-making at the Board
All matters which under the Company and Group's governance arrangements are reserved for decision by the Directors are presented at Board meetings. Directors are briefed on any potential impacts and risks for customers, and other stakeholders and how they are to be managed. The Directors take these factors into account before making decisions, which together they believe are in the best interests of the Company or Group company and its member.

Long-term sustainability
As referenced throughout the Strategic Report, the Group's core business model (via Northern Powergrid) is to make sufficient profit in order to invest in the Network thereby, ensuring the integrity of the electricity supply for its customers. To achieve this objective, the Group delivers its service to fulfil the needs of the stakeholders with whom it interacts and in doing so, ensures all business relationships are conducted in an open and transparent manner. Consequently, fostering business relationships is a prerequisite of the activity performed by the Group in the pursuit of its goals and the long-term sustainability of the Group is at the forefront of decision-making.

The Group's policy in respect of engaging with stakeholders is governed by the Core Principles and the Code of Conduct. The Core Principle of 'Regulatory Integrity' defines the Group's commitment to comply with all laws wherever it does business and the expectation that all employees (including directors) manage their activities in a manner that is compliant with all standards, regulations and corporate policies. In addition, the Code of Conduct requires adherence to the highest level of ethical conduct and fair dealings with all customers, suppliers and competitors. See 'Corporate Responsibility' for further details of stakeholder engagement activity.

Employees
As detailed in the 'Employee Commitment' section, the Group works hard to ensure the health and safety of employees and to provide them with opportunities for advancement alongside fair terms whilst remunerating appropriately. Activities undertaken by the board in the year included reviewing health and safety performance, monitoring key appointment changes, receiving regular updates on the Group's Diversity, Equity and Inclusion plan, receiving an update from the Pension Advisory Group, reviewing the Group's gender pay gap report and approving the delegations of authority.

Customers
Customers, whether they are domestic or commercial, are the primary stakeholder group served by the Group and therefore the services offered are all tailored to provide a benefit or enhance an experience. During the year, the board regularly reviewed performance levels, closely monitored the response in respect of Storm Arwen, including compensation arrangements and engaged with the Chairs of the CEG and DRP. Further detail of the Group's relationship with customers and the support programmes provided is discussed in 'Customer Service'.

Producers and suppliers
The Group works closely with its supply chain and has measures in place to ensure the treatment of all supplies is fair and equitable. Relations with suppliers is managed using a supplier registration system which supports a robust and transparent procurement process and ensures strict compliance with the prevention of slavery and human trafficking. As a consequence, the system allows the Group to make informed decisions which align with its values when awarding contracts. When considering suppliers, the board advocates prompt payment practices, which are reviewed regularly by the internal audit function, and the implementation of procedures to reduce the risk of modern slavery in supply chains - as set out in the Group's annual modern slavery statement.

Financial stakeholders
Financial information is routinely made available to financial stakeholders, including relationship banks and bondholders. Directors participate directly with stakeholders when entering into new financial arrangements. During the year, the board approved an interim dividend, the annual and interim accounts and the tax strategy.

Community and environment
Each Director is required to take all reasonable steps to minimise any detrimental impact the Group's operations may have on the environment (see 'Environmental Respect'). The Group also supports a range of charitable and community activities to help customers with fuel poverty and safety around electricity ('Community' section). During the year, the directors routinely reviewed environmental performance and made decisions pursuant to Environmental Respect.

Regulator

Northern Powergrid is in regular dialogue with Ofgem concerning new policy development and emerging risks or opportunities within the sector. As outlined in ‘Regulatory Integrity’, to meet its licence conditions, the Group and the directors provide regular reporting to Ofgem (including the annual regulatory certificates and Regulatory Accounts), contribute to various regulatory consultations and monitor regulatory compliance. Given the implications on the Group’s long-term strategy, the relationship with Ofgem, the evolving ED2 framework, the transition to DSO were regular items on the board agenda throughout the year.

Acting fairly as between the Company’s owners

The Company has one class of ordinary shares which are all held by Berkshire Hathaway Energy U.K. Electric, Inc. (35%), Berkshire Hathaway Energy U.K. Power, Inc. (35%) and Berkshire Hathaway Energy U.K. Inc. (30%) all entities wholly owned by Berkshire Hathaway Energy. Further details of the shareholder relationship is set out in the 'Corporate Governance Statement'.

Non-financial and sustainability information statement

The non-financial reporting information pursuant to Section 414CA of the Companies Act 2006 has been reported throughout the Strategic Report and principal risks and uncertainties. The climate-related financial disclosures pursuant to Section 414CB (2A) can be found in the ‘Adapting to Climate Change’ section of the Strategic Report.

Approved by the board on 29 May 2024 and signed on its behalf by:

T H France
Director

Northern Powergrid Holdings Company
Directors' Report for the Year Ended 31 December 2023

The directors present their annual report and the audited consolidated financial statements consolidated financial statements for the year ended 31 December 2023.

Dividends

During the year, an interim dividend of £200.0 million paid (2022: £nil). The directors recommend that no final dividend be paid in respect of the year (2022: £nil). No dividends have been paid post year-end.

The Company and Group dividend policy is that dividends will be paid only after having due regard to available distributable reserves, available liquid funds and the financial resources and facilities needed to enable the Company and Group to carry on its business for at least the next year, , with the Company and Group's long-term prospects and viability in mind. In addition, the level of dividends is set to maintain sufficient equity in the Company so as not to jeopardise its investment grade issuer credit rating.

Directors of the group

The directors of the Company, who held office during the year and to the date of signing were as follows:

T H France
C D Haack
P A Jones
J N Reynolds
S Thon

During the year:
• None of the directors had an interest in any contract which was material to the business of the Company or the Group; and
• Up to the date of approval of the Report of the Directors, an indemnity contained in the Company's Articles of Association was in force for the benefit of the directors of the Company and as directors of associated companies, which was a qualifying indemnity provision for the purposes of the Companies Act 2006.

Future developments and future outlook

The financial position of the Group, as at 31 December 2023, is shown in the consolidated statement of financial position on pages 38 and 39. There have been no significant events since the year end and the directors intend that:

- Northern Powergrid will continue to implement the Business Plan during the remainder of the ED2 period and by delivering the strategic objectives linked to the Core Principles, Northern Powergrid will continue to develop its business by efficiently investing in the Network and improving the quality of supply and service provided to customers.
- IUS and IUS Ireland will further develop its business by concentrating on its core skills of engineering contracting thereby delivering a high standard of service to its existing clients and pursuing opportunities to increase its portfolio of clients.
- NPg Metering will retain its focus on pursuing opportunities in the market for meter asset provision as the smart meter roll-out programme develops.
- CE Resources will continue to look to build value through the management of a portfolio of hydrocarbon and renewables projects in Australia and the United Kingdom.

There are no plans to change the existing business model of any company within the Group.

Subsequent balance sheet events

Subsequent to the balance sheet date on 24 May 2024 a subsidiary undertaking, CalEnergy Resources (Operator) Limited, exchanged on a sale and purchase agreement to acquire the entire share capital of IOG North Sea Limited, IOG UK Limited, IOG Infrastructure Limited and certain assets of IOG PLC. IOG PLC and it's subsidiary entities own and operate gas production facilities and a pipeline in the South North Sea, which are jointly owned by a subsidiary of Northern Powergrid Holdings Limited. CalEnergy Resources (Operator) Limited has agreed to pay consideration of £5.0m, which will be payable on completion. Consideration will be adjusted to the extent that the net assets of IOG PLC change during the period to completion. Completion will occur subject to, and at the point of, North Sea Transition Authority approval and certain other conditions being satisfied. The revenues associated with the business disclosed in the IOG plc annual report and accounts (the last published annual report and accounts) were £75m in 2022 and included a decommissioning liability of £30m. Reflecting the timing of the agreement the acquisition accounting and any fair value adjustments are still being considered as at the date of signing of these financial statements.

Research and development

Northern Powergrid supports a programme of research that is expected to contribute to higher standards of performance and a more cost-effective operation of its business. During the year, Northern Powergrid invested £4.3 million (2022: £2.8 million) (Note 5 to the financial statements) in its research and development activities.

Political donations

During the year, no contributions were made to political organisations (2022: £nil).

Financial instruments

Financial risk management

Details of financial risks are included in the Principal Risks and Uncertainties on page 26 to 30 of the Strategic Report and in Note 31 to the financial statements.

Financial derivatives

As at 31 December 2023 the Group held two derivative financial instrument (2022: one) to mitigate the interest rate risk on a floating interest rate loan. More details on derivative financial instruments are available in Note to the financial statements.

Stakeholder engagement and environmental disclosures

In accordance with Paragraphs 10, 11 and 15 of Schedule 7 of the Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008, details concerning the employment of disabled persons, the relationship and engagement with employees and those with whom the Company does business, in addition to information concerning greenhouse gas emissions can be found in the Section 172 Statement and the Strategic Report (Environmental Respect and Employee Commitment).

CORPORATE GOVERNANCE STATEMENT

The directors have elected to set the information required by the Disclosure and Transparency Rules 7.2.1 R to 7.2.8AR in the 'Northern Powergrid Holdings Company and its subsidiaries Group Corporate Governance statement', a copy of which is available on the Group's corporate website.

Audit committee

The board of Northern Powergrid Holdings Company has established an audit committee for the Northern Powergrid Group under delegated terms of reference which carries out the functions required by DTR 7.1.3 R.

Composition:

- J N Reynolds, non-executive Director (Chair)
- A P Jones, Finance Director (appointed 14 April 2022)
- M Knowles, independent member - Northern Powergrid Holdings Company

DIRECTORS RESPONSIBILITIES STATEMENT

The directors are responsible for preparing the annual report and the financial statements in accordance with applicable law and regulations.

Company law requires the directors to prepare financial statements for each financial year. Under that law the directors have elected to prepare the financial statements in accordance with International Financial Reporting Standards adopted pursuant to Regulation (EC) No 1606/2002 as it applies in the European Union. The Financial Statements also comply with International Financial Reporting Standards (“IFRSs”) as issued by the International Accounting Standards Board ("IASB"). Under company law the directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the company and of the profit or loss of the company for that period.

In preparing these financial statements, International Accounting Standard 1 requires that directors:

- Properly select and apply accounting policies;
- Present information, including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information;
- Provide additional disclosures when compliance with the specific requirements in IFRSs are insufficient to enable users to understand the impact of particular transactions, other events and conditions on the Company's and the Group's financial position and financial performance; and
- Make an assessment of the Company's and the Group's ability to continue as a going concern.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the company’s transactions and disclose with reasonable accuracy at any time the financial position of the company and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The directors are responsible for the maintenance and integrity of the corporate and financial information included on the company’s website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions. The directors have elected to set out the Group’s corporate governance statement in the ‘Northern Powergrid Holdings Company and its subsidiaries Group Corporate Governance statement’, a copy of which is available on the Group’s corporate website.

Viability statement

The directors have chosen a period of not less than ten years for the purposes of making this statement. The timeframe corresponds with the ten-year plan that is submitted to the Group's shareholder each year alongside the Annual Plan and which sets out the Group's long term strategy. Given Northern Powergrid's business model, which operates in a stable sector, the directors believe that the Group as a whole is very likely to be viable for longer than the period chosen for the purpose of this statement.

In addition, various factors were contemplated when making an assessment of the Group's prospects including the general stability associated with the regulatory environment, the principal risks and uncertainties facing the Group (including the ability to mitigate those risks), the Group's business model and strategy, the forecasts developed as part of the Annual Plan, the commitments made in the Business Plan, and the fact that the notice period that GEMA must provide to Northern Powergrid in the event it wishes to revoke either of the electricity distribution licences is twenty five years. The Directors have also taken account of the Group's current cash position, its strong operating performance, its operating cash flows, the availability of banking facilities and its strong relationship with its parent company, Berkshire Hathaway Energy.

Stress-testing of the Annual Plan and the Group's forecasts is undertaken on an ongoing basis. The stress-testing considers the potential impact of a combination of a wide spectrum of risks and uncertainties driven by external factors. The risks and uncertainties are considered both in isolation or in the scenario that they materialise together. Stress-testing scenarios are submitted to the shareholder alongside the Annual Plan and more regularly as part of the preparation of the Group's forecasts.

Consideration was also given to the obligations contained in Northern Powergrid's licences to provide Ofgem with annual certificates, confirming that the directors have a reasonable expectation that Northern Powergrid will have sufficient financial and operational resources available for the continuation of business for a period of at least 12 months. The board determined any material variations to the assumptions used when providing those certificates were unlikely. Based on the results of their review, the directors have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the next ten-year period.

Going Concern

A review of the Group's business activities during the year, together with details regarding its future development, performance and position, its objectives, policies and processes for managing its capital, its financial risk management objectives and details of its exposures to trading risk, credit risk and liquidity risk are set out in the Strategic Report, the Directors' Report and the appropriate notes to the financial statements.

When considering whether to continue to adopt the going concern basis in preparing the annual report and financial statements, the directors have taken into account a number of factors, including the following:

- The Group's main subsidiaries, NPg Northeast and NPg Yorkshire, are stable electricity distribution businesses operating an essential public service and are regulated by the Gas and Electricity Markets Authority ("GEMA"). In carrying out its functions, GEMA has a statutory duty under the Electricity Act 1989 to have regard to the need to secure that licence holders are able to finance the activities, which are the subject of obligations under Part 1 of the Electricity Act 1989 (including the obligations imposed by the electricity distribution licence) or by the Utilities Act 2000;
- The Group is profitable with strong underlying cash flows. The Company, NPg Northeast and NPg Yorkshire hold investment grade credit ratings
- The Group is financed by long-term borrowings with an average maturity of 17 years and has access to short-term committed borrowing facilities of £242 million provided by Barclays Bank plc, Lloyds Bank plc, HSBC UK Bank plc and Royal Bank of Canada;
- The Group benefits from strong investment-grade credit ratings which allow access to a range of financing options including the capital markets. A successful bond issue by the Group in November 2023, demonstrated that the Group's bonds remain attractive to investors and there is an active market with strong appetite to invest;

Consequently, after making their assessment, the directors have a reasonable expectation that the Company and the Group have adequate resources to continue in operational existence for the foreseeable future. Accordingly, they continue to adopt the going concern basis in preparing the annual report and financial statements.

Disclosure of information to the auditor

Each director has taken steps that they ought to have taken as a director in order to make themselves aware of any relevant audit information and to establish that the company's auditor is aware of that information. The directors confirm that there is no relevant information that they know of and of which they know the auditor is unaware. This confirmation is given and should be interpreted in accordance with the provisions of s418 of the Companies Act 2006.

Resignation and appointment of auditor

In accordance with the auditor rotation requirements of the Statutory Auditors and Third Country Auditors Regulations 2016, Deloitte LLP will resign from office and the directors will put a resolution to the Company's shareholders recommending the appointment of KPMG as the Group's external auditor.

Approved by the board on 29 May 2024 and signed on its behalf by:

T H France
Director

Northern Powergrid Holdings Company
Independent Auditor's Report to the Members of Northern Powergrid Holdings Company

Report on the audit of the financial statements

Opinion

- the financial statements of Northern Powergrid Holdings Company (the 'parent company') and its subsidiaries (the 'group') give a true and fair view of the state of the group's and of the parent company's affairs as at 31 December 2023 and of the group's profit for the year then ended;
- the group financial statements have been properly prepared in accordance with United Kingdom adopted international accounting standards and International Financial Reporting Standards (IFRSs) as issued by the International Accounting Standards Board (IASB);
- the parent company financial statements have been properly prepared in accordance with United Kingdom adopted international accounting standards and as applied in accordance with the provisions of the Companies Act 2006; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements which comprise:

- the consolidated income statement;
- the consolidated statement of comprehensive income;
- the consolidated and parent company balance sheets;
- the consolidated and parent company statements of changes in equity;
- the consolidated and parent company statement of cash flows and;
- the related Notes 1 to 34.

The financial reporting framework that has been applied in the preparation of the group financial statements is applicable law, United Kingdom adopted international accounting standards and IFRSs as issued by the IASB. The financial reporting framework that has been applied in the preparation of the parent company financial statements is applicable law and United Kingdom adopted international accounting standards and as applied in accordance with the provisions of the Companies Act 2006.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the auditor's responsibilities for the audit of the financial statements section of our report.

We are independent of the group and the parent company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the Financial Reporting Council's (the 'FRC's') Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

In auditing the financial statements, we have concluded that the directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the group's and parent company's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

Our responsibilities and the responsibilities of the directors with respect to going concern are described in the relevant sections of this report.

Other information

The other information comprises the information included in the annual report, other than the financial statements and our auditor's report thereon. The directors are responsible for the other information contained within the annual report. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the course of the audit, or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

Responsibilities of directors

As explained more fully in the directors' responsibilities statement, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the group's and the parent company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the group or the parent company or to cease operations, or have no realistic alternative but to do so.

Auditor Responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Extent to which the audit was considered capable of detecting irregularities, including fraud
Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud is detailed below.

We considered the nature of the group's industry and its control environment, and reviewed the group's documentation of their policies and procedures relating to fraud and compliance with laws and regulations. We also enquired of management, internal audit and the directors about their own identification and assessment of the risks of irregularities, including those that are specific to the group's business sector.

We obtained an understanding of the legal and regulatory frameworks that the group operates in, and identified the key laws and regulations that:

- had a direct effect on the determination of material amounts and disclosures in the financial statements. These included the UK Companies Act and tax legislation; and
- do not have a direct effect on the financial statements but compliance with which may be fundamental to the group's ability to operate or to avoid a material penalty. These included Electricity Act 1989 and industry regulations monitored by Ofgem

We discussed among the audit engagement team including relevant internal specialists such as tax, pensions, IT and ESG regarding the opportunities and incentives that may exist within the organisation for fraud and how and where fraud might occur in the financial statements.

As a result of performing the above, we identified the greatest potential for fraud in the following area, and our procedures performed to address it are described below:

Accounting for capital spend - overhead model
The calculation of capitalised overheads poses a potential bias and fraud risk due to subjectivity in the percentage of overheads capitalised, which could lead to material misstatement of property, plant and equipment.

We have performed the following procedures in response to the risk identified:
• Tested a sample of cost centres for which we have assessed the capitalisation percentages applied ;
• Tested a sample costs by obtaining documentary evidence to assess the consistency of those costs with our understanding of the activities performed by the cost centre and the capitalisation rates applied along with assessing their classification; and
• Tested the integrity and mechanics of the cost allocation model to assess its mathematical accuracy.

Impairment of oil and gas assets within the Saturn Banks Phase 1 cash generating unit

An impairment of £129.0m has been recognised in respect of oil and gas assets within the Saturn Banks Phase 1 cash generating unit ("CGU") representing the difference between the carrying value of assets and their recoverable value as at 31 December 2023. The accuracy of the impairment charge is sensitive to variables which are inherently uncertain such as future gas prices and field reserves.

We have performed the following procedures in response to the risk identified:

• Performed sensitivity analysis on the value-in-use calculation and assessed key inputs into the model against the requirements of IAS 36 including consideration of contradictory evidence; and
• Tested the mathematical accuracy of the model using analytical tools including assessing historical performance to budget.

In common with all audits under ISAs (UK), we are also required to perform specific procedures to respond to the risk of management override. In addressing the risk of fraud through management override of controls, we tested the appropriateness of journal entries and other adjustments; assessed whether the judgements made in making accounting estimates are indicative of a potential bias; and evaluated the business rationale of any significant transactions that are unusual or outside the normal course of business.

In addition to the above, our procedures to respond to risks identified included the following:

- reviewing the financial statement disclosures and testing to supporting documentation to assess compliance with provisions of relevant laws and regulations described as having a direct effect on the financial statements;
- performing analytical procedures to identify any unusual or unexpected relationships that may indicate risks of material misstatement due to fraud;
- enquiring of management and in-house / external legal counsel concerning actual and potential litigation and claims, and instances of non-compliance with laws and regulations; and
- reading minutes of meetings of those charged with governance.

Report on other legal and regulatory requirements

Opinion on other matter prescribed by the Companies Act 2006
In our opinion, based on the work undertaken in the course of the audit:

- the information given in the strategic report and the directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the strategic report and the directors' report have been prepared in accordance with applicable legal requirements.

In the light of the knowledge and understanding of the group and of the parent company and their environment obtained in the course of the audit, we have not identified any material misstatements in the strategic report or the directors' report.

Matters on which we are required to report by exception
Under the Companies Act 2006 we are required in respect of the following matters if, in our opinion:

- adequate accounting records have not been kept by the parent company, or returns adequate for our audit have not been received from branches not visited by us; or
- the parent company financial statements are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.

We have nothing to report in respect of these matters.

Use of our report
This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Anthony Matthews

Anthony Matthews FCA (Senior Statutory Auditor)
For and on behalf of Deloitte LLP, Statutory Auditor
London
United Kingdom

29 May 2024

Northern Powergrid Holdings Company
Consolidated Income Statement for the Year Ended 31 December 2023

	Note	2023 £ 000	(As restated) 2022 £ 000
Revenue	3	1,130,773	1,148,839
Cost of sales		(162,649)	(161,722)
Gross profit		968,124	987,117
Distribution costs		(343,572)	(329,120)
Administrative expenses		(219,261)	(218,912)
Impairment	5	(129,000)	-
Operating profit	5	276,291	439,085
Other gains	4	3,106	1,354
Finance income	6	1,409	2,273
Finance costs	6	(97,034)	(102,515)
Profit before tax		183,772	340,197
Income tax expense	10	(3,238)	(131,258)
Profit for the year		180,534	208,939
Profit attributable to:			
Owners of the Company		178,826	206,980
Non-controlling interests	21	1,708	1,959
		180,534	208,939

The above results were derived from continuing operations.

