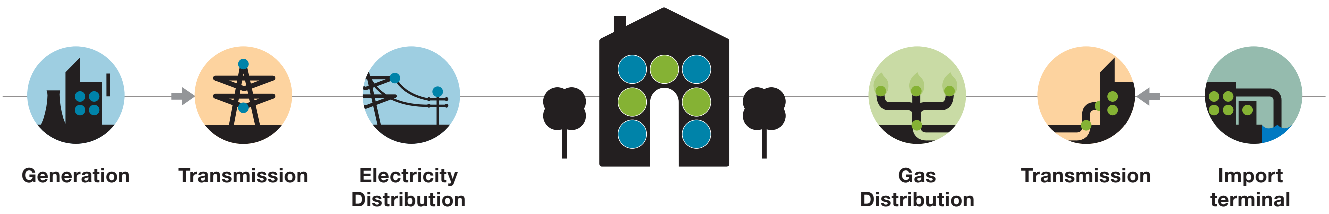
# Operating and Financial Review




**Contents to the Operating and Financial Review**


18 Principal operations
19 Organisation and structure
20 External market and regulatory environment
22 Current and future developments
24 External relationships
25 Business drivers
26 Vision, strategy and objectives
28 Performance summary
30 Performance against our objectives
40 Risks and opportunities
41 Financial performance
48 Transmission
57 Gas Distribution
66 Electricity Distribution & Generation
74 Non-regulated businesses and other
78 Discontinued operations
79 Financial position and financial management
87 Accounting policies


## Principal operations

Our principal operations are the ownership and operation of regulated electricity and gas infrastructure networks in the UK and the US, serving around 19 million consumers directly and many more indirectly. We also have interests in related markets, including electricity interconnectors, metering services, liquefied natural gas (LNG) facilities and property in the UK, LNG storage and transportation and non-regulated gas transmission pipelines in the US.

We have over 27,500 employees located in the UK and the US.

The performance of our principal businesses is reported by segment, reflecting the management responsibilities and economic characteristics of each activity. Our principal businesses and segments, together with other activities, are below. Discontinued operations represent businesses that we have committed to exit, including the Ravenswood generation station in New York City that we sold on 26 August 2008.

### Transmission

**UK** The transmission of electricity and gas in the UK as owner and operator of the high voltage electricity transmission network in England and Wales, the gas national transmission system in Great Britain, the electricity interconnector with France and storage facilities for LNG. Operator of the electricity transmission networks in Scotland.

**US** The transmission of electricity in the northeastern US as owner of high voltage electricity transmission networks in upstate New York and in New England.

### Gas Distribution

**UK** The distribution of gas in England as owner and operator of four of Great Britain's eight gas distribution networks.

**US** The distribution of gas in the northeastern US as owner and operator of gas distribution networks in upstate New York, New York City, Long Island, Massachusetts, New Hampshire and Rhode Island.

### Electricity Distribution & Generation

**US** The distribution and generation of electricity in the northeastern US as owner of electricity distribution networks in upstate New York, Massachusetts, New Hampshire and Rhode Island, as operator and manager of the electricity transmission and distribution network on Long Island on behalf of the Long Island Power Authority, and as a generator of electricity on Long Island.

### Non-regulated businesses and other

Other services related to our main operations, principally in the UK. They do not constitute a segment so are reported, together with other operations and corporate activities, as 'other activities'.

**UK** Principally metering services, property management, our LNG importation terminal on the Isle of Grain, and the construction and operation of an electricity interconnector between The Netherlands and the UK through our BritNed joint venture.

**US** Includes LNG storage, LNG road transportation, unregulated transmission pipelines, US gas fields and home energy services.

This Operating and Financial Review describes the main trends and factors underlying our development, performance and position during the year ended 31 March 2009 as well as those likely to affect us in the future. It has been prepared in line with the guidance provided in the Reporting Statement on the Operating and Financial Review issued by the UK Accounting Standards Board.

# Organisation and structure



## Organisation
Our organisational structure and executive responsibilities ensure a balance between activities that are local, by lines of business and those that are common throughout National Grid.

The Board of Directors has overall responsibility for the governance, strategy and management oversight of National Grid. The Executive Committee, led by the Chief Executive, is responsible for day-to-day management of National Grid and for the execution of our strategy as approved by the Board.

**Board of Directors**

**Executive Committee**

**Chief Executive Steve Holliday**

**Finance and shared services Steve Lucas**

**Transmission**
**Nick Winser**

**Gas Distribution**
**Mark Fairbairn**

**Electricity Distribution & Generation**
**Tom King**

**Non-regulated businesses* and other (including corporate functions and information services)**

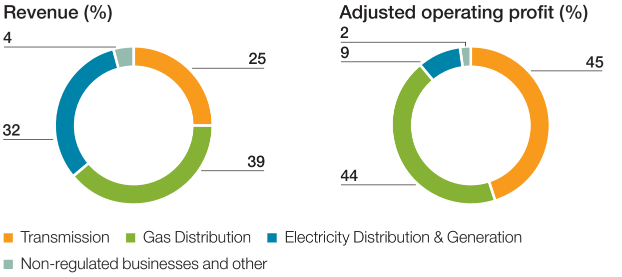
*Responsibility for each of our non-regulated businesses is allocated to the Executive Directors based on the nature of each business

In addition to the Executive Committee, the Board has also established a number of other committees that assist in exercising governance over National Grid's activities, including the Audit, Finance, Nominations, Remuneration, Risk & Responsibility, and Disclosure Committees.