Northern Powergrid Holdings Company
Consolidated Statement of Comprehensive Income for the Year Ended 31 December 2023

	Note	2023 £ 000	(As restated) 2022 £ 000
Profit for the year		180,534	208,939
Items that will not be reclassified subsequently to profit or loss			
Re-measurements of post-employment benefit obligations (net)	27	(7,995)	(85,657)
Items that may be reclassified subsequently to profit or loss			
(Loss)/gain on cash flow hedges (net)	20	(4,857)	16,564
Cumulative (gain)/loss arising on cash flow hedges reclassified to profit or loss	20	(1,550)	-
Foreign currency losses	20	(7,982)	(85)
		(14,389)	16,479
Total comprehensive income for the year		158,150	139,761
Total comprehensive income attributable to:			
Owners of the Company		156,442	137,802
Non-controlling interests	21	1,708	1,959
		158,150	139,761

Northern Powergrid Holdings Company
(Registration number: 03476201)
Consolidated Statement of Financial Position as at 31 December 2023

	Note	31 December 2023 £ 000	31 December 2022 £ 000
Assets			
Non-current assets			
Property, plant and equipment	11	7,648,597	7,562,034
Right of use assets	12	27,267	30,976
Intangible assets	13	55,096	51,126
Goodwill		248,843	248,843
Equity accounted investments	14	3,633	3,982
Retirement benefit obligations	27	148,600	151,500
Deferred tax asset	10	143	754
Trade and other receivables	16	6,463	4,087
Other non-current financial assets	32	27,630	45,967
		8,166,272	8,099,269
Current assets			
Inventories	15	37,022	32,509
Trade and other receivables	16	200,842	199,505
Tax receivable		582	6,454
Cash and cash equivalents	17	34,224	30,977
Restricted cash	18	3,103	2,823
Contract assets	3	7,052	5,824
Other current financial assets	32	6,531	3,484
		289,356	281,576
Total assets		8,455,628	8,380,845
Equity and liabilities			
Equity			
Share capital	19	(354,550)	(354,550)
Other reserves		810	810
Foreign currency translation reserve	20	9,282	1,300
Cash flow hedging reserve	20	(11,018)	(17,425)
Retained earnings		(2,868,375)	(2,897,544)
Equity attributable to owners of the Company		(3,223,851)	(3,267,409)
Non-controlling interests		(42,390)	(40,682)
Total equity		(3,266,241)	(3,308,091)
Non-current liabilities			
Lease liabilities		(19,363)	(26,057)
Loans and borrowings	22	(2,707,525)	(2,512,624)
Provisions	24	(52,323)	(63,018)
Deferred revenue	26	(1,531,281)	(1,504,481)
Deferred tax liabilities		(327,940)	(408,624)
		(4,638,432)	(4,514,804)

Northern Powergrid Holdings Company
(Registration number: 03476201)
Consolidated Statement of Financial Position as at 31 December 2023 (continued)

	Note	31 December 2023 £ 000	31 December 2022 £ 000
Current liabilities			
Lease liabilities		(6,332)	(6,346)
Trade and other payables	25	(298,728)	(269,386)
Loans and borrowings	22	(161,752)	(184,304)
Income tax liability		(354)	-
Deferred revenue	26	(68,966)	(66,685)
Provisions	24	(14,823)	(15,932)
Other current financial liabilities	32	-	(15,297)
		(550,955)	(557,950)
Total liabilities		(5,189,387)	(5,072,754)
Total equity and liabilities		(8,455,628)	(8,380,845)

Approved by the board on 29 May 2024 and signed on its behalf by:

T H France
Director

Northern Powergrid Holdings Company
(Registration number: 03476201)
Company Statement of Financial Position as at 31 December 2023

	Note	31 December 2023 £ 000	(As restated) 31 December 2022 £ 000	(As restated) 31 December 2021 £ 000
Assets				
Non-current assets				
Investments in subsidiaries, joint ventures and associates	14	376,289	376,289	376,289
Trade and other receivables	16	248,652	264,117	409,738
		624,941	640,406	786,027
Current assets				
Cash and cash equivalents		-	-	10,403
Total assets		624,941	640,406	796,430
Equity and liabilities				
Equity				
Share capital	19	(354,550)	(354,550)	(354,550)
Retained earnings		(5,234)	(225,537)	(223,000)
Total equity		(359,784)	(580,087)	(577,550)
Non-current liabilities				
Loans and borrowings		-	-	(199,134)
Current liabilities				
Trade and other payables	25	(2,292)	(24,095)	(18,842)
Loans and borrowings	22	(260,086)	(35,624)	(644)
Income tax liability		(2,779)	(600)	(260)
		(265,157)	(60,319)	(19,746)
Total liabilities		(265,157)	(60,319)	(218,880)
Total equity and liabilities		(624,941)	(640,406)	(796,430)

The Directors have taken the exemption offered under section 408 of the Act from publishing a separate statement of profit or loss. The Company reported a loss for the financial year ended 31 December 2023 of £(20.3)m (2022: profit of £2.5m).

Approved by the Board on 29 May 2024 and signed on its behalf by:

T H France
Director

Northern Powergrid Holdings Company
Consolidated Statement of Changes in Equity for the Year Ended 31 December 2023

	Share capital £ 000	Other reserves £ 000	Foreign currency translation £ 000	Cash flow hedging reserve £ 000	Retained earnings £ 000	Total £ 000	Non-controlling interests £ 000	Total equity £ 000
At 1 January 2023	354,550	(810)	(1,300)	17,425	2,897,544	3,267,409	40,682	3,308,091
Profit for the year	-	-	-	-	178,826	178,826	1,708	180,534
Other comprehensive income	-	-	(7,982)	(6,407)	(7,995)	(22,384)	-	(22,384)
Total comprehensive income	-	-	(7,982)	(6,407)	170,831	156,442	1,708	158,150
Dividends	-	-	-	-	(200,000)	(200,000)	-	(200,000)
At 31 December 2023	354,550	(810)	(9,282)	11,018	2,868,375	3,223,851	42,390	3,266,241

	Share capital £ 000	Other reserves* £ 000	Foreign currency translation £ 000	Cash flow hedging reserve £ 000	Retained earnings £ 000	Total £ 000	Non-controlling interests £ 000	Total equity £ 000
At 1 January 2022	354,550	(810)	(1,215)	861	2,776,221	3,129,607	38,723	3,168,330
Profit for the year (as restated)	-	-	-	-	206,980	206,980	1,959	208,939
Other comprehensive income (as restated)	-	-	(85)	16,564	(85,657)	(69,178)	-	(69,178)
Total comprehensive income	-	-	(85)	16,564	121,323	137,802	1,959	139,761
At 31 December 2022	354,550	(810)	(1,300)	17,425	2,897,544	3,267,409	40,682	3,308,091

It was identified during 2023 that the header for this reserve had been incorrectly disclosed as "share premium" in the 2022 financial statements. This has been corrected during 2023. There is no impact on the values disclosed in either the current or preceding year.

Northern Powergrid Holdings Company
Company Statement of Changes in Equity for the Year Ended 31 December 2023

	Share capital £ 000	Retained earnings £ 000	Total £ 000
At 1 January 2023	354,550	225,537	580,087
Loss for the year	-	(20,303)	(20,303)
Total comprehensive income	-	(20,303)	(20,303)
Dividends	-	(200,000)	(200,000)
At 31 December 2023	354,550	5,234	359,784

	Share capital £ 000	Retained earnings £ 000	Total £ 000
At 1 January 2022	354,550	223,000	577,550
Profit for the year	-	2,537	2,537
Total comprehensive income	-	2,537	2,537
At 31 December 2022	354,550	225,537	580,087

Northern Powergrid Holdings Company
Consolidated Statement of Cash Flows for the Year Ended 31 December 2023

	Note	2023 £ 000	(As restated) 2022 £ 000
Cash flows from operating activities			
Profit for the year		180,534	208,939
Depreciation and amortisation	5	349,525	350,064
Depreciation on right of use assets		7,088	6,926
Amortisation of deferred revenue		(67,070)	(66,515)
Profit on disposal of property plant and equipment	4	(3,106)	(1,354)
Impairment	5	129,000	-
Gain on derivatives		(11,185)	-
Retirement benefit obligation		(11,300)	(3,262)
Finance income	6	(1,409)	(2,273)
Finance costs	6	97,034	102,515
Income tax expense	10	3,238	131,258
		672,349	726,298
Increase in inventories	15	(4,513)	(9,484)
Increase in trade and other receivables	16	(4,081)	(30,926)
(Decrease)/increase in trade and other payables	25	(11,457)	12,075
(Increase)/decrease in contract assets	3	(1,228)	1,769
Receipt of customer contributions*		131,615	114,071
Decrease in provisions	24	(10,706)	(13,365)
Cash generated from operations		771,979	800,438
Income taxes paid		(68,333)	(62,071)
Net cash flow from operating activities		703,646	738,367
Cash flows used in investing activities			
Acquisitions of property plant and equipment		(558,177)	(673,926)
Proceeds from sale of property plant and equipment		3,106	3,652
Acquisition of intangible assets	13	(17,577)	(13,983)
Interest received		1,939	2,156
Dividend income	6	615	927
Fixed asset investments	14	(796)	(894)
Net cash flows used in investing activities		(570,890)	(682,068)
Cash flows used in financing activities			
Proceeds from long-term borrowing draw downs	22	248,428	348,320
Transaction costs relating to loans and borrowings		(1,717)	(2,105)
Repayment of long-term borrowing	22	(44,028)	(391,509)
Movement on short-term borrowing	22	(27,537)	98,848
Payments to lease creditors		(10,087)	(6,622)
Movement in restricted cash		(280)	(1,661)
Interest expense on leases		(835)	(654)
Interest paid		(91,729)	(99,064)
Dividends paid	28	(200,000)	-
Foreign exchange gain/loss		-	-
Net cash flows used in financing activities		(127,785)	(54,447)

Northern Powergrid Holdings Company
Consolidated Statement of Cash Flows for the Year Ended 31 December 2023 (continued)

	Note	2023 £ 000	(As restated) 2022 £ 000
Net increase in cash and cash equivalents		4,971	1,852
Cash and cash equivalents at 1 January		30,977	29,125
Effect of exchange rate fluctuations on cash held		(1,724)	-
Cash and cash equivalents at 31 December		34,224	30,977

*Following a review of sector general practice and to align with the accounting treatment of customer contributions within revenue these amounts have been presented within operating activities rather than investing activities with the comparatives restated. Accordingly this has resulted in an increase in cash from operating activities and increase in cash used in investing activities in the comparative period by £114.1m. There has been no other impact on the financial statements from this change.

Northern Powergrid Holdings Company
Company Statement of Cash Flows for the Year Ended 31 December 2023

	Note	2023 £ 000	2022 £ 000
Cash flows from/(used in) operating activities			
(Loss)/profit for the year		(20,303)	2,537
Estimated credit loss		34,700	-
Finance income		(20,663)	(19,976)
Finance costs		3,144	14,763
Income tax expense		4,429	595
		1,307	(2,081)
(Decrease)/increase in trade and other payables	25	(21,803)	5,253
Cash generated from operations		(20,496)	3,172
Income taxes paid		(2,250)	(255)
Net cash flow from operating activities		(22,746)	2,917
Cash flows from/(used in) investing activities			
Movement in intercompany loans		(19,235)	145,265
Interest received		20,663	19,976
Net cash flows from/(used in) investing activities		1,428	165,241
Cash flows from/(used in) in financing activities			
Movement in intercompany treasury account		224,462	35,624
Interest paid		(3,144)	(14,185)
Repayment of long-term borrowing		-	(200,000)
Dividends paid		(200,000)	-
Net cash flows used in financing activities		21,318	(178,561)
Net decrease in cash and cash equivalents		-	(10,403)
Cash and cash equivalents at 1 January		-	10,403
Cash and cash equivalents at 31 December		-	-

Yorkshire Electricity Group plc, a Northern Powergrid Group company, acting on behalf of other group companies was authorised to settle various liabilities against the relevant intercompany accounts. The Company has disclosed the underlying cash flows as operating, investing or financing according to their nature on the basis that, as a principal, the entity has the right to the cash inflows and/or the obligation to settle the liability and ensure clarity of disclosure of the cash costs of the business. In addition it acts as a treasury company to the Group and accordingly the movements in the intercompany treasury account are included in financing activities.

1 General information

The Company is a private Company limited by share capital, incorporated in England and Wales and domiciled in the United Kingdom.

The principal activities of the Group is split between the following four areas:

- Northern Powergrid is the distribution of electricity to approximately 1.6 million customers connected to its electricity distribution network.
- IUS provides engineering contracting services.
- NPG Metering rents meters to energy suppliers.
- CE Resources holds interests in hydrocarbon permits and renewables projects in Australia and the United Kingdom.

The address of its registered office is:
Lloyds Court, 78 Grey Street, Newcastle upon Tyne, Tyne and Wear, NE1 6AF, United Kingdom

Subsequent balance sheet events
Subsequent to the balance sheet date on 24 May 2024 a subsidiary undertaking, CalEnergy Resources (Operator) Limited, exchanged on a sale and purchase agreement to acquire the entire share capital of IOG North Sea Limited, IOG UK Limited, IOG Infrastructure Limited and certain assets of IOG PLC. IOG PLC and it's subsidiary entities own and operate gas production facilities and a pipeline in the South North Sea, which are jointly owned by a subsidiary of Northern Powergrid Holdings Limited. CalEnergy Resources (Operator) Limited has agreed to pay consideration of £5.0m, which will be payable on completion. Consideration will be adjusted to the extent that the net assets of IOG PLC change during the period to completion. Completion will occur subject to, and at the point of, North Sea Transition Authority approval and certain other conditions being satisfied. The revenues associated with the business disclosed in the IOG plc annual report and accounts (the last published annual report and accounts) were £75m in 2022 and included a decommissioning liability of £30m. Reflecting the timing of the agreement the acquisition accounting and any fair value adjustments are still being considered as at the date of signing of these financial statements.

2 Accounting policies

Statement of compliance
The group and company financial statements have been prepared in accordance with International Financial Reporting Standards and its interpretations adopted by the IASB ("adopted IFRS's").

Summary of significant accounting policies and key accounting estimates
The principal accounting policies applied in the preparation of these financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

Basis of preparation
The financial statements have been prepared under the historical cost convention as modified by financial instruments recognised at fair value.

The preparation of financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the group's accounting policies.

Climate Change
There has been no material impact from climate change within the accounts. See the strategic report page 10 for details on the climate related risks and opportunities for the Group.

2 Accounting policies (continued)

Going Concern

A review of the Group's business activities during the year, together with details regarding its future development, performance and position, its objectives, policies and processes for managing its capital, its financial risk management objectives and details of its exposures to trading risk, credit risk and liquidity risk are set out in the Strategic Report, the Directors' Report and the appropriate notes to the financial statements.

When considering whether to continue to adopt the going concern basis in preparing the annual report and financial statements, the directors have taken into account a number of factors, including the following:

- The Group's main subsidiaries, NPg Northeast and NPg Yorkshire, are stable electricity distribution businesses operating an essential public service and are regulated by the Gas and Electricity Markets Authority (“GEMA”). In carrying out its functions, GEMA has a statutory duty under the Electricity Act 1989 to have regard to the need to secure that licence holders are able to finance the activities, which are the subject of obligations under Part 1 of the Electricity Act 1989 (including the obligations imposed by the electricity distribution licence) or by the Utilities Act 2000;
- The Group is profitable with strong underlying cash flows. The Company, NPg Northeast and NPg Yorkshire hold investment grade credit ratings
- The Group is financed by long-term borrowings with an average maturity of 17 years and has access to short-term committed borrowing facilities of £242 million provided by Barclays Bank plc, Lloyds Bank plc, HSBC UK Bank plc and Royal Bank of Canada;
- The Group benefits from strong investment-grade credit ratings which allow access to a range of financing options including the capital markets. A successful bond issue by the Group in November 2023, demonstrated that the Group’s bonds remain attractive to investors and there is an active market with strong appetite to invest;
- The Group has prepared forecasts which taking into account reasonable possible changes in trading performance, show that the Group has sufficient resources to settle its liabilities as they fall due. The directors have had discussions with the bank who have indicated that they would continue to provide the short-term facilities to the Group for the foreseeable future on acceptable terms.
- Consideration was also given to the obligations contained in NPg Northeast's and Northern Powergrid (Yorkshire) plc’s licences to provide Ofgem with annual certificates, confirming that the directors have a reasonable expectation that the Group will have sufficient financial and operational resources available for the continuation of business for a period of at least 12 months. The board determined any material variations to the assumptions used when providing those certificates were unlikely.

Consequently, after making their assessment, the directors have a reasonable expectation that the Company and the Group have adequate resources to continue in operational existence for the foreseeable future. Accordingly, they continue to adopt the going concern basis in preparing the annual report and financial statements.

2 Accounting policies (continued)

Basis of consolidation

The group financial statements consolidate the financial statements of the company and its subsidiary undertakings drawn up to 31 December 2023.

A subsidiary is an entity controlled by the company. Control is achieved where the company has the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities.

The results of subsidiaries acquired or disposed of during the year are included in the income statement from the effective date of acquisition or up to the effective date of disposal, as appropriate. Where necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with those used by the group.

The purchase method of accounting is used to account for business combinations that result in the acquisition of subsidiaries by the group. The cost of a business combination is measured as the fair value of the assets given, equity instruments issued and liabilities incurred or assumed at the date of exchange, plus costs directly attributable to the business combination. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. Any excess of the cost of the business combination over the acquirer’s interest in the net fair value of the identifiable assets, liabilities and contingent liabilities recognised is recorded as goodwill.

Inter-company transactions, balances and unrealised gains on transactions between the company and its subsidiaries, which are related parties, are eliminated in full.

Intra-group losses are also eliminated but may indicate an impairment that requires recognition in the consolidated financial statements.

Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the group. Non-controlling interests in the net assets of consolidated subsidiaries are identified separately from the group’s equity therein. Non-controlling interests consist of the amount of those interests at the date of the original business combination and the non-controlling shareholder’s share of changes in equity since the date of the combination. Total comprehensive income is attributed to non-controlling interests even if this results in the non-controlling interests having a deficit balance.

Critical judgements in applying accounting policies

The following are the critical judgements, apart from those involving estimations, that the directors have made in the process of applying the Group's accounting policies and that have the most significant effect on amounts recognised in the consolidated financial statements:

- The split of operating and capital expenditure and the allocation of overheads to property, plant and equipment: The allocation of overheads to capital is derived from a detailed analysis of the costs and their cost drivers which is reviewed on an annual basis. The percentage allocation of overheads across the work stream categories are obtained from section managers who are asked to provide reasoning and supporting evidence for the allocation. Finance then undertake a financial impact assessment review and the rationale to ensure it complies with IFRS. The amount of overheads capitalised in the year was £109.4 million (2022: £98.7 million) which was an decrease from 63% to 56%.

Key sources of estimation uncertainty

The following are the key assumptions concerning the future and other key sources of estimation uncertainty at the end of the reporting period that may have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year:

- Assumptions used when evaluating long-term pension plans - these assumptions and their possible impacts are disclosed in note 27.
- Impairment of goodwill evaluation - determining whether goodwill is impaired requires an estimation on an annual basis of the fair value of cash generating units to which goodwill has been allocated. The carrying value of goodwill at the Statement of Financial Position date was £248.8m. The fair value used as the basis for the goodwill impairment calculations are set out in note 13.

2 Accounting policies (continued)

- Recognition of deferred tax asset in relation to the tax attributes of the oil and gas business - determining on whether the tax attributes of the oil and gas business (as disclosed in Note 10) are recognised as a deferred tax asset under IAS 12 which requires the business to demonstrate that it is probable that future taxable profits should be available in order to offset these losses.
- Impairment of oil and gas assets -

  Exploration and appraisal ("E&A") costs are accounted for on a successful efforts basis. All costs relating to licence and data acquisition, geological and geophysical activity and exploration and appraisal drilling are initially capitalised as intangible oil and gas assets pending determination of the commercial potential of the relevant oil and gas properties. The carrying value of intangible oil and gas assets at the Statement of Financial Position date was £4.5m (Note 14). These relate to E&A costs of the Phase 2 Saturn Banks Assets. The commercial potential of the remaining assets is not yet known and there are no impairment indicators at the Statement of Financial Position date.
  The carrying value of tangible oil and gas assets at the Statement of Financial Position date, net of abandonment provision, was £147.3m (Note 11 and 25).
  Tangible oil and gas assets are tested for impairment whenever there is an indication that the asset may be impaired. Impairment is tested by comparing the recoverable amount of the CGU with the carrying value of certain net assets of the CGU. The recoverable amount of the CGU is the greater of their fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Any impairment arising is recognised immediately in the Income Statement.
  The calculation of discounted future cash flows for oil and gas assets under development or in production are most sensitive to the following assumptions:
  • Cash generating unit - where individual fields benefit from shared infrastructure and the assets were acquired concurrently the Group considers treating them as one CGU is the most appropriate basis for considering impairment.
  • Commercial reserves - oil and gas reserves are calculated on an entitlement basis. Estimates of commercial reserves underpin the calculation of depletion and amortisation on a unit of production basis. Estimates of commercial reserves include estimates of the amount of oil and gas in place, assumptions about the reservoir performance over the life of the field and assumptions about commercial factors which, in turn, will be affected by the future oil and gas price.
  • Production volumes - annual estimates of oil and gas reserves are generated internally with input from operator profiles and technical opinion from management utilising information which is considered similar to '2P' calculated reserves used in the UK sector. The estimated future production profiles are used in the life of the fields which in turn are used as a basis in the calculation of discounted future cash flows.
  • Commodity prices - long term assumptions for oil and gas prices are used for future cash flows in accordance with the judgement of senior management.
  • Fixed and variable operating costs - variables operating costs include examples such as pipeline tariffs and treatment charges. Fixed operating costs are based on operator budgets.
  • Capital expenditure - Field development is long-term and capital intensive and future capital expenditures are often an integral part of the development plan for oil and gas assets
  • Discount rates - Rates used should reflect the current market assessment of risks specific to the oil and gas sector. A rate of 9% (2022:10%) has been applied to the assessment as at 31 December 2023.
  A negative change in any of the above assumptions would cause the estimated future cash flows to be lower than the carrying value, resulting in an impairment loss greater than that recognised in the year. The impairment assessment carried out concluded that an impairment of £129m should be recognised for the oil and gas assets and greater detail is given in Note 11.

2 Accounting policies (continued)

- Impairment of renewable energy assets -

  The carrying value of renewable energy assets at the Statement of Financial Position date was £248.1m.

  Determining if the renewable energy assets are impaired requires an estimation of the value in use of the assets. The calculation of discounted future net cash flows are reviewed at least annually and are most sensitive to the following assumptions:

  • Generation - estimates of energy generation are based on operator profiles and technical opinion from management. The estimated future generation is impacted by factors such as the weather and technical issues.
  • Market Black Price - the assets are subjected to a fixed price contract on approximately 70% of the generation therefore movements in the market price of electricity impact the value in use to a lesser extent. Long term assumptions for electricity prices are used for future cash flows in accordance with the judgement of senior management.

  The impairment assessment carried out concluded that no impairment should be recognised for the renewable energy assets.

New standards, interpretations and amendments

Effective for periods beginning on or after 1 January 2023:
- Amendments to IFRS 17: Insurance Contracts
- Amendments to IAS 1: Presentation of Financial Statements
- Amendments to IAS 8: Accounting Policies, Changes in Accounting Estimates

Effective for periods beginning on 23 May 2023:
- Amendments to IAS 12: Income Taxes

These amendments did not have a material impact on the financial statements including the comparatives.

New standards issued that are not yet applicable

Effective for periods beginning on 1 January 2024:
- Amendments to IAS 1: Classification of Liabilities as Current or Non-current
- Amendments to IFRS 16: Lease Liability on a Sale and Leaseback
- Amendments to IAS 7 and IFRS 7: Supplier Finance Agreements

The Directors have considered the above accounting standards issued that are not yet applicable and have noted no material changes are likely to arise.

Other key accounting policies applied by the Group are as follows:

2 Accounting policies (continued)

Leases

For lessees, all leases will be recorded on the balance sheet as liabilities, at the present value of the future lease payments, along with an asset reflecting the right to use the asset over the lease term. Short-term leases (a lease that, at the commencement date has a lease term of 12 months or less) and low value leases (below £5,000) will be excluded.

The Group applies IFRS 16 to all leases which include buildings, land and fleet vehicles. The right-of-use assets are initially measured at the amount of the lease liability plus any initial direct costs incurred by the lessee, discounted at the rate implicit in the lease if that can be readily determined. If that rate cannot be readily determined, the lessee shall use their incremental borrowing rate. These values can be found in the Statement of Financial Position.

The Group has taken practical expedients as per below:

- For short-term leases (lease term of 12 months or less) and leases of low-value assets (which includes personal computers, small items of office furniture and telephones), the Group has opted to recognise a lease expense on a straight-line basis as permitted by IFRS 16. This expense is presented within 'administrative expenses' in the Income Statement.
- Uses current expectations to determine the lease term when contract contains options to extend or terminate the lease; and
- Adjusts right of use asset by provision for onerous leases as an alternative to performing an impairment review.

The implicit rate applied to determine the present value of the lease liabilities during the current period was 5.5% (2022: 2.33%).

The Group recognises deprecation of right-of-use assets (within administration expenses) and interest on lease liabilities (within finance costs) in the Statement of Profit and Loss. Within the Statement of Cash Flow, the Group separates the total amount of cash paid between the principal portion and the interest, both of which are presented within financing activities.

Right-of-use assets are depreciated over the shorter of the useful life of the asset or the lease term. For information regarding the depreciation charge per class of asset and carrying value, please refer to Note 12 Right of use assets.

Revenue recognition

Recognition

The Group earns revenue from the provision of services relating to revenue from a contract to provide services is recognised by the following means:
- Distribution use of system income is primarily recognised on a per unit (volumetric i.e. kWh and capacity (kVA)) and fixed (per 'customer' per day) basis;
- Customer contributions for connections are amortised over the life of the corresponding asset;
- This revenue is recognised in the accounting period when control of the product has been transferred, at an amount that reflects the consideration to which the entity expects to be entitled in exchange for fulfilling its performance obligations to customers.
- Contracting revenue is recognised in line with expenditure;
- Meter asset provision income is accounted for under lease accounting;
- Intercompany recharges for services provided are based on costs incurred;
- Gas revenue is the sale of natural gas and condensate;
- Renewables revenue is the sale of renewable energy; and
- Other revenue includes assessment and design fees and disconnections from the network and are recognised by reference to the proportion of total costs of providing the service.
- This revenue is recognised in the accounting period when the services are rendered at an amount that reflects the consideration to which the entity expects to be entitled in exchange for fulfilling its performance obligations to customers.

2 Accounting policies (continued)

The principles in IFRS are applied to revenue recognition criteria using the following 5 step model:

1. Identify the contracts with the customer
2. Identify the performance obligations in the contract
3. Determine the transaction price
4. Allocate the transaction price to the performance obligations in the contract
5. Recognise revenue when or as the entity satisfies its performance obligations

Fee arrangements
Below are details of fee arrangements and how these are measured and recognised, for revenue from the provision of services:

- For regulated use of system income the revenue for the service is recognised on the basis of agreed charging methodologies on a per GWh basis.
- For fixed price for contracted service revenue is recognised based on the stage of completion and performance obligations met for actual services provided as a proportion of the total fixed fee agreed in the contract.
- For stage payment on long-term contracts revenue is recognised by reference to stage of manufacture at the year end date using contractual rates specified in the contract. Revenue on materials is measured at the actual amount of the material used on the contract at the price specified in the contract.

The performance obligations involved in engineering contracting work are accounted for as follows:

- Where the outcome of a contract can be estimated reliably, revenue and costs are recognised by reference to the stage of completion of the contract activity at the end of the reporting period, based on the proportion of contract costs incurred for work performed to date relative to the estimated total contract costs, except where this would not be representative of the stage of completion.
- Variations in contract work, claims and incentive payments are included to the extent that they have been agreed with the customer.
- Where the outcome of a contract cannot be estimated reliably, contract revenue is recognised to the extent of the costs incurred where it is probable they will be recoverable. Contract costs are recognised as expenses in the period in which they are incurred. When it is probable that total contract costs will exceed total contract revenue, the expected loss is recognised as an expense immediately.
- When contract costs incurred to date plus recognised profits less recognised losses exceed progress billings, the surplus is shown as amounts due from customers for contract work. For contracts where progress billings exceed contract costs incurred to date plus recognised profits less recognised losses, the surplus is shown as the amounts due to customers for contract work. Amounts received before the related work is performed are included in the consolidated statement of financial position, as a liability, as advances received. Amounts billed for work performed but not yet paid by the customer are included in the consolidated statement of financial position under trade and other receivables.

2 Accounting policies (continued)

Other performance obligations include but are not limited to:
- Provision of vehicles over a specified period accounted for under lease accounting;
- Provisions of exploration equipment over a specified period; and
- Passage of milestones and completion of installation of equipment for engineering contracting.

The principal activity of the CalEnergy Resources ("CER") business is the exploration, development, production and sale of natural gas as well as the sale of renewable energy. During the year, CER recognised revenues from the sale of gas, condensate and renewables in line with IFRS 15 Revenue from Contracts with Customers. CER is considered to be the principal in it’s contract with customers because it controls the gas before transferring it when sold. Revenue is recognised when performance obligations are satisfied (i.e. by transferring control). Transferring control of gas involves the customer taking physical possession and the title passing, generally on delivery of the gas to an agreed delivery point. In respect of gas sales, the delivery point is when the gas is delivered into the National Transmission System downstream of the Bacton gas terminal. Condensate is sold on an FCA basis when it is delivered onto the buyer's rail tank car loading manifold.

Performance obligations are satisfied at a point in time and at this point CER recognises revenue. Contracts contain one performance obligation which is the provision of gas or condensate. The transaction price is the amount to which CER expects to be entitled and is allocated based on standalone selling prices. Contracts for the sale of gas and condensate are priced with reference to quoted prices. All revenue from these contracts is disclosed as revenue from contracts with customers and any amounts payable to the customer for certain costs are recognised as a reduction of the transaction price and, therefore, a reduction in revenue since the payment to the customer is not in exchange for goods. The credit terms range between 20-40 days after the month-end, depending on the customer.

Contract modifications
The group’s contracts are often amended for changes in contract specifications and requirements. Contract modification exists when the amendment either creates new or changes the existing enforceable rights and obligations. The effect of a contract modification on the transaction price and the group’s measure of progress for the performance obligation to which it relates, is recognised as an adjustment to revenue in one of the following ways:

a. Prospectively as an additional separate contract:
b. Prospectively as a termination of the existing contract and creation of a new contract;
c. As part of the original contract using a cumulative catch up; or
d. As a combination of b) and c).

The facts and circumstances of any contract modification are considered individually as the types of modifications will vary contract by contract and may result in different accounting outcomes. Judgement is applied in relation to the accounting for such modifications where the final terms or legal contracts have not been agreed prior to the period end as management need to determine if a modification has been approved and if it either creates new or changes existing enforceable rights and obligations of the parties. Depending upon the outcome of such negotiations, the timing and amount of revenue recognised may be different in the relevant accounting periods. Modification and amendments to contracts are undertaken via an agreed formal process. For example, if a change in scope has been approved but the corresponding change in price is still being negotiated, management use their judgement to estimate the change to the total transaction price.

Tax
The tax expense for the period comprises current and deferred tax. Tax is recognised in profit or loss, except that a change attributable to an item of income or expense recognised as other comprehensive income is also recognised directly in other comprehensive income.

The current income tax charge is calculated on the basis of tax rates and laws that have been enacted or substantively enacted by the reporting date in the countries where the group operates and generates taxable income.

2 Accounting policies (continued)

Deferred income tax is recognised on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements and on unused tax losses or tax credits in the group. Deferred income tax is determined using tax rates and laws that have been enacted or substantively enacted by the reporting date.

The carrying amount of deferred tax assets are reviewed at each reporting date and a valuation allowance is set up against deferred tax assets so that the net carrying amount equals the highest amount that is more likely than not to be recovered based on current or future taxable profit.

Property, plant and equipment

Property, plant and equipment is stated in the statement of financial position at cost, less any subsequent accumulated depreciation and subsequent accumulated impairment losses.

The cost of property, plant and equipment includes directly attributable incremental costs incurred in their acquisition and installation.

Depreciation

Depreciation is charged so as to write off the cost of assets, other than land and properties under construction over their estimated useful lives on a straight-line basis:

Asset class	**Depreciation method and rate**
Distribution system:	
- Generation assets	15 years
- Conventional metering equipment	up to 5 years
- Information Technology equipment	up to 10 years
- Land	not depreciated
- Other system assets	45 years
Land and buildings:	
- Freehold buildings	up to 60 years
- Leasehold buildings	lower of lease period or 60 years
- Non-Operational land	not depreciated
Furniture, fittings and equipment	up to 10 years
Metering equipment	up to 15 years
Renewables	up to 35 years

The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any material changes in those estimates accounted for on a prospective basis. Due to the significance of the Groups's investment in property, plant and equipment, variations in estimates could impact operating results both positively and negatively although, historically, few changes have been required.

Assets in the course of construction are carried at cost, less any recognised impairment loss. Costs include professional fees, and, for qualifying assets, borrowing costs capitalised in accordance with the Group's accounting policy. Such assets are classified to the appropriate categories of property, plant and equipment when completed and ready for intended use. Depreciation on these assets, on the same basis as other assets, commences when the assets are commissioned. Assets are derecognised when they are disposed of profit or loss on disposal is recognised in other gains on the statement of profit or loss.

2 Accounting policies (continued)

Goodwill
Goodwill arising on the acquisition of an entity represents the excess of the cost of acquisition over the Group's interest in the net fair value of the identifiable assets, liabilities and contingent liabilities of the entity recognised at the date of acquisition. Goodwill is initially recognised as an asset at cost and is subsequently measured at cost less any accumulated impairment losses. Goodwill is held in the currency of the acquired entity and revalued to the closing rate at each reporting period date.

Goodwill is not subject to amortisation but is tested for impairment.

Negative goodwill arising on an acquisition is recognised directly in the income statement. On disposal of a subsidiary or a jointly controlled entity, the attributable amount of goodwill is included in the determination of the profit or loss recognised in the income statement on disposal.

Intangible assets amortisation
Amortisation is provided on intangible assets so as to write off the cost, less any estimated residual value, over their expected useful economic life on a straight-line basis:

Asset class	Amortisation method and rate
Software development	up to 15 years

Generation credits
Large Scale Generation Certificates ("LGCs") are considered Government Grants under IAS20 Government Grants. Government grants are recognized when there is reasonable assurance that the Group will comply with the conditions of the grant and the grant will be received.

Government Grants shall be recognised in profit or loss on a systematic basis over the periods in which the entity recognises as expenses the related costs for which the grants are intended to compensate. The LGC's are therefore recognised in the same period as the electricity that is generated. This appropriately matches the costs of generating the asset (i.e. the associated power generation) with the income from the grant. At each period end, for LGCs remaining on the balance sheet, an assessment of the value is completed.

No further conditions are required to be met in relation to these grants and we recognise these through revenue when registered.

Investments in associates and joint ventures
An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies. A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have the rights to the net assets of the joint arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The results and assets and liabilities of associates or joint ventures are incorporated in these consolidated financial statements using the equity method of accounting except when classified as held for sale. Investments in associates or joint venture entities are initially recognised at cost and adjusted thereafter to recognise the Group's share of profit or loss and other comprehensive income of the associate or joint venture. When the Group's share of losses of an associate or a joint venture exceeds the Group's interest in that associate or joint venture, the Group discontinues recognising its share of future losses.

An investment in an associate or a joint venture is accounted for using the equity method from the date on which the investee becomes an associate or a joint venture. On acquisition of the investment in an associate or a joint venture, any excess of the cost of the investment over the Group's share of the net fair value of the identifiable assets and liabilities of the investee is recognised as goodwill, which is included within the carrying amount of the investment. Any excess of the Group's share of the net fair value of the identifiable assets and liabilities over the cost of the investment, after reassessment, is recognised immediately in profit or loss in the period in which the investment is acquired.

2 Accounting policies (continued)

A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

Fixed asset investments are stated at cost less provision or amounts written off for impairment in value.

Investments in subsidiaries

Investments in subsidiaries are account for at cost less impairment.

2 Accounting policies (continued)

Prior Year Restatement

Pensions consolidation only

During the preparation of the 2023 financial statements the treatment of pension increases over 5% was identified as incorrectly being treated as a past service cost through the income statement when it should have been included as an actuarial movement in the Statement of Comprehensive Income. In the comparative period the restatement has reduced the income statement cost by £16.5 million before tax with an associated increase in tax of £5.0 million and a corresponding increase in the charge and tax shown in the statement of comprehensive income. There has been no other impact on the financial statements arising from this change.

Receipt of customer contributions (consolidation only)

The Consolidated Statement of Cash Flows contains more information relating to the prior year restatement on receipt of customer contributions.

Trade and other receivables (Company only)

Prior year company only current trade and other receivables from related parties of £224.1m have been restated as non-current trade and other receivables from related parties. This restatement has been made in line with the maturity date of the loan agreements with related parties.

Cash and cash equivalents

Cash and cash equivalents comprise cash on hand and call deposits, and other short-term highly liquid investments that are readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. Amounts borrowed under overdraft facilities are included within borrowings on the statement of financial position, however included within cash and cash equivalents on the statement of cash flows.

Intercompany Short-term loans (Current Accounts)

The Northern Powergrid group operates a central treasury function operated through it’s subsidiary Yorkshire Electricity Group plc. As a result, every company within the Northern Powergrid group has a relationship with Yorkshire Electricity Group plc as either an intercompany debtor or creditor. Interest periods are for a duration of one month, and the interest is applied to an intercompany debtor balance on the last day of the preceding month at the compounded reference rate (currently SONIA) applicable under the most recent revolving facility agreement to which Northern Powergrid Holdings Company is a party. Monthly interest is applied to an intercompany creditor balance on the last day of the preceding month at the aggregate of the compounded reference rate (currently SONIA) and the margin (currently 0.2%) applicable under the most recent revolving facility agreement to which Northern Powergrid Holdings Company is a party. The Intercompany debtor or creditor balance will be repaid at the end of each month, or if still required will be rolled over for a further period of one month.

Trade receivables

Trade receivables are amounts due from customers for merchandise sold or services performed in the ordinary course of business. If collection is expected in one year or less (or in the normal operating cycle of the business if longer), they are classified as current assets. If not, they are presented as non-current assets.

Trade receivables are recognised initially at the transaction price. They are subsequently measured at transaction price less provision for impairment.The Group always recognises lifetime expected credit losses (ECL) for trade receivables, contract assets and lease receivables. The expected credit losses on these financial assets are estimated using a provision matrix based on the group’s historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current as well as the forecast direction of conditions at the reporting date, including time value of money where appropriate.

Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined using the average cost method.

The cost of finished goods and work in progress comprises direct materials and, where applicable, direct labour costs and those overheads that have been incurred in bringing the inventories to their present location and condition. At each reporting date, inventories are assessed for impairment. If inventory is impaired, the carrying amount is reduced to its selling price less costs to complete and sell; the impairment loss is recognised immediately in profit or loss.

2 Accounting policies (continued)

Trade payables
Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Accounts payable are classified as current liabilities if payment is due within one year or less (or in the normal operating cycle of the business if longer). If not, they are presented as non-current liabilities.

Trade payables are recognised initially at the transaction price and subsequently measured at amortised cost using the effective interest method.

Borrowings
All borrowings are initially recorded at the amount of proceeds received, net of transaction costs. Borrowings are subsequently carried at amortised cost, with the difference between the proceeds, net of transaction costs, and the amount due on redemption being recognised as a charge to the income statement over the period of the relevant borrowing.

Interest expense is recognised on the basis of the effective interest method and is included in finance costs.

Borrowings are classified as current liabilities unless the group has an unconditional right to defer settlement of the liability for at least 12 months after the reporting date.

Provisions
Provisions are recognised when the group has a present obligation (legal or constructive) as a result of a past event, it is probable that the group will be required to settle that obligation and a reliable estimate can be made of the amount of the obligation.

Provisions are measured at the directors' best estimate of the expenditure required to settle the obligation at the reporting date and are discounted to present value where the effect is material.

Share capital
Ordinary shares are classified as equity. Equity instruments are measured at the fair value of the cash or other resources received or receivable, net of the direct costs of issuing the equity instruments. If payment is deferred and the time value of money is material, the initial measurement is on a present value basis.

Dividends
Dividend distribution to the company's shareholders is recognised as a liability in the Company's financial statements in the period in which the dividends are approved by the company's shareholders.

2 Accounting policies (continued)

Financial instruments

Initial recognition
Financial assets and financial liabilities comprise all assets and liabilities reflected in the statement of financial position, although excluding property, plant and equipment, investment properties, intangible assets, deferred tax assets, prepayments, deferred tax liabilities and employee benefits plan.

The Group recognises financial assets and financial liabilities in the statement of financial position when, and only when, the Group becomes party to the contractual provisions of the financial instrument.

Financial assets are initially recognised at fair value. Financial liabilities are initially recognised at fair value, representing the proceeds received net of premiums, discounts and transaction costs that are directly attributable to the financial liability.

All regular way purchases and sales of financial assets and financial liabilities classified as fair value through profit or loss (“FVTPL”) are recognised on the trade date, i.e. the date on which the Group commits to purchase or sell the financial assets or financial liabilities. All regular way purchases and sales of other financial assets and financial liabilities are recognised on the settlement date, i.e. the date on which the asset or liability is received from or delivered to the counterparty. Regular way purchases or sales are purchases or sales of financial assets that require delivery within the time frame generally established by regulation or convention in the market place.

Subsequent to initial measurement, financial assets and financial liabilities are measured at either amortised cost or fair value.

Classification and measurement
Financial instruments are classified at inception into one of the following categories, which then determine the subsequent measurement methodology:

Financial assets are classified into one of the following three categories:
· financial assets at amortised cost;
· financial assets at fair value through other comprehensive income (FVTOCI); or
· financial assets at FVTPL.

Financial liabilities are classified into one of the following two categories:
· financial liabilities at amortised cost; or
· financial liabilities at FVTPL.

The classification and the basis for measurement are subject to the Group’s business model for managing the financial assets and the contractual cash flow characteristics of the financial assets, as detailed below:

Financial assets at amortised cost
A financial asset is measured at amortised cost if it meets both of the following conditions and is not designated as at FVTPL:
· the assets are held within a business model whose objective is to hold assets in order to collect contractual cash flows; and
· the contractual terms of the financial assets give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

If either of the above two criteria is not met, the financial assets are classified and measured at FVTOCI or FVTPL.

If a financial asset meets the amortised cost criteria, the Group may choose to designate the financial asset at FVTPL. Such an election is irrevocable and applicable only if the FVTPL classification significantly reduces a measurement or recognition inconsistency.

2 Accounting policies (continued)

Financial assets at fair value through other comprehensive income
A financial asset is measured at FVTOCI only if it meets both of the following conditions and is not designated as at FVTPL:
· the asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
· the contractual terms of the financial assets give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

On initial recognition of an equity investments that is not held for trading, the Group may irrevocably elect to present subsequent changes in fair value in OCI. This election is made on an investment-by-investment basis.

If an equity investment is designated as FVTOCI, all gains and losses, except for dividend income, are recognised in other comprehensive income and are not subsequently included in the statement of income.

Financial assets at fair value through the profit or loss
Financial assets not otherwise classified above are classified and measured as FVTPL.

Financial liabilities at amortised cost
All financial liabilities, other than those classified as financial liabilities at FVTPL, are measured at amortised cost using the effective interest rate method.

Financial liabilities at fair value through the profit or loss
Financial liabilities not measured at amortised cost are classified and measured at FVTPL. This classification includes derivative liabilities.

2 Accounting policies (continued)

Derecognition

Financial assets
The Group derecognises a financial asset when;
- the contractual rights to the cash flows from the financial asset expire,
- it transfers the right to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred; or
- the Group neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

On derecognition of a financial asset, the difference between the carrying amount of the asset and the sum of the consideration received is recognised as a gain or loss in the profit or loss.

Any cumulative gain or loss recognised in OCI in respect of equity investment securities designated as FVTOCI is not recognised in profit or loss on derecognition of such securities. Any interest in transferred financial assets that qualify for derecognition that is created or retained by the group is recognised as a separate asset or liability.

The Group enters into transactions whereby it transfers assets recognised on its statement of financial position, but retains either all or substantially all of risks and rewards of the transferred assets or a portion of them. In such cases, the transferred assets are not derecognised.

When the group derecognises transferred financial assets in their entirety, but has continuing involvement in them then the entity should disclose for each type of continuing involvement at the reporting date:

(a) The carrying amount of the assets and liabilities that are recognised in the entity’s statement of financial position and represent the entity’s continuing involvement in the derecognised financial assets, and the line items in which those assets and liabilities are recognised;

(b) The fair value of the assets and liabilities that represent the entity’s continuing involvement in the derecognised financial assets;

(c) The amount that best represents the entity’s maximum exposure to loss from its continuing involvement in the derecognised financial assets, and how the maximum exposure to loss is determined; and

(d) The undiscounted cash outflows that would or may be required to repurchase the derecognised financial assets or other amounts payable to the transferee for the transferred assets.

Financial liabilities
The Group derecognises a financial liability when its contractual obligations are discharged, cancelled, or expire.

Modification of financial assets and financial liabilities

Financial assets
If the terms of a financial asset are modified, the Group evaluates whether the cash flows of the modified asset are substantially different. If the cash flows are substantially different, then the contractual rights to the cash flows from the original financial asset are deemed to expire. In this case the original financial asset is derecognised and a new financial asset is recognised at either amortised cost or fair value.

If the cash flows are not substantially different, then the modification does not result in derecognition of the financial asset. In this case, the group recalculates the gross carrying amount of the financial asset and recognises the amount arising from adjusting the gross carrying amount as a modification gain or loss in the statement of income.

2 Accounting policies (continued)

Financial liabilities
If the terms of a financial liabilities are modified, the Group evaluates whether the cash flows of the modified asset are substantially different. If the cash flows are substantially different, then the contractual obligations from the cash flows from the original financial liabilities are deemed to expire. In this case the original financial liabilities are derecognised and new financial liabilities are recognised at either amortised cost or fair value.

If the cash flows are not substantially different, then the modification does not result in derecognition of the financial liabilities. In this case, the Group recalculates the gross carrying amount of the financial liabilities and recognises the amount arising from adjusting the gross carrying amount as a modification gain or loss in the statement of income.

Impairment of financial assets

Measurement of Expected Credit Losses
The Group recognises loss allowances for expected credit losses (ECL) on financial instruments that are not measured at FVTPL, namely:
- Financial assets that are debt instruments;
- Accounts and other receivables;
- Financial guarantee contracts issued; and
- Loan commitments issued.

The Group classifies its financial instruments into stage 1, stage 2 and stage 3, based on the applied impairment methodology, as described below:

Stage 1: for financial instruments where there has not been a significant increase in credit risk since initial recognition and that are not credit-impaired on origination, the Group recognises an allowance based on the 12-month ECL.

Stage 2: for financial instruments where there has been a significant increase in credit risk since initial recognition but they are not credit-impaired, the Group recognises an allowance for the lifetime ECL.

Stage 3: for credit-impaired financial instruments, the Group recognises the lifetime ECL.

The Group measures loss allowances at an amount equal to the lifetime ECL, except for the following, for which they are measured as a 12-month ECL:

- debt securities that are determined to have a low credit risk (equivalent to investment grade rating) at the reporting date; and
- other financial instruments on which the credit risk has not increased significantly since their initial recognition.

The Group considers a debt security to have low credit risk when their credit risk rating is equivalent to the globally understood definition of ‘investment grade’.

A 12-month ECL is the portion of the ECL that results from default events on a financial instrument that are probable within 12 months from the reporting date.

Provisions for credit-impairment are recognised in the statement of income and are reflected in accumulated provision balances against each relevant financial instruments balance.

Evidence that the financial asset is credit-impaired include the following;

- Significant financial difficulties of the borrower or issuer;
- A breach of contract such as default or past due event;
- The restructuring of the loan or advance by the Group on terms that the Group would not consider otherwise;
- It is becoming probable that the borrower will enter bankruptcy or other financial reorganisation;
- The disappearance of an active market for the security because of financial difficulties; or
- There is other observable data relating to a group of assets such as adverse changes in the payment status of borrowers or issuers in the Group, or economic conditions that correlate with defaults in the Group.

2 Accounting policies (continued)

For trade receivables, the Group applies the simplified approach, which requires expected lifetime losses to be recognised from initial recognition of the receivables.

To measure the expected credit losses, trade receivables and contract assets have been grouped based on shared credit risk characteristics and the days past due. The contract assets relate to unbilled work in progress and have substantially the same risk characteristics as the trade receivables for the same types of contracts. The Group has therefore concluded that the expected loss rates for trade receivables are a reasonable approximation of the loss rates for the contract assets.

The expected loss rates are based on the payment profiles of sales over a period of 36 month before 31 December 2021 and the corresponding historical credit losses experienced within this period. The historical loss rates are adjusted to reflect current and forward-looking information on macroeconomic factors affecting the ability of the customers to settle the receivables. The Group has identified the GDP and the unemployment rate of the countries in which it sells its goods and services to be the most relevant factors, and accordingly adjusts the historical loss rates based on expected changes in these factors.

Derivative financial instruments
Derivative financial instruments are contracts, the value of which is derived from one or more underlying financial instruments or indices, and include futures, forwards, swaps and options in the interest rate, foreign exchange, equity and credit markets.

Derivative financial instruments are recognised in the statement of financial position at fair value. Fair values are derived from prevailing market prices, discounted cash flow models or option pricing models as appropriate.

In the statement of financial position, derivative financial instruments with positive fair values (unrealised gains) are included as assets and derivative financial instruments with negative fair values (unrealised losses) are included as liabilities.

Hedge accounting
Derivatives held for risk management purposes include all derivative assets and liabilities that are not classified as trading assets and liabilities.

The group designates certain derivatives held for risk management as well as certain non-derivative financial instruments as hedging instruments in qualifying hedging relationships. On initial designation of the hedge, the group formally documents the relationship between the hedging instruments and hedge items, including the risk management objective and strategy in undertaking the hedge, together with the method that will be used to assess the effectiveness of the hedging relationship. The group makes an assessment, both at inception of the hedge relationship and on an ongoing basis, of whether the hedging instruments are expected to be highly effective in offsetting that changes in the fair value or cash flows of the respective hedged items during the period for which the hedge is designated.

2 Accounting policies (continued)

These hedging relationships are discussed below.

Cash flow hedges
The group makes an assessment for a cash flow hedge of a forecast transaction, of whether the forecast transaction is highly probable to occur and presents an exposure to variations in cash flows that could ultimately affect profit or loss.

When a derivative is designated as the hedging instrument in a hedge of the variability in cash flows attributable to a particular risk associated with a recognised asset or liability that could affect profit or loss, then the effective portion of changes in the fair value of the derivative is recognised in other comprehensive income ("OCI") and presented in the hedging reserve within equity. Any ineffective portion of changes in the fair value of the derivative is recognised immediately in profit or loss. The amount recognised in OCI is reclassified to profit or loss as a reclassification adjustment in the same period as the hedged cash flows affect profit or loss, and in the same line item in the statement of profit or loss and OCI.

If the hedging derivative expires or is sold, terminated or exercised, or the hedge no longer meets the criteria for cash flow hedge accounting, or the hedge designation is revoked, then hedge accounting is discontinued prospectively. However, if the derivative is novated to a central clearing counterparty by both parties as a consequence of laws or regulations without changes in its terms except for those that are necessary for the novation, then the derivative is not considered expired or terminated.

Accounting estimates and assumptions
The preparation of the financial statements requires management to make estimates and assumptions that affect the reported amounts of certain financial assets, liabilities, income and expenses.

The use of estimates and assumptions is principally limited to the determination of provisions for impairment, the valuation of financial instruments is explained in more detail below:

Provisions for impairment
In determining impairment of financial assets, judgement is required in the estimation of the amount and timing of future cash flows as well as an assessment of whether the credit risk on the financial asset has increased significantly since initial recognition and incorporation of forward-looking information in the measurement of ECL.

Fair value of financial assets and liabilities
Where the fair value of financial assets and liabilities cannot be derived from active markets, they are determined using a variety of valuation techniques that include the use of mathematical models. The input to these models is derived from observable markets where available, but where this is not feasible, a degree of judgement is required in determining assumptions used in the models. Changes in assumptions used in the models could affect the reported fair value of financial assets and liabilities.

- The split of operating and capital expenditure and the allocation of overheads to property, plant and equipment: The allocation of overheads to capital is derived from a detailed analysis of the costs and their cost drivers which is reviewed on annual basis. The percentage allocation of overheads across the work stream categories are obtained from section managers who are asked to provide reasoning and supporting evidence for the allocation. Finance then undertake a financial impact assessment review and the rationale to ensure it complies with IFRS. The amount of overheads capitalised in the year was £109.4 million (2022: £98.7 million).

3 Revenue & Segmental Analysis

The analysis of the Group's revenue for the year from continuing operations is as follows:

	2023 £ 000	2022 £ 000
Distribution revenue	842,703	881,954
Amortisation of deferred revenue	67,070	66,515
Contracting revenue	38,183	23,430
Meter asset rental	89,679	86,334
Gas revenue	36,771	98,202
Renewables revenue	45,937	15,527
Gain/(loss) on Renewables derivative	8,448	(24,318)
Other revenue	1,982	1,195
	1,130,773	1,148,839

The tables below represent the internal information provided to the President and Chief Executive Officer of the Group for the purposes of resource allocation and segmental performance appraisal. The Group operates in five principal areas of activity, those of the distribution of electricity, engineering contracting, gas exploration and smart meter rental in the United Kingdom & renewables in Australia.

Reportable segments are those that meet two or more of the following criteria under IFRS 8:
- Its reported revenue is 10% or more of the combined revenue of all segments;
- The absolute measure of its profit or loss is 10% or more of the combined reported profit; and
- Its assets are 10% or more of the combined assets of all segments.

NPg Northeast and NPg Yorkshire are aggregated into a single operating segment, "Distribution", as they have similar characteristics and are similar in the nature of their products and services, their processes, and the type of customer that utilise their products and services. The distribution segment includes distribution revenue and amortisation of deferred revenue listed above, all other revenue is included in "other" in the segmental analysis.

"Other revenue" comprises engineering contracting, hydrocarbon exploration, renewables, smart meter rental and business support units.

3 Revenue & Segmental Analysis (continued)

2023	Distribution £ 000	Other £ 000	Total £ 000
Revenue	909,773	221,000	1,130,773
Inter-segment sales	1,116	(1,116)	-
Total revenue	910,889	219,884	1,130,773
Operating profit	366,876	(90,585)	276,291
Other gains			3,106
Finance costs			(97,034)
Finance income			1,409
Profit before tax			183,772
Capital additions	500,865	84,198	585,063
Depreciation and amortisation	251,558	105,055	356,613
Amortisation of deferred revenue	(67,070)	-	(67,070)
Segment assets	7,261,930	950,726	8,212,656
Unallocated corporate assets			242,972
Total assets			8,455,628
Segment liabilities	(1,896,867)	(321,486)	(2,218,353)
Unallocated corporate liabilities			(2,971,034)
Total liabilities			(5,189,387)
Segment net assets	5,365,063	629,240	5,994,303
Unallocated net corporate liabilities			2,728,062
Total net assets			3,266,241

Unallocated corporate liabilities include loans and borrowings and taxation that are reviewed by the Chief Operating Decision Maker at a group level and are considered in the context of the performance of the overall group.

3 Revenue & Segmental Analysis (continued)

2022 (as restated)	Distribution £ 000	Other £ 000	Total £ 000
Revenue	948,469	200,370	1,148,839
Inter-segment sales	1,152	(1,152)	-
Total revenue	949,621	199,218	1,148,839
Operating profit	390,980	48,105	439,085
Other gains			1,354
Finance costs			(102,515)
Finance income			2,273
Profit before tax			340,197
Capital additions	465,238	421,846	887,084
Depreciation and amortisation	241,615	115,375	356,990
Amortisation of deferred revenue	(66,515)	-	(66,515)
Segment assets	7,000,644	1,149,778	8,150,421
Unallocated corporate assets			230,424
Total assets			8,380,845
Segment liabilities	(1,904,465)	(256,410)	(2,160,874)
Unallocated corporate liabilities			(2,911,880)
Total liabilities			(5,072,754)
Segment net assets	5,096,179	893,368	5,989,547
Unallocated net corporate liabilities			(2,681,456)
Total net assets			3,308,091

Sales to the E.ON group in 2023 of £116.5 million (2022: £186.5 million) and to British Gas plc in 2023 of £141.6 million (2022: £121.1 million) are included within the Distribution segment.

Contract assets arise where goods or services are transferred to the customer before the customer pays consideration, or before payment is due. All contract assets relate to engineering contracting work within Integrated Utility Services. Contracts in progress at statement of financial position date:

3 Revenue & Segmental Analysis (continued)

Assets recognised from costs to fulfil a contract with customers

	31 December 2023 £ 000	31 December 2022 £ 000
Contract costs incurred plus recognised profit less recognised losses to date	56,873	40,230
Less: progress billings	(49,821)	(34,406)
	7,052	5,824

At 31 December 2023, no retentions are held by customers for contract work (2022: £nil).

Advances received from customers for contract work amounted to £nil (2022: £nil).

The Company had no contract assets at 31 December 2023 (2022: £nil).

4 Other gains and losses

The analysis of the Group's other gains and losses for the year is as follows:

	2023 £ 000	2022 £ 000
Gain on disposal of property, plant and equipment	3,106	1,354

5 Operating profit

Arrived at after charging/(crediting)

	2023 £ 000	2022 £ 000
Depreciation expense	335,918	338,125
Depreciation on right of use assets	7,088	6,926
Amortisation expense	13,607	11,939
Impairment loss	129,000	-
Research and development	4,304	2,750
Trade and other receivables loss allowance	1,276	1,202
Amortisation of deferred revenue	(67,070)	(66,515)

Amortisation expense is included in administration costs within the statement of profit or loss on page 36.

More information on impairment is disclosed in Property, Plant and Equipment (Note 11).

6 Finance income and costs

	2023 £ 000	2022 £ 000
Finance income		
Other finance income	1,409	2,273
Finance costs		
Interest on bank overdrafts and borrowings	(99,210)	(108,787)
Interest expense on leases	(835)	(654)
Borrowing costs included in cost of qualifying asset	3,011	6,926
Total finance costs	(97,034)	(102,515)
Net finance costs	(95,625)	(100,242)

Borrowing costs included in the costs of qualifying assets during the year arose on the general borrowing pool and are calculated by applying a capitalisation rate of 3.02% within NPg Northeast (2022: 3.14%), 3.35% within NPg Yorkshire (2022: 3.28%) and 4.50% within oil and gas assets (2022: 4.50%).

7 Staff costs

Group

	2023 £ 000	(As restated) 2022 £ 000
Salaries	151,015	138,350
Social security costs	18,108	16,732
Defined benefit pension cost	(800)	7,490
Defined contribution pension cost	12,622	10,313
	180,945	172,885
Less capitalised to property, plant and equipment	(104,429)	(99,728)
	76,516	73,157

A large proportion of the Group's employees are members of the defined benefit scheme, details of which are given in the Employee Benefit Obligations Note 27.

The monthly average number of persons employed by the Group (including directors) during the year was as follows:

	2023 No.	2022 No.
Distribution	2,505	2,370
Engineering contracting	168	163
Hydrocarbon exploration and development	22	17
Other	13	14
	2,708	2,564

The Company had no employees in the years ended 31 December 2023 and 31 December 2022.

8 Directors' remuneration

The directors' remuneration for the year was as follows:

	2023 £	2022 £
Highest paid		
Short-term employee benefits	754,943	754,112
Other long-term benefits	513,244	798,882
	1,268,187	1,552,994
Total		
Short-term employee benefits	1,039,478	991,748
Post-retirement benefits - defined contribution	8,324	11,645
Other long-term benefits	604,048	901,619
	1,651,850	1,905,012
Post retirement benefits		
Directors who are members of a defined contribution scheme	2	2
Directors who are members of a defined benefit scheme	-	-

	2023 £	2022 £
Key personnel remuneration		
Short-term employee benefits	2,099,325	1,552,310
Post-retirement benefits - defined benefit	66,098	63,578
Post-retirement benefits - defined contribution	264,265	161,038
Other long-term benefits	501,400	502,178
	2,931,088	2,279,104

Other key personnel includes a number of senior functional managers who, whilst not board directors, have authority and responsibility for planning, directing and controlling activities of the Group.

9 Auditor's remuneration

The auditor's remuneration for the year was as follows:

	2023 £ 000	2022 £ 000
Fees payable to the auditor for audit of the Company's annual accounts	300	280
Fees payable to the auditor for audit of the Company's subsidiaries pursuant to legislation	1,114	792
Total audit fees	1,414	1,072
Audit of regulatory reporting	139	117
Other services	139	14
Total auditor's remuneration	1,692	1,203

Other services relate to non-statutory audit services including European Single Electronic Format ("ESEF") assurance, apprentice levy assurance, bond issuance and pensions.

10 Income tax

Tax charged in the income statement

	2023 £ 000	(As restated) 2022 £ 000
Current taxation		
UK corporation tax	78,632	60,814
UK corporation tax adjustment to prior periods	(893)	(1,082)
Petroleum revenue tax	(19)	(483)
	77,720	59,249
Deferred taxation		
Arising from origination and reversal of temporary differences	(28,485)	5,861
Deferred tax expense/(credit) from unrecognised temporary difference from a prior period	5,016	(7,985)
Deferred tax expense/(credit) relating to changes in tax rates or laws	722	3,431
Deferred Energy Profits Levy	(51,735)	70,702
Total deferred taxation	(74,482)	72,009
Tax expense in the income statement	3,238	131,258

10 Income tax (continued)

The tax on profit before tax for the year is lower than the standard rate of corporation tax in the UK (2022 - higher than the standard rate of corporation tax in the UK) of 19.00% to 31 March 2023 and 25% thereafter (2022 - 19.00%).

The differences are reconciled below:

	2023 £ 000	(As restated) 2022 £ 000
Profit before tax	183,772	340,197
Corporation tax at standard rate	43,224	64,637
Increase in deferred tax due to changes in tax rates or laws	722	3,431
Tax effect of result of joint venture entities	(54)	(192)
Decrease in current tax from adjustment for prior periods	(893)	(1,082)
Permanent differences (including non-taxable dividends)	(2,040)	3,191
Pension contributions recognised in other comprehensive income	2,656	893
Increase/(decrease) in deferred tax from adjustment for prior periods	5,016	(7,985)
Non-deductible interest	701	485
Current year and prior year tax losses which are not recognised for deferred tax	346	595
Petroleum revenue tax	212	(391)
Overseas taxes- non taxable foreign exchange	(624)	1,196
Release of deferred tax in respect to prior year holdover relief claims due to asset reinvestment	-	(2,889)
UK:UK transfer pricing adjustments	-	(442)
Difference in tax rates arising on ring fence trade	(12,289)	-
Deferred Energy Profits Levy	(51,735)	70,702
Deferred tax asset not recognised	41,838	(7,422)
Recognition of additional ring fence allowances	(23,115)	4,834
Benefit of overseas tax losses	609	-
Initial recognition exemption	(1,296)	2,109
Other tax effects for reconciliation between accounting profit and tax expense/(income)	(40)	(412)
Total tax charge	3,238	131,258

Finance Act 2024 confirmed that the corporation tax rate will remain at 25% from 1 April 2023 as previously enacted. Deferred tax balances are therefore measured at 25% at 31 December 2023 (after taking into account the estimated effect of timing differences which will reverse at the 19% rate prior to 1 April 2023).

There is no uncertainty over the acceptable income tax treatment. Should any uncertainties arise the Company will apply adopted amendments to IFRIC 23

10 Income tax (continued)

Amounts recognised in other comprehensive income

	2023		
	Before tax £ 000	**Tax (expense) benefit £ 000**	**Net of tax £ 000**
Gain/(loss) on cash flow hedges (net)	(8,652)	2,245	(6,625)
Foreign currency translation gains/(losses)	(7,982)	-	(7,982)
Remeasurements of post employment benefit obligations (net)	(14,200)	6,205	(7,995)
	(30,834)	8,450	(22,602)

	2022		
	Before tax £ 000	**Tax (expense) benefit £ 000**	**Net of tax £ 000**
Gain/(loss) on cash flow hedges (net)	22,195	(5,631)	16,564
Foreign currency translation gains/(losses)	(85)	-	(85)
Remeasurements of post employment benefit obligations (As restated)	(115,400)	29,743	(85,657)
	(93,290)	24,112	(69,178)

10 Income tax (continued)

Deferred tax

Group

Deferred tax movement during the year:

	At 1 January 2023 £ 000	Recognised in income £ 000	Recognised in other comprehensive income £ 000	At 31 December 2023 £ 000
Accelerated tax depreciation	418,286	(52,278)	-	366,008
Pension benefit obligations	27,734	2,130	(3,558)	26,306
Other items	980	5,265	(2,245)	4,000
Rollover/holdover relief	104	(61)	-	44
Losses	(109,184)	21,799	-	(87,385)
Energy Profits Levy	70,702	(51,735)	-	18,967
	408,622	(74,880)	(5,803)	327,940

	At 1 January 2022 £ 000	Recognised in income £ 000	Recognised in other comprehensive income £ 000	At 31 December 2022 £ 000
Accelerated tax depreciation	402,511	15,775	-	418,286
Pension benefit obligations	55,431	1,153	(28,850)	27,734
Other items	(4,752)	101	5,631	980
Rollover/holdover relief	2,993	(2,889)	-	104
Losses	(96,350)	(12,834)	-	(109,184)
Energy Profits Levy	-	70,702	-	70,702
	359,833	72,008	(23,219)	408,622

Also included on the Statement of Financial Position is a deferred PRT balance of £143k (2022: £754k).

10 Income tax (continued)

The other deferred tax liability of £4.0m (2022: £1.0m) includes the deferred tax impact of cash flow hedges, provisions and employee benefits which are deductible on a paid basis. Within pension benefit obligations the movement in the year represents deferred tax on the movement in retirement benefit obligation/asset. A proportion of the movement has been capitalised in property, plant and equipment.

The Energy Profits Levy ("EPL") was introduced from 26 May 2022 to apply a 25% levy on profits earned from the production of UK oil and gas from 26 May 2022 to 31 March 2025. The EPL was subsequently increased to 35% from 1 January 2023 and extended to 31 March 2028. The deferred tax liability of the Group includes a deferred EPL liability of £19.0m which has been measured at 35%.

The Spring Budget 2024 announced a further extension of the EPL rules to 31 March 2029 however as this is not yet enacted legislation, no impact of the extension is included in the accounts.

The Company had no deferred tax liability as at 31 December 2023 (2022: £nil).

A subsidiary included a group relief claim from a Berkshire Hathaway group company for losses of £90.6m within its corporation tax return for the year ended 31 December 2015, the parties agreed a discounted payment for these losses. This would give rise to a potential tax asset to recognise in the Group of £6.8m. However, this tax asset has not been recognised to date on the basis the surrendering company was dissolved prior to the formal group relief surrender being made and as a result the surrenderers previous shareholder is currently in ongoing discussions with HM Revenue & Customs to establish and agree a mechanism which will permit a valid group relief surrender of the losses which meets the requirements of the tax legislation. There has been no significant progress on these discussions in the past 12 months but this is continually monitored by the Group on a regular basis.

In May 2023, the IASB issued International Tax Reform - Pillar Two Model Rules - Amendments to IAS 12 Income Taxes to clarify the application of IAS 12 to tax legislation enacted or substantively enacted to implement Pillar Two. The amendments include a mandatory temporary exception from accounting for deferred tax on such tax law. The amendments were adopted by the UK in July and the temporary exception has been applied by the Group at 31 December 2023.

The Group is affected by Pillar Two legislation. The overall impact is not fully known or reasonably estimable as of December 2023. Safe harbor analyses in accordance with Pillar Two guidance have been conducted based on available 2022 country-by-country data at a jurisdictional level. The Group will continue to assess and monitor its exposure to Pillar Two taxes on a jurisdiction-by-jurisdiction basis, however, does not expect Pillar Two taxes to have a material impact on the Group’s financial statements.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the group intends to settle its current tax assets and liabilities on a net basis.

There is an unrecognised deferred tax asset of £72.8m (2022: £21.3m) in relation to the tax attributes of a group company's hydrocarbon exploration projects as at 31 December 2023. This position will be re-assessed at the end of the next reporting period. There is no expiration date of these losses.

11 Property, plant and equipment

Group

	Land and buildings £ 000	Distribution system £ 000	Metering equipment £ 000	Oil & gas assets £ 000	Furniture, fittings and equipment £ 000	Renewables £ 000	Total £ 000
Cost or valuation							
At 1 January 2022	8,404	8,959,283	568,364	272,728	109,119	-	9,917,898
Additions	-	442,922	53,266	90,075	10,560	276,278	873,101
Disposals	-	(30,801)	(35,845)	-	-	-	(66,646)
Foreign exchange movements	-	-	-	277	-	-	277
At 31 December 2022	8,404	9,371,404	585,785	363,080	119,679	276,278	10,724,630
At 1 January 2023	8,404	9,371,404	585,785	363,080	119,679	276,278	10,724,630
Additions	-	473,545	65,772	15,188	12,981	-	567,486
Disposals	-	(21,259)	(25,530)	-	(163)	-	(46,952)
Foreign exchange movements	-	-	-	(364)	-	(14,678)	(15,042)
At 31 December 2023	8,404	9,823,690	626,027	377,904	132,497	261,600	11,230,122
Depreciation							
At 1 January 2022	5,615	2,466,564	304,825	15,866	95,949	-	2,888,819
Charge for year	108	222,639	52,843	52,807	5,791	3,937	338,125
Eliminated on disposal	-	(30,801)	(33,547)	-	-	-	(64,348)
At 31 December 2022	5,723	2,658,402	324,121	68,673	101,740	3,937	3,162,596

11 Property, plant and equipment (continued)

	Land and buildings £ 000	Distribution system £ 000	Metering equipment £ 000	Oil & gas assets £ 000	Furniture, fittings and equipment £ 000	Renewables £ 000	Total £ 000
At 1 January 2023	5,723	2,658,402	324,121	68,673	101,740	3,937	3,162,596
Charge for the year	181	234,039	52,027	32,919	7,165	9,587	335,918
Eliminated on disposal	-	(21,259)	(24,567)	-	(163)	-	(45,989)
Impairment	-	-	-	129,000	-	-	129,000
At 31 December 2023	5,904	2,871,182	351,581	230,592	108,742	13,524	3,581,525
Carrying amount							
At 31 December 2022	2,681	6,713,002	261,664	294,407	17,939	272,341	7,562,034
At 31 December 2023	2,500	6,952,508	274,446	147,312	23,755	248,076	7,648,597

11 Property, plant and equipment (continued)

During the year it was confirmed that the Southwark field is unlikely to ever support commercial development. This is a result of a reduction in expected reserves and high rates of associated water at the Southwark field.

Following this impairment indicator being identified an impairment review has been performed for the Saturn Banks phase 1 CGU and an impairment loss of £129m has been recognised through administrative expenses in the other segment. This impairment has been recognised within oil and gas assets within property, plant and equipment.

In performing an impairment review, the recoverable amount of £120m as at 31 December 2023 was based on value in use and was determined at a CGU level, being that of Saturn Banks Phase 1 assets. In determining the value in use for the CGU, the cash flows were discounted at a rate of 9% (2022: 10%) on a pre-tax basis. Furthermore, while volumes have been adjusted to reflect management's assessment of future risks thereon, the impairment model assumes a continuation of the political and regulatory environment prevailing as at the balance sheet date; any changes to the regulatory environment governing the production of hydrocarbons within the North Sea could have a material effect on the carrying value of assets within the Saturn Banks Phase 1 CGU in future years.

The Group has conducted an analysis of the sensitivity of the impairment test to changes in the key assumptions used to determine the recoverable amount for the CGU. Note 2 provides further detail regarding the assumptions adopted.

- Gas prices - A 10% reduction in gas prices would result in a further impairment charge of £7.9m.
- Production volumes - A 10% reduction in gas prices would result in a further impairment charge of £7.9m.
- Discount rates - A rise in the discount rate to 10% (i.e., +1%) would result in a further impairment of £7.3m
- Tariff prices - A 10% reduction in tariff prices would result in a further impairment charge of £12m.
- Tariff volumes - A 10% reduction in tariff volumes would result in a further impairment charge of £12.5m.

11 Property, plant and equipment (continued)

Expenditure recognised in the carrying amount of property, plant and equipment in the course of construction was as follows:

	31 December 2023 £ 000	31 December 2022 £ 000
Distribution system	479,859	432,483
Oil and gas assets	-	127,800
	479,859	560,283

Contractual commitments for the acquisition of property, plant and equipment were as follows:

	31 December 2023 £ 000	31 December 2022 £ 000
Distribution system	84,473	65,959

12 Right of use assets

Group

	Fleet £ 000	Property £ 000	Land £ 000	Total £ 000
Cost or valuation				
At 1 January 2022	29,183	7,395	1,923	38,501
Additions	5,519	-	8,277	13,796
Disposals	(2,831)	-	-	(2,831)
At 31 December 2022	31,871	7,395	10,200	49,466
Additions	2,729	-	650	3,379
Disposals	(2,214)	(181)	-	(2,395)
At 31 December 2023	32,386	7,214	10,850	50,450
Depreciation				
At 1 January 2022	11,851	2,454	91	14,396
Charge for year	5,721	977	227	6,925
Eliminated on disposal	(2,831)	-	-	(2,831)
At 31 December 2022	14,741	3,431	318	18,490
Charge for the year	5,428	977	683	7,088
Eliminated on disposal	(2,214)	(181)	-	(2,395)
At 31 December 2023	17,955	4,227	1,001	23,183
Carrying amount				
At 31 December 2023	14,431	2,987	9,849	27,267
At 31 December 2022	17,130	3,964	9,882	30,976

Within the Land additions for the prior year, 96.5% (£7,985k) of these relate to additions through acquisitions in the year.

13 Intangible assets

Group

	Goodwill £ 000	Software development £ 000	Oil & Gas exploration £ 000	Total £ 000
Cost or valuation				
At 1 January 2022	248,843	180,260	79,328	508,431
Additions	-	9,961	4,022	13,983
At 31 December 2022	248,843	190,221	83,350	522,414
At 1 January 2023	248,843	190,221	83,350	522,414
Additions	-	14,422	3,155	17,577
Disposals	-	-	(61,425)	(61,425)
At 31 December 2023	248,843	204,643	25,080	478,566
Amortisation				
At 1 January 2022	-	131,328	79,178	210,506
Amortisation charge	-	11,516	423	11,939
At 31 December 2022	-	142,844	79,601	222,445
At 1 January 2023	-	142,844	79,601	222,445
Amortisation charge	-	11,204	2,403	13,607
Amortisation eliminated on disposals	-	-	(61,425)	(61,425)
At 31 December 2023	-	154,048	20,579	174,627
Carrying amount				
At 31 December 2023	248,843	50,595	4,501	303,939
At 31 December 2022	248,843	47,377	3,749	299,969

During the year the amount of contractual commitments for the acquisition of intangible assets amounted to £4.1 million (2022: £2.3m).

Disposals of oil & gas exploration costs and accumulated amortisation is in relation to interests in licenses that the Group no longer intends to take forward for development.

13 Intangible assets (continued)

Goodwill

All the goodwill arose on the acquisition of Yorkshire Power Group Limited prior to the adoption of IFRS by the Group. In accordance with the transitional rules on first time adoption, the allocation of goodwill to cash generating units ("CGU") has not been reassessed from that used in the previous UK GAAP accounts.

The Group's distribution activities comprise two cash generating units ("CGUs") with carrying values as follows:

	2023 £ m	2022 £ m
Northern Powergrid (Northeast) plc	2,352	2,277
Northern Powergrid (Yorkshire) plc (including Goodwill)	3,398	3,254
	5,750	5,531

The carrying values of the CGUs comprise tangible and intangible assets with finite lives and are net of deferred revenues. In addition, the Northern Powergrid (Yorkshire) plc CGU includes goodwill of £248.8m (2022: £248.8m).

The Group tests goodwill annually for impairment or more frequently if there are indications that goodwill might be impaired.

The recoverable amounts of the CGUs are determined from fair value less costs of disposal calculations with reference to recent market transactions for similar assets. The key assumptions for the calculations are those regarding the premium to RAV.

The RAV premia used to determine the fair value was assessed against the RAV premia implicit in comparable market transactions. The fair value measurement is categorised as Level 2 in the fair value hierarchy.

The current carrying value of the Northern Powergrid (Yorkshire) plc CGU is at 1.29 times premia to RAV and the Northern Powergrid (Northeast) plc CGU is 1.21 times premia to RAV. We have noted a transaction of 1.61 times premia to RAV which provides an external benchmark that our internal valuation is supportable. We have utilised an estimated RAV as at 31 March 2023 of £1,958m for Northern Powergrid (Northeast) plc and £2,650m for Northern Powergrid (Yorkshire) plc.

The application of these assumptions did not give rise to an impairment charge in 2023 (2022: £nil).

The below analysis provides the headroom on our base case assessment of 1.6 times premia to RAV along with a 5% downside sensitivity.

The sensitivity of changes in the assumptions used in the impairment calculation is:

RAV premium sensitivity	Variable used	Fair value £ 000	Headroom/ (Impairment) £ 000
Base case:			
Northern Powergrid (Northeast) plc	60%	3,366	1,014
Northern Powergrid (Yorkshire) plc	60%	4,352	954
Downside 5% RAV premium reduction:			
Northern Powergrid (Northeast) plc	55%	3,271	919
Northern Powergrid (Yorkshire) plc	55%	4,221	823

14 Investments

	Investment in joint ventures £ 000	Investment in associate £ 000	Share in other undertakings £ 000	Total £ 000
At 1 January 2022	3,877	-	21	3,898
Additions	-	894	-	894
Profit from investments	1,011	(894)	-	117
Dividends paid by investments	(927)	-	-	(927)
At 31 December 2022	3,961	-	21	3,982
Additions	-	796	-	796
Profit/(loss) from investments	266	(796)	-	(530)
Dividends paid by investments	(615)	-	-	(615)
At 31 December 2023	3,612	-	21	3,633

Summary of the Company investments

	31 December 2023 £ 000	31 December 2022 £ 000
Investments in subsidiaries	376,289	376,289

14 Investments (continued)

Group subsidiaries
Details of the Group subsidiaries as at 31 December 2023 are as follows:

Name of subsidiary	Principal activity	Registered office and country of incorporation	Proportion of ownership interest and voting rights held 2023	2022
Northern Powergrid UK Holdings*	Holding company	England and Wales	99%	99%
Yorkshire Power Group Limited	Holding Company	England and Wales	99%	99%
CalEnergy Gas Limited	Hydrocarbon exploration and development	3rd floor, 55 Drury Lane, London, WC2B 5SQ, England and Wales	100%	100%
CalEnergy Gas (Holdings) Limited*	Holding company	England and Wales	100%	100%
CalEnergy Resources Limited	Holding company	England and Wales	100%	100%
CalEnergy Resources Poland Sp. zo.o	Hydrocarbon exploration and development	AL. Wilanowska 206 app. 19, 02-765, Warsaw, Poland	100%	100%
CalEnergy Resources (Australia) Limited	Hydrocarbon exploration and development	3rd Floor, 55 Drury Lane, London, WC2B 5SQ, England and Wales	100%	100%
CE Electric Services Limited	Dormant	England and Wales	100%	100%
Central Powergrid Limited	Dormant	England and Wales	100%	100%
East PowerGrid Limited	Dormant	England and Wales	100%	100%
Eastern PowerGrid Limited	Dormant	England and Wales	100%	100%
Infrastructure North Limited	Dormant	England and Wales	100%	100%
Integrated Utility Services Limited	Engineering contracting services	England and Wales	100%	100%
Integrated Utility Services Limited	Engineering contracting services	C11 Gateway, Rosemount Business Park, Ballycoolin, Dublin 15, Ireland	100%	100%
IUS Limited	Dormant	England and Wales	100%	100%
Midlands PowerGrid Limited	Dormant	England and Wales	100%	100%
NEDL Limited	Dormant	England and Wales	100%	100%
North East PowerGrid Limited	Dormant	England and Wales	100%	100%
North Eastern Powergrid Limited	Dormant	England and Wales	100%	100%
North PowerGrid Limited	Dormant	England and Wales	100%	100%

14 Investments (continued)

Name of subsidiary	Principal activity	Registered office and country of incorporation	Proportion of ownership interest and voting rights held 2023	2022
North West PowerGrid Limited	Dormant	England and Wales	100%	100%
North Western PowerGrid Limited	Dormant	England and Wales	100%	100%
Northern Electric Distribution Limited	Dormant	England and Wales	100%	100%
Northern Electric Finance plc	Finance company	England and Wales	100%	100%
Northern Electric plc**	Holding company	England and wales	100%	100%
Northern Electric Properties Limited*	Property holding and management company	England and Wales	100%	100%
Northern Electric Share Scheme Trustee Limited	Dormant	England and Wales	100%	100%
Northern Electricity (North East) Limited	Dormant	England and Wales	100%	100%
Northern Electricity (Yorkshire) Limited	Dormant	England and Wales	100%	100%
Northern Electricity Limited	Dormant	England and Wales	100%	100%
Northern Electricity Networks Company (North East) Limited	Dormant	England and Wales	100%	100%
Northern Electricity Networks Company (Yorkshire) Limited	Dormant	England and Wales	100%	100%
Northern Electricity Networks Company Limited	Dormant	England and Wales	100%	100%
Northern Electrics Limited	Dormant	England and Wales	100%	100%
Northern Energy Funding Company Limited	Dormant	England and Wales	100%	100%
Northern Metering Services Limited	Dormant	England and Wales	100%	100%
Northern Powergrid Gas Limited*	Holding company	England and Wales	100%	100%
Northern Powergrid Limited	Holding company	England and Wales	100%	100%
Northern Powergrid Metering Limited	Meter asset provider	England and Wales	100%	100%
Northern Powergrid (Northeast) plc	Distribution of electricity	England and Wales	100%	100%
Northern PowerGrid (North West) Limited	Dormant	England and Wales	100%	100%
Northern Powergrid (Yorkshire) plc	Distribution of electricity	England and Wales	100%	100%

14 Investments (continued)

Name of subsidiary	Principal activity	Registered office and country of incorporation	Proportion of ownership interest and voting rights held 2023	2022
Northern Power Networks Company (North East) Limited	Dormant	England and Wales	100%	100%
NewGen Drilling Pty Limited	Hydrocarbon exploration and development	Level 1, 12 St Georges Terrace, Perth, W A 6000, Australia	80%	80%
Northern Power Networks Company (Yorkshire) Limited	Dormant	England and Wales	100%	100%
Northern Powergrid Networks Company Limited	Dormant	England and Wales	100%	100%
Northern Transport Finance Limited	Car finance company	England and Wales	100%	100%
Northern Utility Services Limited	Dormant	England and Wales	100%	100%
PowerGrid (Central) Limited	Dormant	England and Wales	100%	100%
PowerGrid (East) Limited	Dormant	England and Wales	100%	100%
PowerGrid (Eastern) Limited	Dormant	England and Wales	100%	100%
PowerGrid (Midlands) Limited	Dormant	England and Wales	100%	100%
PowerGrid (North East) Limited	Dormant	England and Wales	100%	100%
PowerGrid (North Eastern) Limited	Dormant	England and Wales	100%	100%
PowerGrid (North West) Limited	Dormant	England and Wales	100%	100%
PowerGrid (North Western) Limited	Dormant	England and Wales	100%	100%
PowerGrid (North) Limited	Dormant	England and Wales	100%	100%
PowerGrid (Northern) Limited	Dormant	England and Wales	100%	100%
PowerGrid (South East) Limited	Dormant	England and Wales	100%	100%
PowerGrid (South Eastern) Limited	Dormant	England and Wales	100%	100%
PowerGrid (South West) Limited	Dormant	England and Wales	100%	100%
PowerGrid (South Western) Limited	Dormant	England and Wales	100%	100%
PowerGrid (South) Limited	Dormant	England and Wales	100%	100%
PowerGrid (Southern) Limited	Dormant	England and Wales	100%	100%
PowerGrid (West) Limited	Dormant	England and Wales	100%	100%

14 Investments (continued)

Name of subsidiary	Principal activity	Registered office and country of incorporation	Proportion of ownership interest and voting rights held 2023	2022
Powergrid (Western) Limited	Dormant	England and Wales	100%	100%
PowerGrid (Yorkshire) Limited	Dormant	England and Wales	100%	100%
South East PowerGrid Limited	Dormant	England and Wales	100%	100%
South Eastern PowerGrid Limited	Dormant	England and Wales	100%	100%
South PowerGrid Limited	Dormant	England and Wales	100%	100%
South West PowerGrid Limited	Dormant	England and Wales	100%	100%
South Western PowerGrid Limited	Dormant	England and Wales	100%	100%
Southern PowerGrid Limited	Dormant	England and Wales	100%	100%
West PowerGrid Limited	Dormant	England and Wales	100%	100%
Western Powergrid Limited	Dormant	England and Wales	100%	100%
YEDL Limited	Dormant	England and Wales	100%	100%
Yorkshire Electricity Distribution Limited	Dormant	England and Wales	100%	100%
Yorkshire Electricity Group plc	Finance company	England and Wales	100%	100%
Yorkshire Power Finance Limited	Finance company	PO Box 309, Ugland House, SOuth Church Street, George Town, Grand Cayman, Cayman Islands	100%	100%
Yorkshire Powergrid Limited	Dormant	England and Wales	100%	100%
CalEnergy Resources (UK) Limited	Hydrocarbon exploration and development	England and Wales	100%	100%
Canadian Solar Investment Trust	Holdings company	Australia	100%	100%
Suntop Holding Trust	Holdings company	Australia	100%	100%
Guneddah Holding Trust	Holdings company	Australia	100%	100%
Suntop Asset Trust	Asset trust	Australia	100%	100%
Gunnedah Asset Trust	Asset trust	Australia	100%	100%
Canadian Solar Investment Management Pty Ltd	Investment management	Australia	100%	100%
Suntop Holdco Pty Ltd	Trustee	Australia	100%	100%
Suntop SF Pty Ltd	Trustee	Australia	100%	100%

14 Investments (continued)

Name of subsidiary	Principal activity	Registered office and country of incorporation	Proportion of ownership interest and voting rights held 2023	2022
Suntop Finco Pty Ltd	Finance company	Australia	100%	100%
Canadian Solar Investments Holdco Pty	Holdings company	Australia	100%	100%
Candian Solar Investments Finco Pty Ltd	Finance company	Australia	100%	100%
Gunnedah Holdco Pty Ltd	Trustee	Australia	100%	100%
Gunnedah SF Pty Ltd	Trustee	Australia	100%	100%
Gunnedah Finco Pty Ltd	Finance company	Australia	100%	100%
Northern Powergrid Foundation***			100%	100%

The class of shares held in the above subsidiaries are ordinary shares.

*These companies have taken advantage of s479A Companies Act exemption from audit. Their Company registration numbers are:

• Northern Powergrid UK Holdings (03270696);
• CalEnergy Gas (Holdings) Limited (02772202);
• Northern Electric Properties Limited (02522939); and
• Northern Powergrid Gas Limited (04328138).

**The Group also owns 69% of the Northern Electric plc cumulative preference shares. The terms of the cumulative preference shares are contained in the Financial Statements of Northern Electric plc.

Unless otherwise stated the registered office of the above companies is: Lloyds Court, 78 Grey Street, Newcastle upon Tyne, Tyne and Wear, NE1 6AF.

Northern Powergrid UK Holdings is a direct subsidiary of the Group. All of the other above companies are indirect subsidiaries. The class of shares related to the above companies are ordinary shares.

Group associates

14 Investments (continued)

Details of the Group associates as at 31 December 2023 are as follows:

Name of associate	Principal activity	Registered office	Proportion of ownership interest and voting rights held by the Group 2023	2022
Baltic Gas Sp. Z o.o	General partner in Baltic Gas project	ul. Stary Dwor 9, 80-758 Ddansk, Poland	50%	50%
Baltic Gas Sp. Z o.o. i Wspolnicy Spolka Komandytowa	Hydrocarbon exploration and development	ul. Stary Dwor 9, 80-758 Gdansk, Poland	50%	50%

The class of shares held in the above associates are ordinary shares.

14 Investments (continued)

Summarised financial information in respect of the Group's joint venture is set out below:

Group joint ventures
Details of the Group joint ventures as at 31 December 2023 are as follows:

Name of Joint-ventures	Principal activity	Registered office	Proportion of ownership interest and voting rights held by the Group 2023	2022
Vehicle Lease and Service Limited	Transport services	Centre for Advanced Industry, 3rd floor, Coble Dene, North Shields, NE29 6DE, England and Wales	50%	50%
VLS Limited	Dormant	Centre for Advanced Industry, 3rd Floor, Coble Dene, North Shields, NE29 6DE, England and Wales	50%	50%

The class of shares held in the above joint ventures are ordinary shares.

Joint ventures and associates are not strategic to the Group’s activities.

14 Investments (continued)

Summarised financial information in respect of the Group's joint venture is set out below:

	31 December 2023 £ 000	31 December 2022 £ 000
Net assets	7,152	7,922
Group's share of net assets	3,576	3,961
Revenue	19,512	20,615
Profit for the year	532	2,022
Group's share of profit for the year	266	1,011

Accounted for using the equity method.

15 Inventories

	Group		Company	
	31 December 2023 £ 000	31 December 2022 £ 000	31 December 2023 £ 000	31 December 2022 £ 000
Raw materials and consumables	31,548	24,968	-	-
Generation credits	2,892	5,865	-	-
Work in progress	1,947	1,345	-	-
Vehicle inventory	635	331	-	-
	37,022	32,509	-	-

16 Trade and other receivables

	Group		Company (As restated)	
	31 December 2023 £ 000	31 December 2022 £ 000	31 December 2023 £ 000	31 December 2022 £ 000
Distribution use of system receivables and accrued income*	131,903	131,236	-	-
Engineering contracting receivables	7,755	10,562	-	-
Trade receivables	57,769	56,823	-	-
Finance lease receivable	3,858	3,968	-	-
Loss allowance	(16,371)	(17,102)	-	-
Net trade receivables	184,914	185,487	-	-
Prepayments	15,774	12,539	-	-
Other receivables	154	1,479	-	-
	200,842	199,505	-	-
Non-current trade receivables	-	-	248,652	264,117
Non-current finance lease receivable	6,463	4,087	-	-
	207,305	203,592	248,652	264,117

* *Accrued income in 2023 was £72.m (2022: £80.5m).*

The average credit period on receivables is 30 days. No interest is charged on outstanding trade receivables.

The Group always measures the loss allowance for trade receivables at an amount equal to lifetime expected credit loss. The expected credit losses on trade receivables are estimated using a provision matrix by reference to past default experience of the debtor and an analysis of the debtor's current financial position, adjusted for factors that are specific to the debtors, general economic conditions of the industry in which the debtors operate and an assessment of both the current as well as the forecast direction of conditions at the reporting date.

There has been no change in the estimation techniques or significant assumptions made during the current reporting period.

The Group writes off a trade receivable when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery, e.g. when the debtor has been placed under liquidation or has entered into bankruptcy proceedings. None of the trade receivables that have been written off is subject to enforcement activities.

As the Group's historical credit loss experience does shows significantly different loss patterns for different customer segments, the provision for loss allowance based on past due status is distinguished as follows:

- Distribution businesses: DUoS receivables, damages receivables, and other receivables;
- Metering: contracted meters, contracted churn, and non-contracted churn; and
- Engineering contracting.

The movement in the loss allowance was as follows:

16 Trade and other receivables (continued)

	2023 £ 000	2022 £ 000
At 1 January	17,102	16,221
Amounts utilised/written off in the year	(2,007)	(321)
Amounts recognised in the income statement	1,276	1,202
At 31 December	16,371	17,102

The loss allowance is made on amount due net of VAT which would be recoverable from His Majesty's Revenue and Customs when the debt is written off.

Significant increase in credit risk

In assessing whether the credit risk on a financial instrument has increased significantly since initial recognition, the Group compares the risk of a default occurring on a financial instrument at the reporting date with the risk of a default occurring on the financial instrument at the date of initial recognition. In making this assessment the Company considers historical experience as well as forward-looking information that is available without undue cost or effort. Forward-looking information includes the future prospects of the industries in which the Group's debtors operate obtained from economic expert reports, financial analysts, government bodies, relevant think-tanks and other similar organisations. In particular the following information is taken into account when assessing whether credit risk has increased significantly since initial recognition:

- existing or forecast adverse changes in business, financial or economic conditions that are expected to cause a significant decrease in the debtor's ability to meet its debt obligations;
- an actual or expected significant deterioration in the operating results of the debtor;
- significant increases in credit risk on other financial instruments of the same debtor; and
- an actual or expected significant adverse change in the regulatory, economic, or technological environment of the debtor that results in a significant decrease in the debtor's ability to meet its debt obligations.

16 Trade and other receivables (continued)

Distribution use of system receivables

The customers served by the Group's distribution network are supplied predominantly by a number of electricity supply businesses (circa 110) with the E.ON group accounting for approximately 12.2% of distribution revenues in 2023 (2022: 21.7%) and British Gas plc accounting for approximately 14.8% of distribution revenues in 2023 (2022: 14.1%). Ofgem under Code Governance arrangements, set out a framework known as Credit Cover within the Distribution Connection and Use of System Agreement (DCUSA), which sets credit limits for each supply business based on its credit rating (taken from a credit agency). If no score is available, then they can build up their credit limit through good payment history. In addition, suppliers can provide other forms of collateral to cover their value at risk (measured as being equivalent to 45 days usage) or if their credit rating alone is not sufficient to cover their value at risk. Acceptable collateral typically is provided in the form of a parent company guarantee, letter of credit, cash or an escrow account.

Provided the Group has implemented credit control, billing and collection processes in line with best practice guidelines and can demonstrate compliance with the guidelines or is able to satisfactorily explain departure from the guidelines, any losses arising from supplier default will be recovered through an increase in future allowed income.

The following is the expected credit loss for receivables and accrued income past due:

2023	Not due £ 000	Current £ 000	1-3 months £ 000	>3 months £ 000
Total balance	71,980	52,866	79	6,978
Less specific provisions	-	(275)	-	(6,925)
Balance eligible for ECL	71,980	52,591	79	53
Lifetime ECL	0%	2%	2%	2%
Expected credit loss	-	1,052	2	1

2022	Not due £ 000	Current £ 000	1-3 months £ 000	>3 months £ 000
Total balance	80,516	61,476	89	6,984
Less specific provisions	-	(48)	(10)	(6,967)
Balance eligible for ECL	80,516	61,428	79	17
Lifetime ECL	0%	0%	0%	0%
Expected credit loss	-	-	-	-

16 Trade and other receivables (continued)

Other distribution trade receivables

Sales of goods and services comprise all income streams which are not classified as UoS income. Examples of non-UoS income streams would be service alterations/disconnections, assessment and design fees, and recovery of amounts for damage caused by third parties to the distribution system. The average credit period on sales of goods and services is 30 days. Interest is not generally charged on the trade receivables paid after the due date.

The following is the expected credit loss for receivables past due:

Damages receivables

2023	0-6 months £ 000	6-12 months £ 000	1-2 years £ 000	2-3 years £ 000	Over 3 year £ 000
Total balance	3,024	1,083	2,181	1,486	211
Less specific provisions	(457)	(146)	(1,025)	(1,055)	(32)
Balance eligible for ECL	2,567	937	1,156	431	179
Lifetime ECL	20%	25%	30%	40%	80%
Expected credit loss	513	234	347	172	143

2022	0-6 months £ 000	6-12 months £ 000	1-2 years £ 000	2-3 years £ 000	Over 3 year £ 000
Total balance	3,076	2,002	1,321	384	307
Less specific provisions	(156)	(80)	(520)	(86)	(234)
Balance eligible for ECL	2,920	1,922	801	298	73
Lifetime ECL	20%	25%	30%	40%	80%
Expected credit loss	584	481	240	119	58

16 Trade and other receivables (continued)

Non-damages receivables

2023	Not due £ 000	Current £ 000	1-6 months £ 000	6-12 months £ 000	Over 1 year £ 000
Total balance	379	1,164	1,510	902	1,748
Less specific provisions	(8)	-	-	(4)	(172)
Balance eligible for ECL	371	1,164	1,510	898	1,576
Lifetime ECL	0%	0%	0%	50%	85%
Expected credit loss	-	-	-	449	1,340

2022	Not due £ 000	Current £ 000	1-6 months £ 000	6-12 months £ 000	Over 1 year £ 000
Total balance	762	699	1,911	569	872
Less specific provisions	-	-	-	-	-
Balance eligible for ECL	762	699	1,911	569	872
Lifetime ECL	0%	0%	0%	50%	88%
Expected credit loss	-	-	-	285	767

Meter asset provision

Included in trade receivables are balances relating to the provision of meters through Northern Powergrid Metering Limited. The average credit period on these receivables is 30 days. Interest is not generally charged on receivables paid after the due date.

The Group writes off a trade receivable when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery, e.g. when the debtor has been placed under liquidation or has entered into bankruptcy proceedings, or when the debtor is over 1 year past due. None of the trade receivables that have been written off is subject to enforcement activities.

For receivables where there is no specific provisions, a provision is made for debts past their due date based on lifetime expected credit loss determined by reference to past default experience. The following is the expected credit loss for receivables past due:

Contracted

2023	Current £ 000	1-3 months £ 000	3-6 months £ 000	6-12 months £ 000	Over 1 year £ 000
Total balance	7,604	1,833	10	-	-
Lifetime ECL	0%	10%	50%	100%	100%
Expected credit loss	-	183	5	-	-

2022	Current £ 000	1-3 months £ 000	3-6 months £ 000	6-12 months £ 000	Over 1 year £ 000
Total balance	6,774	2,145	27	4	58
Less specific provisions	-	(2,145)	(27)	(4)	(58)
Balance eligible for ECL	6,774	-	-	-	-
Lifetime ECL	0%	100%	100%	100%	100%
Expected credit loss	-	-	-	-	-

16 Trade and other receivables (continued)

Contracted churn

2023	**Current £ 000**	**1-3 months £ 000**	**3-6 months £ 000**	**6-12 months £ 000**	**Over 1 year £ 000**
Total balance	3,881	4,879	376	6	11
Lifetime ECL	0%	20%	50%	100%	100%
Expected credit loss	-	990	191	6	11

2022	**Current £ 000**	**1-3 months £ 000**	**3-6 months £ 000**	**6-12 months £ 000**	**Over 1 year £ 000**
Total balance	4,164	1,128	270	117	1,053
Less specific provisions	-	(1,128)	(270)	(117)	(1,053)
Balance eligible for ECL	4,164	-	-	-	-
Lifetime ECL	0%	100%	100%	100%	100%
Expected credit loss	-	-	-	-	-

Non-contracted churn

2023	**Current £ 000**	**1-3 months £ 000**	**3-6 months £ 000**	**6-12 months £ 000**	**Over 1 year £ 000**
Total balance	346	40	1	-	-
Lifetime ECL	0%	40%	100%	100%	100%
Expected credit loss	-	16	1	-	-

2022	**Current £ 000**	**1-3 months £ 000**	**3-6 months £ 000**	**6-12 months £ 000**	**Over 1 year £ 000**
Total balance	347	36	1	33	660
Less specific provisions	-	(36)	(1)	(33)	(660)
Balance eligible for ECL	347	-	-	-	-
Lifetime ECL	0%	100%	100%	100%	100%
Expected credit loss	-	-	-	-	-

Engineering contracting receivables

The average credit period on Engineering contracting receivables is 30 days. Interest is not generally charged on receivables paid after due date. Included in the Group’s construction contracts balance are debtors with a carrying amount of £4.2 million (2022: £1.9 million), which are past due at the reporting date for which the Group has provided for an irrecoverable amount of £0.5 million (2022: £0.1 million) based on past experience. The Group does not hold and collateral over these balances. The average age of these receivables is 60 days (2022: 50 days).

Included in the Group's construction contracts balance are debtors with a carrying amount of £nil (2022: £nil) which are past due at the reporting date for which the Group has not provided as there has not been a significant change in credit quality and the amounts are still considered recoverable. The Group does not hold any collateral over these balances.

The average credit period on sales of goods and services is 30 days. Interest is not generally charged on the trade receivables paid after the due date.

16 Trade and other receivables (continued)

2023	Current £ 000	1-3 months £ 000	3-6 months £ 000	6-12 months £ 000	Over 1 year £ 000
Total balance	1,892	1,087	181	74	549
Less specific provisions	-	-	-	-	(549)
Balance eligible for ECL	1,892	1,087	181	74	-
Lifetime ECL	0%	1%	10%	50%	100%
Expected credit loss	-	11	18	37	-

2022	Current £ 000	1-3 months £ 000	3-6 months £ 000	6-12 months £ 000	Over 1 year £ 000
Total balance	2,174	1,891	135	44	104
Less specific provisions	-	-	-	-	(104)
Balance eligible for ECL	2,174	1,891	135	44	-
Lifetime ECL	0%	1%	10%	50%	100%
Expected credit loss	-	19	14	22	-

Finance lease receivables

Northern Transport Finance Limited ("NTFL"), a wholly owned subsidiary, enters into credit finance arrangements for motor vehicles with employees in the Group. All agreements are denominated in sterling. The term of the finance agreements is predominantly three years.

The interest rate inherent in the agreements is fixed at the contract date for all of the term of the agreement. The average effective interest rate contracted is approximately 6.5% (2022: 6.5%) per annum. None of these debts are past due and there are no indicators of impairment.

The directors consider the carrying value of finance lease receivables approximates their fair value. The maximum risk exposure is the book value of these receivables, less the residual value of the leased assets.

2023	Minimum lease payments £ 000	Interest £ 000	Present value £ 000
Within one year	3,903	(45)	3,858
Between one to five years	7,067	(604)	6,463
	10,970	(649)	10,321

2022	Minimum lease payments £ 000	Interest £ 000	Present value £ 000
Within one year	4,027	(109)	3,918
Between one to five years	4,624	(537)	4,087
	8,651	(646)	8,005

16 Trade and other receivables (continued)

Operating lease receivables

Operating leases relate to the metering assets owned by the Group with lease terms of up to 10 years. The lessee does not have an option to purchase the meters at the expiry of the lease period.

The total future value of minimum lease payments is as follows:

	31 December 2023 £ 000	31 December 2022 £ 000
Within one year	85,848	79,519
In two to five years	236,459	262,627
Over five years	177,401	145,932
	499,708	488,078

The Group's exposure to credit and market risks, including maturity analysis, relating to trade and other receivables is disclosed in Note "".

17 Cash and cash equivalents

	Group		Company	
	31 December 2023 £ 000	31 December 2022 £ 000	31 December 2023 £ 000	31 December 2022 £ 000
Cash at bank	20,247	30,808	-	-
Other cash and cash equivalents	13,977	169	-	-
Total included in current assets in the statement of financial position	34,224	30,977	-	-

Cash and cash equivalents have a maturity of less than three months, are readily convertible to cash and are subject to an insignificant risk of changes in value. The carrying amount of these assets approximates their fair value. Other cash and cash equivalents include short-term investments and intercompany loans that are highly liquid and repayable on demand.

18 Restricted cash

	Group		Company	
	31 December 2023 £ 000	31 December 2022 £ 000	31 December 2023 £ 000	31 December 2022 £ 000
Restricted cash	3,103	2,823	-	-

Restricted cash was acquired within the acquisition of renewable assets in June 2022.

19 Share capital

Allotted, called up and fully paid shares

	31 December 2023		31 December 2022	
	No. 000	£ 000	No. 000	£ 000
Ordinary shares of £1 each	354,550	354,550	354,550	354,550

The Company has 400 million shares authorised for issue. The Company has one class of ordinary shares which carries no right to fixed income. Details of the cumulative non-equity preference shares are contained in the loans and borrowings Note 22.

20 Reserves

Group

The changes to each component of equity resulting from items of other comprehensive income for the current year were as follows:

	Foreign currency translation £ 000	Cash flow hedging reserve £ 000	Retained earnings £ 000	Total £ 000
Gain on cash flow hedges (net)	-	(4,857)	-	(4,857)
Cumulative (gain)/loss arising on cash flow hedges reclassified to profit or loss	-	(1,550)	-	(1,550)
Foreign currency translation losses	(7,982)	-	-	(7,982)
Remeasurements of post employment benefit obligations	-	-	(7,995)	(7,995)
	(7,982)	(6,407)	(7,995)	(22,384)

There had been no movement on share premium and capital redemption reserve.

The changes to each component of equity resulting from items of other comprehensive income for the prior year were as follows:

	Foreign currency translation £ 000	Cash flow hedging reserve £ 000	Retained earnings £ 000	Total £ 000
Loss on cash flow hedges (net)	-	16,564	-	16,564
Foreign currency translation losses	(85)	-	-	(85)
Remeasurements of post employment benefit obligations (as restated)	-	-	(85,657)	(85,657)
	(85)	16,564	(85,657)	(69,178)

21 Non-controlling interests

	Non-controlling interests £ 000
At 1 January 2023	40,682
Profit for the year	1,708
Total comprehensive income	1,708
At 31 December 2023	42,390

	Non-controlling interests £ 000
At 1 January 2022	38,723
Profit for the year	1,959
Total comprehensive income	1,959
At 31 December 2022	40,682

22 Loans and borrowings

	Group 2023 £ 000	Group 2022 £ 000	Company 2023 £ 000	Company 2022 £ 000
Non-current loans and borrowings	2,707,525	2,512,624	-	-
Current loans and borrowings	161,752	184,304	260,086	35,624
	2,869,277	2,696,928	260,086	35,624

Group

	Carrying value 2023 £ 000	Carrying value 2022 £ 000	Fair value 2023 £ 000	Fair value 2022 £ 000
Short-term loans	65,860	99,570	65,860	99,570
Bank overdraft	6,211	-	6,211	-
Eurobond due 2033 (5.265%)	248,791	-	269,739	-
Bond 2025 - 2.50%	152,445	152,148	147,688	142,411
Amortising loan 2025 - 3.0842%	125,029	135,199	124,859	131,445
Amortising loan 2026 - 2.9520%*	135,502	174,915	137,476	173,480
Bond 2028 - 7.25%	192,701	193,076	209,082	206,117
Bond 2032 - 4.375%	151,526	151,365	150,007	143,659
Bond 2035 - 5.125%	153,550	153,457	158,526	150,066
Bond 2035 - 5.125%	204,725	204,599	211,117	200,337
Bond 2052 - 3.25%	355,018	354,942	272,362	259,793
European Investment Bank 2025 - 2.073%	50,086	50,086	47,135	45,163
European Investment Bank 2027 - 2.564%	250,267	250,267	232,660	215,108
Cumulative preference shares	34,114	34,114	41,201	42,925
2049 - 2.750% Northern Electric Finance plc	150,161	150,098	106,192	100,507
2059 - 2.250%- Northern Powergrid (Yorkshire) plc	295,549	295,443	173,238	169,829
2062 - 1.875% - Northern Powergrid (Northeast) plc	297,742	297,649	159,538	154,267
	2,869,277	2,696,928	2,512,891	2,234,677

The Group's exposure to market and liquidity risks, including maturity analysis, relating to loans and borrowings is disclosed in Note 31.

* 2026 £218m Amortising Loan is 80% swapped at a fixed rate of 2.4455%, with the remaining 20% floating at SONIA plus 1.55%. Loan is secured by a Fixed and Floating charge over all assets of the Company (excluding smart meters) and limited recourse security over the issued share capital of the Company by the Shareholder.

Information on the new bond issuance during the year can be found in the financial strength section of the strategic report.

22 Loans and borrowings (continued)

Company

	Carrying value		Fair value	
	2023	**2022**	**2023**	**2022**
	£ 000	**£ 000**	**£ 000**	**£ 000**
Amounts owed to Group undertakings	260,086	35,624	260,086	35,624
	260,086	35,624	260,086	35,624

Within the total financial liabilities, £2,979.2 million relates to external borrowings and preference shares (34,473,672 shares) whose fair value is determined with reference to quoted market prices. The directors' estimates of the fair value of internal borrowings are determined in accordance with generally accepted pricing models based on discounted cash flow analysis using prices from observable current market transactions or dealer quotes for similar instruments. The valuation of liabilities set out above is based on Level 1 inputs.

The terms of the cumulative preference shares:

- entitle holders, in priority to holders of all other classes of shares, to a fixed cumulative preferential dividend of 8.061p (net) per share per annum payable half-yearly in equal amounts on 31 March and 30 September;
- on a return of capital on a winding up, or otherwise, will carry the right to repayment of capital together with a premium of 99p per share and a sum equal to any arrears or accruals of dividend. This right is in priority to the rights of ordinary shareholders;
- carry the right to attend a general meeting of Northern Electric plc and vote if, at the date of the notice convening the meeting, payment of the dividend to which they are entitled is six months or more in arrears, or if a resolution is to be considered at the meeting for the winding-up of Northern Electric plc or abrogating, varying or modifying any of the special rights attaching to them; and
- are redeemable in the event of the revocation by the Secretary of State of Northern Electric plc's Public Electricity Supply Licence at the value given above.

During the year ended 31 December 2001, under the terms of the Northern Electric plc's transfer scheme, as approved by the Secretary of State in accordance with the provisions of the Utilities Act 2000, the Northern Electric plc's Public Electricity Supply Licence was converted into an Electricity Distribution Licence and an Electricity Supply Licence.

More details on the classification of loans and borrowings is available in Note 30.

The Group's capital management and exposure to market and liquidity risk, including maturity analysis, in respect of loans and borrowings is disclosed in financial risk review Note 31.

23 Obligations under leases

Group

Lease liability
Lease commitments relate to fleet vehicles from Vehicle Lease and Service Limited, a joint venture, with terms of up to 7 years and land and buildings with terms of up to 100 years.

The total future value of minimum lease payments is as follows:

	31 December 2023 £ 000	31 December 2022 £ 000
Within one year	6,336	7,209
Between two to five years	13,306	16,258
In over five years	13,997	12,238
Total lease payment	33,639	35,705
Unearned interest	(7,944)	(3,302)
Total lease liability	25,695	32,403

The discounted amount due within one year totalled £6,332k (2022: £6,346k).

Unearned interest is future interest on leases not yet earned at the balance sheet date.

The Company has no lease commitments.

24 Provisions

Group

	PPA Liability £ 000	Claims £ 000	Abandonment £ 000	Other £ 000	Total £ 000
At 1 January 2023	35,000	2,382	37,020	4,548	78,950
Additional provisions	-	3,098	143	1,888	5,129
Provisions used	(8,330)	(2,372)	(1,631)	(2,546)	(14,879)
Increase (decrease) due to foreign exchange differences	(1,754)	-	(300)	-	(2,054)
At 31 December 2023	24,916	3,108	35,232	3,890	67,146
Non-current liabilities	16,649	-	33,957	1,717	52,323
Current liabilities	8,267	3,108	1,275	2,173	14,823

PPA Liability: The Power Purchase Agreement (PPA) is a virtual contract for difference which provides Amazon with ~67% of generated electricity and associated generation credits from the two solar farms over a ten-year period. The provision is made for the difference between the expected value of the contract and the book value at the point when the entity was acquired, which is unwound through the life of the contract.

Claims: Provision has been made to cover costs arising from utility damage, public liability, and motoring third party claims, which are not externally insured. Settlement is expected substantially within 12 months.

Abandonment provision relates to the decommissioning of the Group's exploration and evaluation assets. The decommissioning is recorded at the Group's share of expected costs to be incurred. It is not expected that these costs will be incurred over the next 12 months. The provision has been estimated using existing technology at current prices.

Other: Relates primarily to environmental liabilities, wayleave disputes, provision for future safe disposal of transformers which contain oil contaminated with Polychlorinated Biphenyls (PCBs) and holidays in suspense. Settlement is expected substantially within the next 12 months.

Also included within 'other' are pension provisions which relate to the Group's share of expected settlements of liabilities relating to pension deficit repair of Electricity Association Technology Limited ("EATL") and are expected to be settled over a period of approximately two years. As at 31 December 2023 the provision relating to the EATL is £0.6m (2022: £1.6m). Another item included is a provision to cover the actuarial assessment of the costs of unfunded pension arrangements in respect of former employees. As at 31 December 2023 provision relating to unfunded pensions is £0.9m (2022: £1.5m). This is expected to be realised over the next 20 years.

At 31 December 2023, the Company had no provisions for liabilities and charges (2022: £nil).

25 Trade and other payables

	Group		Company	
	31 December 2023 £ 000	31 December 2022 £ 000	31 December 2023 £ 000	31 December 2022 £ 000
Payments on account	147,172	111,708	-	-
Trade payables	21,797	18,147	-	-
Capital creditors	53,181	47,846	-	-
Accrued expenses	24,969	21,659	125	-
Amounts due to related parties	1,393	25,844	1,372	23,224
Social security and other taxes	15,034	20,624	-	-
Other payables	35,182	23,558	795	871
	298,728	269,386	2,292	24,095

Payments on account is primarily advanced customer contributions.

The fair value of the trade and other payables classified as financial instruments are disclosed in the financial instruments note.

The Group's exposure to market and liquidity risks, including maturity analysis, related to trade and other payables is disclosed in the financial risk review Note 31.

The directors consider that the carrying amount of other financial liabilities approximates their fair value, calculated by discounting future cash flows at market rate at the statement of financial position date. The valuation is based on Level 1 inputs. Trade creditors and accruals principally comprise amounts outstanding for trade purchases and on-going costs. Invoices are paid at the end of the month following the date of the invoice. The Group has financial risk management policies in place to ensure that all payables are paid within the credit timeframe. The standard payment term for trade payables is net monthly.

26 Deferred revenue

	Group		Company	
	31 December 2023 £ 000	31 December 2022 £ 000	31 December 2023 £ 000	31 December 2022 £ 000
Opening balance	1,571,166	1,552,721	-	-
Additions	96,151	84,960	-	-
Amortisation	(67,070)	(66,515)	-	-
	1,600,247	1,571,166	-	-

	Group		Company	
	31 December 2023 £ 000	31 December 2022 £ 000	31 December 2023 £ 000	31 December 2022 £ 000
Current	68,966	66,685	-	-
Non-current	1,531,281	1,504,481	-	-
	1,600,247	1,571,166	-	-

26 Deferred revenue (continued)

Deferred revenue relates to customer contributions towards distribution system assets. The Group's policy is to credit the customer contribution to revenue on a straight-line basis, in line with the useful life of the distribution system assets.

27 Pension and other schemes

Defined benefit pension schemes
Electricity Supply Pension Scheme

The Group contributes to two pension schemes, which it operates on behalf of the participating companies within the Group. Those pension schemes are:
- The Northern Powergrid Group of the ESPS (the "DB Scheme"); and
- The Northern Powergrid Pension Scheme.

The Northern Powergrid Pension Scheme was introduced for new employees of the Group from July 1997 and is a money purchase arrangement accounted for as a defined contribution scheme.

The DB Scheme is a defined benefit scheme for directors and employees, which provides pension and other related retirement benefits based on final pensionable pay. The DB Scheme closed to staff commencing employment with the Group on or after 23 July 1997. Members who joined before this date, including some Protected Persons under The Electricity (Protected Persons) (England and Wales) Pension Regulations 1990, continue to build up future pension benefits.

Under the DB Scheme, employees are typically entitled to annual pensions on retirement at age 63 of one-eightieth of final pensionable salary for each year of service plus an additional tax-free cash lump sum at retirement of three times pension. Benefits are also payable on death and following other events such as withdrawing from active service.

No other post-retirement benefits are provided to members of the DB Scheme.

Pension regulation
The UK pensions market is regulated by the Pensions Regulator whose key statutory objectives in relation to UK defined benefit plans are to:
- protect the benefits of members;
- promote and to improve understanding of good administration;
- reduce the risk of situations arising which may lead to compensation being payable from the Pension Protection Fund ("PPF"); and
- minimise any adverse impact on the sustainable growth of an employer.

The Pensions Regulator has various powers including the power to:
- wind up a scheme where winding up is necessary to protect members' interests;
- appoint or remove a trustee;
- impose a schedule of company contributions where trustees and company fail to agree on appropriate contributions; and
- impose contributions where there has been a detrimental action against the scheme.

Role of Trustees
The DB Scheme is administered by a board of Trustees which is legally separate from the Company. The assets of the DB Scheme are held in a separate trustee-administered fund. The board of Trustees is made up of Trustees appointed by the Company, as the Principal Employer of the DB Scheme, Trustees elected by the membership and an independent trustee. The Trustees are required by law to act in the interests of all relevant beneficiaries and are responsible in particular for the asset investment strategy plus the day-to-day administration of the benefits payable. They also are responsible for jointly agreeing with the Principal Employer the level of contributions due to the DB Scheme.

27 Pension and other schemes (continued)

Funding requirements
UK legislation requires that pension schemes are funded prudently (i.e. to a level in excess of the current expected cost of providing benefits). The next actuarial valuation of the DB Scheme will be carried out by the Trustee's actuarial advisors, Aon, at a date no later than 31 March 2025. Such valuations are required by law to take place at intervals of no more than three years. Following each valuation, the Trustees and the Northern Powergrid Group must agree the contributions required (if any) such that the DB Scheme is fully funded over time on the basis of suitably prudent assumptions.

At the latest funding valuation as at 31 March 2022, the funding surplus was assessed to be £2.9 million. In light of this and subsequent changes in the funding position, the Group are not currently paying any deficit contributions. The next actuarial valuation is underway as at 31 March 2025 and is expected to be completed by 30 June 2026, by which time a new contribution schedule will be agreed.

The contributions payable by the Group to the DB Scheme in respect of future benefits which are accruing is 46.1% (49.1% to 30 June 2023) of pensionable pay with effect from 1 July 2023. These contributions were determined as part of the 31 March 2022 actuarial valuation. These rates will remain in place until such a time as a new schedule of contributions is agreed between the Trustees and the Group as part of the 31 March 2025 valuation.

The Northern Powergrid Group’s total contributions to the DB Scheme for the next financial year are expected to be £8.8m.

The Trust Deed provides the Group with an unconditional right to a refund of surplus assets assuming the gradual settlement of plan liabilities over time. Furthermore, in the ordinary course of business the Trustees have no right to unilaterally wind up, or otherwise augment the benefits due to members of the DB scheme. Based on these rights, any net surplus in the plan is recognised in full.

Profile of the scheme
The defined benefit obligation ("DBO") includes benefits for current employees, former employees and current pensioners. The overall duration of the DB Scheme's obligation was assessed to be about 17 years based on the results of the 31 March 2022 funding valuation. This is the weighted-average time over which benefit payments are expected to be made.

As at 31 March 2022, broadly about 23% of the liabilities are attributable to current employees (duration about 24 years), 7% to former employees (duration about 22 years) and 70% to current pensioners (duration about 13 years).

We anticipate that the overall duration of the Scheme’s obligation will have reduced to around 13 years at 31 December 2023.

Investment objectives for the DB Scheme
The Trustees aim to achieve the Scheme's investment objectives through investing partly in a diversified mix of growth assets which, over the long term, are expected to grow in value by more than low risk assets like cash and gilts. This is done with a broad liability driven investing framework that uses cash, gilts and other hedging instruments like swaps in a capital efficient way. In combination this efficiently captures the Trustees' risk tolerances and return objectives relative to the Scheme's liabilities.

The Company and Trustees have agreed a long-term strategy for reducing investment risk as and when appropriate. This includes the use of Liability Driven Investment (LDI) from October 2016 to more closely match the nature and duration of the DB Scheme's liabilities through the use of derivatives such as swaps and repurchase agreements. The portfolio is designed to hedge a proportion of the interest rate and inflation risk inherent in the Scheme's liabilities. The target hedging level is currently 99% (2022: 99%) of the DB Scheme's liabilities as measured on the basis used for the funding valuation.

The trustees insure certain benefits which are payable on death before retirement.

Risks

Volatile asset returns
The DBO is calculated using a discount rate set with reference to corporate bond yields. If assets underperform this discount rate, this will create an element of deficit. The DB Scheme aims to hold a significant proportion (27%) of its assets in return-seeking assets (such as equities) which, although expected to outperform corporate bonds in the long-term, create volatility and risk in the short-term.

27 Pension and other schemes (continued)

Mitigation
The allocation to return-seeking assets is monitored to ensure it remains appropriate given the DB Scheme's long-term objectives. The Trustees regularly review the strategy from return-seeking assets and have diversified some return-seeking assets from equities into Reinsurance and Listed Infrastructure to reduce overall risk. To avoid concentration risk, the allocation to UK equity is restricted to 35% of the total equity allocation.

Changes in bond yields
A decrease in corporate bond yields will increase the value placed on the DBO for accounting purposes, although this will be partially offset by an increase in the value of the DB Scheme's bond holdings.

Mitigation
The DB Scheme aims to hold a substantial proportion of its assets (73%) as bonds and Liability Driven Investments (LDI), which provide a significant hedge against falling bond yields (falling yields which increase the DBO will also increase the value of the bond assets). There are some differences in the credit quality of bonds held by the DB Scheme and the bonds analysed to decide the DBO discount rate, such that there remains some risk should yields on different quality bond/swap assets diverge.

Inflation risk
A significant proportion of the DBO is indexed in line with price inflation (specifically in line with RPI) and higher inflation will leads to a higher DBO.

Mitigation
The DB Scheme invests around 42% in LDI (included in the 73% above) which provides a hedge against higher-than-expected inflation increases on the DBO (rising inflation will increase both the DBO and the value of the LDI portfolio).

Life expectancy risk
The majority of the DB Scheme's obligations are to provide benefits for the life of the member, so increases in life expectancy will result in an increase in the liabilities.

Mitigation
The DB Scheme regularly reviews actual experience of its membership against the actuarial assumptions underlying the future benefit projections and carries out detailed analysis when setting an appropriate scheme specific mortality assumption.

Currency risk
To increase diversification, the DB Scheme invests in overseas assets. This leads to a risk that foreign currency movements negatively impact the value of assets in Sterling terms.

Mitigation
The DB Scheme hedges a proportion of the overseas investments currency risk for those overseas currencies that can be hedged efficiently. The DB Scheme's currency hedging ratio is currently 50% in respect of overseas developed market currencies.

Other risks
There are a number of other risks associated with the DB Scheme including operational risks (such as paying out the wrong benefits), legislative risks (such as the government increasing the burden on pension schemes through new legislation) and other demographic risks (such as a higher proportion of members dying than assumed with a dependant eligible to receive a survivor's pension from the DB Scheme).

Reporting at 31 December 2023
For the purposes of this disclosure, the current and future pension costs of the Northern Powergrid Group have been assessed by Aon, a qualified independent actuary, using the assumptions set out below, which the actuary has confirmed represent a reasonable best estimate of those costs. The review has been based on the same membership and other data as at 31 March 2022. The board of Northern Powergrid Holdings Company has accepted the advice of the actuary and formally approved the use of these assumptions for the purpose of calculating the pension cost of the Northern Powergrid Group.

27 Pension and other schemes (continued)

The results of the latest funding valuation at 31 March 2022 have been adjusted to 31 December 2023. Those adjustments take account of experience over the period since 31 March 2022, changes in market conditions, and differences in the financial and demographic assumptions. The present value of the DBO and the related current service cost were measured using the Projected Unit Credit Method.

For schemes closed to new members, such as the DB Scheme, the current service cost calculated under the Projected Unit Credit Method is expected to increase as the members of the DB Scheme approach retirement.

Principal actuarial assumptions

The significant actuarial assumptions used to determine the present value of the defined benefit obligation at the statement of financial position date are as follows:

Post retirement mortality assumptions

	31 December 2023 Years	31 December 2022 Years
Life expectancy for male currently aged 60	26.70	26.70
Life expectancy for female currently aged 60	28.90	28.60
Life expectancy at 60 for male currently aged 45	27.40	27.40
Life expectancy at 60 for female currently aged 45	30.10	29.70

27 Pension and other schemes (continued)

Reconciliation of scheme assets and liabilities to assets and liabilities recognised

The amounts recognised in the statement of financial position are as follows:

	31 December 2023 £ 000	31 December 2022 £ 000
Fair value of scheme assets	1,098,300	1,117,000
Present value of scheme liabilities	(949,700)	(965,500)
Defined benefit pension scheme surplus	148,600	151,500

Scheme assets

Changes in the fair value of scheme assets are as follows:

	31 December 2023 £ 000	31 December 2022 £ 000
Fair value at start of year	1,117,000	1,742,600
Interest income	52,700	33,600
Remeasurement gains on scheme assets	(3,000)	(582,000)
Employer contributions	10,500	12,100
Contributions by scheme participants	400	400
Benefits paid	(77,900)	(88,300)
Administrative expenses paid	(1,400)	(1,400)
Fair value at end of year	1,098,300	1,117,000

Analysis of assets

The major categories of scheme assets are as follows:

	31 December 2023 £ 000	31 December 2022 £ 000
Developed market equity	71,700	78,400
Emerging market equity	2,100	4,400
Property	103,300	169,400
Reinsurance	93,800	80,800
Listed infrastructure	53,500	62,800
Investment grade corporate bonds	49,700	15,900
Other debt (non-investment grade)	191,400	32,800
Fixed interest gilts	37,500	6,500
Liability driven investments	454,500	584,300
Cash and cash equivalents including derivatives	40,800	81,700
	1,098,300	1,117,000

The pension scheme has not invested in any of the Company's own financial instruments or in properties or other assets used by the Company.

27 Pension and other schemes (continued)

Scheme liabilities

Changes in the present value of scheme liabilities are as follows:

	31 December 2023 £ 000	(As restated) 31 December 2022 £ 000
Present value at start of year	(965,500)	(1,480,400)
Current service cost	(5,100)	(11,100)
Actuarial gains arising from changes in demographic assumptions	34,400	900
Actuarial losses arising from changes in financial assumptions	(18,300)	530,100
Actuarial gains/(losses) arising from experience adjustments	(27,300)	(64,400)
Interest cost	(45,400)	(28,500)
Benefits paid	77,900	88,300
Contributions by scheme participants	(400)	(400)
Present value at end of year	(949,700)	(965,500)

Amounts recognised in the income statement

	31 December 2023 £ 000	(As restated) 31 December 2022 £ 000
Current service cost	5,100	11,100
Losses (gains) on curtailments and settlements	1,400	1,490
Net interest	(7,300)	(5,100)
Total amount recognised	(800)	7,490
Costs included in cost of qualifying assets	(2,500)	(6,800)
Total amount recognised in income statement	(3,300)	690

27 Pension and other schemes (continued)

Amounts taken to the Statement of Comprehensive Income

	31 December 2023 £ 000	(As restated) 31 December 2022 £ 000
Actuarial (gains) and losses arising from changes in demographic assumptions	(34,400)	(900)
Actuarial (gains) and losses arising from changes in financial assumptions	18,300	(530,100)
Actuarial (gains) and losses arising from experience adjustments	27,300	64,400
Return on plan assets in excess of that recognised in net interest	3,000	582,000
Amounts recognised in the Statement of Comprehensive Income	14,200	115,400

Sensitivity analysis

Significant actuarial assumptions for determination of the defined benefit obligation are discount rate, inflation, and mortality. The sensitivity analyses below have been determined based on reasonably possible changes of the respective assumptions occuring at the end of the reporting period, while holding all other assumptions constant:

		31 December 2023			31 December 2022	
	+ 0.1%	0.0%	- 0.1%	+ 0.1%	0.0%	- 0.1%
Adjustment to discount rate	£ 000	£ 000	£ 000	£ 000	£ 000	£ 000
Present value of total obligation	945,000	957,600	970,400	952,700	965,500	979,300

		31 December 2023			31 December 2022	
	+ 0.1%	0.0%	- 0.1%	+ 0.1%	0.0%	- 0.1%
Adjustment to rate of inflation	£ 000	£ 000	£ 000	£ 000	£ 000	£ 000
Present value of total obligation	966,700	957,600	946,600	978,700	965,500	953,300

		31 December 2023			31 December 2022	
Adjustment to mortality age rating	+ 1 Year	None	- 1 Year	+ 1 Year	None	- 1 Year
assumption	£ 000	£ 000	£ 000	£ 000	£ 000	£ 000
Present value of total obligation	993,800	957,600	920,600	995,300	965,500	934,900

The sensitivity analysis presented above may not be representative of the actual change in defined benefit obligation as it is unlikely that the changes in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

28 Dividends

	31 December 2023 £ 000	31 December 2022 £ 000
Dividend of £0.56 (2022: £nil) per ordinary share	200,000	-

29 Net debt reconciliation

Group

2023

	At 1 January 2023 £ 000	Cash flows £ 000	Other changes £ 000	At 31 December 2023 £ 000
Cash and cash equivalents	30,977	3,247	-	34,224
Borrowings	(2,696,928)	(176,682)	4,333	(2,869,277)
Right-of-use asset leases	(32,403)	10,922	(4,214)	(25,695)
	(2,698,354)	(162,513)	119	(2,860,748)

2022

	At 1 January 2022 £ 000	Cash flows £ 000	Other changes £ 000	At 31 December 2022 £ 000
Cash and cash equivalents	29,125	1,852	-	30,977
Borrowings	(2,498,441)	(53,554)	(144,933)	(2,696,928)
Right-of-use asset leases	(24,711)	(6,759)	(933)	(32,403)
	(2,494,027)	(58,461)	(145,866)	(2,698,354)

Other changes include accrued interest movement, amortisation of borrowings, new leases, and acquisitions in the prior year.

Company

2023

	At 1 January 2023 £ 000	Cash flows £ 000	At 31 December 2023 £ 000
Borrowings	(35,624)	(224,462)	(260,086)
	(35,624)	(224,462)	(260,086)

2022

	At 1 January 2022 £ 000	Cash flows £ 000	Other changes £ 000	At 31 December 2022 £ 000
Cash and cash equivalents	10,403	(10,403)	-	-
Borrowings	(199,778)	164,376	(222)	(35,624)
	(189,375)	153,973	(222)	(35,624)

30 Classification of financial and non-financial assets and financial and non-financial liabilities

Group

The classification of financial assets and financial liabilities by accounting categorisation for the period ended 31 December 2023 was as follows:

	Financial assets at amortised cost £ 000	Financial assets & liabilities at FVTPL £ 000	Financial assets & liabilities at FVTOCI £ 000	Financial liabilities at amortised cost £ 000	Non-financial assets & liabilities £ 000
Assets					
Non-current assets					
Property, plant and equipment	-	-	-	-	7,648,597
Right of use assets	-	-	-	-	27,267
Intangible assets	-	-	-	-	303,939
Investments in subsidiaries, joint ventures and associates	-	3,633	-	-	-
Retirement benefit obligations	-	-	148,600	-	-
Tax receivable	-	-	-	-	143
Trade and other receivables	6,463	-	-	-	-
Other non-current financial assets	-	-	27,630	-	-
	6,463	3,633	176,230	-	7,979,946
Current assets					
Inventories	-	-	-	-	37,022
Trade and other receivables	200,842	-	-	-	-
Income tax asset	-	-	-	-	582
Cash and cash equivalents	34,224	-	-	-	-
Restricted cash	3,103	-	-	-	-
Contract assets	7,052	-	-	-	-
Other current financial assets	-	-	6,531	-	-
	245,221	-	6,531	-	37,604
Total assets	251,684	3,633	182,761	-	8,017,550
Liabilities					
Non-current liabilities					
Long term lease liabilities	-	-	-	(19,363)	-
Loans and borrowings	-	-	-	(2,707,525)	-
Provisions	-	-	-	-	(52,323)
Deferred revenue	-	-	-	-	(1,531,281)
Deferred tax liabilities	-	-	-	-	(327,940)
	-	-	-	(2,726,888)	(1,911,544)

30 Classification of financial and non-financial assets and financial and non-financial liabilities (continued)

	Financial assets at amortised cost £ 000	Financial assets & liabilities at FVTPL £ 000	Financial assets & liabilities at FVTOCI £ 000	Financial liabilities at amortised cost £ 000	Non-financial assets & liabilities £ 000
Current liabilities					
Current portion of long term lease liabilities	-	-	-	(6,332)	-
Trade and other payables	-	-	-	(298,728)	-
Loans and borrowings	-	-	-	(161,752)	-
Income tax liability	-	-	-	-	(354)
Deferred revenue	-	-	-	-	(68,966)
Provisions	-	-	-	-	(14,823)
	-	-	-	(466,812)	(84,143)
Total liabilities	-	-	-	(3,193,700)	(1,995,687)

30 Classification of financial and non-financial assets and financial and non-financial liabilities (continued)

The classification of financial assets and financial liabilities by accounting categorisation for the period ended 31 December 2022 was as follows:

	Financial assets at amortised cost £ 000	Financial assets & liabilities at FVTPL £ 000	Financial assets & liabilities at FVTOCI £ 000	Financial liabilities at amortised cost £ 000	Non-financial assets & liabilities £ 000
Assets					
Non-current assets					
Property, plant and equipment	-	-	-	-	7,562,034
Right of use assets	-	-	-	-	30,976
Intangible assets	-	-	-	-	299,969
Investments in subsidiaries, joint ventures and associates	-	3,982	-	-	-
Retirement benefit obligations	-	-	151,500	-	-
Tax receivable	-	-	-	-	754
Trade and other receivables	4,087	-	-	-	-
Other non-current financial assets	-	-	45,967	-	-
	4,087	3,982	197,467	-	7,893,733
Current assets					
Inventories	-	-	-	-	32,509
Trade and other receivables	199,505	-	-	-	-
Income tax asset	-	-	-	-	6,454
Cash and cash equivalents	30,977	-	-	-	-
Restricted cash	2,823	-	-	-	-
Contract assets	5,824	-	-	-	-
	239,129	-	-	-	38,963
Total assets	243,216	3,982	197,467	-	7,932,696
Liabilities					
Non-current liabilities					
Long term lease liabilities	-	-	-	(26,057)	-
Loans and borrowings	-	-	-	(2,512,624)	-
Provisions	-	-	-	-	(63,018)
Deferred revenue	-	-	-	-	(1,504,481)
Deferred tax liabilities	-	-	-	-	(408,624)
	-	-	-	(2,538,681)	(1,976,123)

30 Classification of financial and non-financial assets and financial and non-financial liabilities (continued)

	Financial assets at amortised cost £ 000	Financial assets & liabilities at FVTPL £ 000	Financial assets & liabilities at FVTOCI £ 000	Financial liabilities at amortised cost £ 000	Non-financial assets & liabilities £ 000
Current liabilities					
Current portion of long term lease liabilities	-	-	-	(6,346)	-
Trade and other payables	-	-	-	(269,386)	-
Loans and borrowings	-	-	-	(184,304)	-
Deferred revenue	-	-	-	-	(66,685)
Provisions	-	-	-	-	(15,932)
Other current financial liabilities	-	-	-	(11,813)	-
	-	-	-	(471,849)	(82,617)
Total liabilities	-	-	-	(3,010,530)	(2,058,740)

Fair values are derived from level 1 inputs.

30 Classification of financial and non-financial assets and financial and non-financial liabilities (continued)

Company

The classification of financial assets and financial liabilities by accounting categorisation for the period ended 31 December 2023 was as follows:

	Financial assets at amortised cost £ 000	Financial liabilities at amortised cost £ 000	Non-financial assets & liabilities £ 000
Assets			
Non-current assets			
Investments in subsidiaries, joint ventures and associates	376,289	-	-
Trade and other receivables	248,652	-	-
	624,941	-	-
Liabilities			
Current liabilities			
Trade and other payables	-	(2,292)	-
Loans and borrowings	-	(260,086)	-
Income tax liability	-	-	(2,779)
	-	(262,378)	(2,779)
Total liabilities	-	(262,378)	(2,779)

30 Classification of financial and non-financial assets and financial and non-financial liabilities (continued)

The classification of financial assets and financial liabilities by accounting categorisation for the period ended 31 December 2022 was as follows:

	Financial assets at amortised cost £ 000	Financial liabilities at amortised cost £ 000	Non-financial assets & liabilities £ 000
Assets			
Non-current assets			
Investments in subsidiaries, joint ventures and associates	376,289	-	-
Trade and other receivables	264,117	-	-
	640,406	-	-
Liabilities			
Current liabilities			
Trade and other payables	-	(24,095)	-
Loans and borrowings	-	(35,624)	-
Income tax liability	-	-	(600)
	-	(59,719)	(600)
Total liabilities	-	(59,719)	(600)

31 Financial risk review

Group
This note presents information about the Group’s exposure to financial risks and the Group’s management of capital.

Capital management
The Group manages its capital centrally to ensure that entities in the Group will be able to continue as going concerns while maximising the return to stakeholders through the optimisation of the debt and equity balance. The Group’s overall strategy remains unchanged from 2022.

The capital structure of the Group consists of net debt (borrowings as detailed in Note offset by equity of the Company (comprising issued capital, reserves and retained earnings as detailed in Notes and)).

The covenants associated with some of the Group’s borrowings include restrictions on the issuance of new indebtedness and the making of distributions dependent on the scale of the ratio of Senior Total Net Debt to Regulatory Asset Value (“RAV”). The Senior Total Net Debt to RAV restriction is 75% and 75% respectively. The definition of Senior Total Net Debt excludes any subordinated debt and certain debt incurred on a non-recourse basis. In addition, it excludes any fair value and accounting adjustments.

The Group’s Senior Total Net Debt as at 31 December 2023 totalled £2,533.4m (2022: £2,296.9m). Using the RAV value as at March 2024, as outlined by Ofgem in its ED2 price control financial model published in January 2024, and adjusting for the effects of movements in the value of the CPIH Index gives an approximation for the RAV value as at 31 March 2024 of £4,657.5m (2022: £4,222.0m). The Senior Total Net Debt to RAV ratio for the Group is therefore estimated at 54.4% (2022: 54.4%).

At 31 December 2023, the Group had available £235.8m (2022: £175.3m) of undrawn committed borrowing facilities in respect of which all conditions precedent had been met.

At 31 December 2023, 99% of the Group’s long-term borrowings were at fixed rates (2022: 99%) and the average maturity for these borrowings was 17 years (2022: 18).

During the year all obligations under the various debt covenants have been complied with.

Credit risk
Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group. The Group has adopted a policy of only dealing with creditworthy counterparties. The Group's exposure and the credit ratings of its counterparties are continuously monitored and the aggregate value of transactions concluded is spread amongst approved counterparties. The carrying amount of financial assets recorded in the financial statements, which is net of impairment losses, represents the Group's maximum exposure to credit risk as no collateral or other credit enhancements are held.

The Group's income is primarily generated from use of system revenue from electricity suppliers; suppliers are credit checked by independent ratings agencies. Impaired income from DUoS will be recovered in future periods through system charges and is therefore of no material risk to the Group. The Group's receivables are subject to expected credit loss calculations disclosed further within the trade receivables (Note 16). The Group's credit risk exposure is shown below:

Group

2023	Notes	Gross carrying amount £ 000	Loss allowance £ 000	Net carrying amount £ 000
Trade and other receivables	16	223,676	(16,371)	207,305
Income tax asset	10	725	-	725
Cash and short-term deposits	17	34,224	-	34,224
Restricted cash	18	3,103	-	3,103
Contract assets	3	7,052	-	7,052
		268,780	(16,371)	252,409

31 Financial risk review (continued)

2022	**Notes**	**Gross carrying amount £ 000**	**Loss allowance £ 000**	**Net carrying amount £ 000**
Trade and other receivables	16	220,694	(17,102)	203,592
Income tax asset	10	7,208	-	7,208
Cash and short-term deposits	17	30,977	-	30,977
Restricted cash	18	2,823	-	2,823
Contract assets	3	5,824	-	5,824
		267,526	(17,102)	250,424

For trade receivables the Group has applied the simplified approach in IFRS 9 to measure the loss allowance at lifetime ECL. The Group determines the expected credit losses on these items by using a provision matrix, estimated based on historical credit loss experience based on the past due status of the debtors, adjusted as appropriate to reflect current conditions and estimates of future economic conditions. Accordingly, the credit risk profile of these assets is presented based on their past due status in terms of the provision matrix. Note includes further details on the loss allowance for these assets.

The carrying amount of the Group’s financial assets at FVTPL as disclosed in Note best represents their respective maximum exposure to credit risk. The Group holds no collateral over any of these balances.

31 Financial risk review (continued)

Company

2023	Notes	Gross carrying amount £ 000	Loss allowance £ 000	Net carrying amount £ 000
Amounts due from Group undertakings		283,352	(34,700)	248,652

2022	Notes	Gross carrying amount £ 000	Loss allowance £ 000	Net carrying amount £ 000
Trade and other receivables		-	-	-
Amounts due from Group undertakings		264,117	-	264,117

Amounts due from Group undertakings are regarded as low credit risk as the Group has a strong capacity to meet its contractual cash flow obligations and maintains an investment grade credit rating.

At the reporting date, in accordance with IFRS 9 Financial Instruments, a cumulative expected credit loss (ECL) of 12% was recognised for £34.7 million (2022: £nil). The ECL was estimated through review of the cash flow psoition of CalEnergy Resources Limited over the 20-year period to 2043. Key estimates were applied when determining the expected cash flows. The main estimate being the perfomance of the assets in the subsidiary businesses. It is possible that the outcomes within the next financial year could differ from the assumptions applied and result in an adjustment to the position reported.

Liquidity risk

Ultimate responsibility of liquidity risk management rests with the board of directors, which has established an appropriate liquidity risk management framework for the management of the Company's short, medium, and long-term funding and liquidity management requirements. The Company manages liquidity by maintaining adequate reserves, banking facilities and reserve borrowing facilities, by continuously monitoring forecast and actual cash flows, and by matching the maturity profiles of financial assets and liabilities.

The Group has access to a £200 million revolving credit facility provided by Barclays Bank plc, Lloyds Bank plc, HSBC UK Bank plc and Royal Bank of Canada. The facility was executed in December 2021 for a period of three years, with two 1-year extension options. During the year the Group exercised the second extension option which extended the termination date to Dec 2026. In addition, the Group has access to a £42 million overdraft facility provided by Lloyds Bank plc, which is reviewed annually, these borrowings are repayable on demand. At 31 December 23, the Group had available £235.8m (2022: £175.3m) of undrawn committed borrowing facilities in respect of which all conditions precedent had been met.

Maturity analysis for financial liabilities

The following table sets out the remaining contractual maturities of financial liabilities by type.

Group

2023	Less than 3 months £ 000	3 months - 1 year £ 000	1-5 years £ 000	More than 5 years £ 000	Total £ 000
Non-interest bearing	204,191	-	-	-	204,191
Short-term interest bearing	6,220	66,338	-	-	72,558
Long-term interest bearing	1,331	145,728	1,202,783	2,832,251	4,182,093
	211,742	212,066	1,202,783	2,832,251	4,458,842

31 Financial risk review (continued)

2022	Less than 3 months £ 000	3 months - 1 year £ 000	1-5 years £ 000	More than 5 years £ 000	Total £ 000
Non-interest bearing	153,808	-	-	-	153,808
Short-term interest bearing	99,175	3,717	30,386	-	133,278
Long-term interest bearing	-	156,801	1,002,634	2,763,261	3,922,696
	252,983	160,518	1,033,020	2,763,261	4,209,782

Company

2023	Less than 3 months £ 000	3 months - 1 year £ 000	1-5 years £ 000	More than 5 years £ 000	Total £ 000
Non-interest bearing	795	-	-	-	795
Short-term interest bearing	260,086	-	-	-	260,086
	260,881	-	-	-	260,881

2022	Less than 3 months £ 000	3 months - 1 year £ 000	1-5 years £ 000	More than 5 years £ 000	Total £ 000
Non-interest bearing	871	-	-	-	871
	871	-	-	-	871

Market risk

Market risk is the risk of loss arising from movements in market variables such as interest rates, exchange rates and commodity prices. Risks are mitigated by utilising appropriate risk management products.

The Group's policy on interest rate risk is designed to limit the Group's exposure to floating interest rates. Consistent with this policy, at 31 December 2023 the Group had 99% (2022: 99%) of long term debt at fixed rates. Short-term loans under the multicurrency revolving credit facility are charged at a floating rate of interest at SONIA plus 0.20% plus a credit adjustment spread. In aggregate, 20% of the amortising long-term loans and the capital expenditure facility loans are at a floating rate of interest at SONIA plus 1.55% and 1.60% respectively, thus exposing the Group to cash flow interest rate risk. A 1% movement in interest rates would subject the Group to an approximate change in interest costs of £0.6m per year. This is considered an acceptable level of risk. All other loans are at fixed interest rates and expose the Group to fair value interest rate risk. The 1% sensitivity is utilised as it is the sensitivity rate used when reporting interest rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in interest rates and is applied to variable interest rate borrowings.

More information on the use of cash flow hedges to manage interest rate risk on is available in note 31.

Financial risk

The Group is exposed to price risk on CE Resources' revenues. During the year there was no revenue relating to the sale of commodities therefore a 1% change in commodity prices would not have a material impact on the net assets of the Group.

The Group is not subject to significant risk relating to foreign exchange. The Group has entities operating in Euros, Australian dollars, and polish złoty; a 1% change in exchange rates in these currencies would not have a material impact on the financial statements.

32 Derivatives held for risk management and hedge accounting

Derivatives held for risk management

Derivatives are financial instruments that derive their value from the price of an underlying item such as interest rates, foreign exchange rates, credit spreads, commodities, equity or other indices. In accordance with Board approved policies, derivatives are transacted to manage our exposure to fluctuations in interest rate. The Group uses derivatives to manage these risks from our financing portfolio to optimise the overall cost of accessing the debt capital markets.

The following table provides a reconciliation of the fair values arising. Derivative financial instruments related to interest rate swaps for cash flow hedging purposes and embedded derivatives associated with virtual power purchase agreements. The only material value relates to interest rate swaps. Reflecting the immaterial values at 31 December 2023, additional reporting generally arising under the accounting standards for certain embedded derivatives has not been disclosed.

	2023		2022	
	Assets £ 000	Liabilities £ 000	Assets £ 000	Liabilities £ 000
Non-current	27,630	-	45,967	-
Current	6,531	-	3,484	15,297
	34,161	-	49,451	15,297

The maturity of financial instruments was as follows:

	Less than 3 months £ 000	3 months to 1 year £ 000	1 to 5 years £ 000	Total £ 000
2023				
Notional principal	-	36,887	212,294	249,181
Cash flow hedge	-	8,124	21,510	29,634
	-	45,011	233,804	278,815
2022				
Notional principal	1,275	34,918	235,736	271,929
Cash flow hedge	265	3,219	37,716	41,200
	1,540	38,137	273,452	313,129

Effectiveness testing

Qualitative features of the interest rate swaps demonstrate fully matched terms between the cash flows of the hedging instruments and the cash flows of the hedged items, resulting in full hedge effectiveness.

Nature of the risk being hedged

The Group is hedging the risk of variability in cash flows indexed to SONIA or BBSY. Further details of the Group's risk management is available in the Strategic Report, and in financial risk review, Note 31.

33 Related party transactions

Directors' advances, credits and guarantees

During the year, 2 directors (2022: 2) and 4 key personnel (2022: 3) utilised the services provided by Northern Transport Finance Limited. The amounts included in finance lease receivables owed by these directors and key personnel at the end of the period were £65,888 (2022: £90,000).

Company

The Company has advanced loans to other companies in the Group. The total interest included in investment income in the statement of profit or loss for the year ended 31 December 2023 was £20,663,000 (2022: £19,976,000). Included in assets within the statement of financial position is £248,652,000 (2022: £264,110,000). These amounts relate to subsidiaries of the Company and are repayable by 2029. £40m of the loan is charged at a fixed interest rate of 6%, with the balance at the Bank of England base rate plus 3%. The Company's amount payable to its parent as of 31 December 2023 is £1.4m (2022: £25.8m).

Group

Income and receivables from related parties

2023	Joint ventures £ 000
Sale of goods	115

2022	Joint ventures £ 000
Sale of goods	97

Expenditure with and payables to related parties

2023	Parent £ 000	Joint ventures £ 000
Purchase of goods	-	10,225
Amounts payable to related party	1,393	-

2022	Parent £ 000	Joint ventures £ 000
Purchase of goods	-	11,129
Amounts payable to related party	25,844	216

Amounts due to parent as shown above relate to amounts owed to Berkshire Hathaway Energy Company for on-going costs and is repayable on demand and doesn't carry any interest.

Joint venture in the tables above relate to Vehicle Lease and Services Limited.

34 Parent and ultimate parent undertaking

The Company's immediate parent is Berkshire Hathaway Energy Company.

The ultimate parent and controlling party is Berkshire Hathaway Inc.. These financial statements are available upon request from 3555 Farnam Street, Omaha, Nebraska 68131.

Relationship between entity and parents

The parent of the largest group in which these financial statements are consolidated is Berkshire Hathaway Inc., incorporated in United States of America.

The registered address of Berkshire Hathaway Inc. is:
3555 Farnam Street, Omaha, Nebraska 68131

The parent of the smallest group in which these financial statements are consolidated is Berkshire Hathaway Energy Company, incorporated in United States of America.

The registered address of Berkshire Hathaway Energy Company is:
3555 Farnam Street, Omaha, Nebraska 68131