More information on the roles of the Board and these committees is available in the Corporate Governance section on pages 90 to 99.

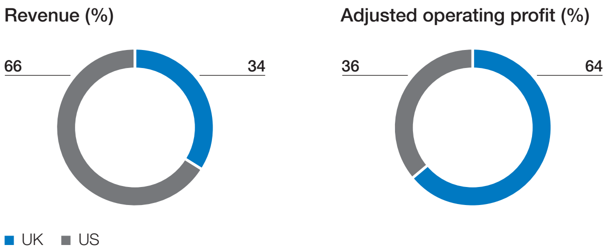
## Business and geographic analysis
Our continuing operations are organised by lines of business as follows:

**Business analysis 2008/09**
Continuing operations




Our businesses are divided between the UK and the US as follows:

**Geographical analysis 2008/09**
Continuing operations




The charts show revenue and adjusted operating profit from continuing operations for the year ended 31 March 2009. Adjusted operating profit excludes exceptional items, remeasurements and stranded cost recoveries.

Revenue in the US includes commodity charges to customers for the energy they use, and on which we make no margin; revenue in the UK does not include such charges.

## History
National Grid originated from the restructurings of the UK gas industry in 1986 and the UK electricity industry in 1990. We entered the US electricity delivery market in 2000 in New England and expanded into upstate New York in 2002. We increased our UK wireless infrastructure activities in 2004 and in 2005 we sold four UK regional gas distribution networks.

In 2006, we acquired the gas distribution network in Rhode Island and in 2007, we acquired KeySpan. We sold our UK and US wireless infrastructure operations and the Basslink electricity interconnector in Australia during 2007. In 2008, we sold the Ravenswood generation station.

## Key milestones

| | |
|---|---|
| **1986** | British Gas incorporated as a public limited company |
| **1990** | Electricity transmission network in England and Wales transferred to National Grid on electricity privatisation |
| **1995** | National Grid listed on the London Stock Exchange |
| **1997** | British Gas (BG) demerged Centrica |
| **1997** | National Grid demerged Energis |
| **2000** | Lattice Group demerged from BG and listed separately |
| **2000** | New England Electric System and Eastern Utilities Associates acquired |
| **2002** | Niagara Mohawk Power Corporation merged with National Grid in US |
| **2002** | Merger of National Grid and Lattice Group to form National Grid Transco |
| **2004** | Acquisition of UK wireless infrastructure network from Crown Castle International Corp. |
| **2005** | Sales of four UK regional gas distribution networks and adopted National Grid as our name |
| **2006** | Acquisition of Rhode Island gas distribution network |
| **2007** | Sales of UK and US wireless infrastructure operations and of the Basslink electricity interconnector in Australia |
| **2007** | Acquisition of KeySpan Corporation |
| **2008** | Sale of the Ravenswood generation station |

The history of operations that are now part of National Grid actually dates back much further than the dates above. For example, the first national gas company in the UK commenced operations in 1812.

# External market and regulatory environment

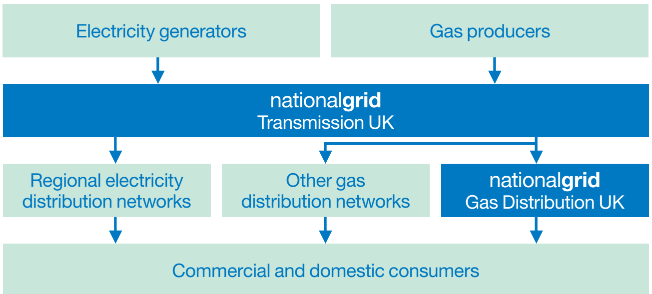
## Markets in which we operate

The principal markets in which we operate are the electricity and gas markets in the UK and the northeastern US.

The generation and supply of electricity and gas in the UK and in most states in the northeastern US are competitive in that consumers can contract with different suppliers to obtain the energy they need. Those suppliers are then responsible for sourcing that energy from electricity generators or from gas extractors or importers as appropriate, as well as arranging for that energy to be delivered through physical delivery networks. These networks, including the ones we operate, are generally monopolies in their local areas as, for the majority of consumers, there are no alternative methods of receiving electricity or gas.

### Energy delivery in the UK

In the UK, domestic and commercial consumers contract directly with energy suppliers who obtain the energy required from electricity generators and gas shippers.




In general, energy is transported through electricity or gas transmission networks to regional electricity or gas distribution networks that then deliver energy to consumers on behalf of suppliers. Certain end customers, primarily large industrial users, receive electricity or gas direct from the relevant transmission network.

We are the owner and operator of the high-voltage electricity transmission network in England and Wales, operator (but not owner) of the two electricity transmission networks in Scotland and owner and operator of the gas national transmission system and of four of the eight regional gas distribution networks in Great Britain. We charge energy suppliers, electricity generators and gas shippers for our services, which they then incorporate into the prices charged to end consumers.

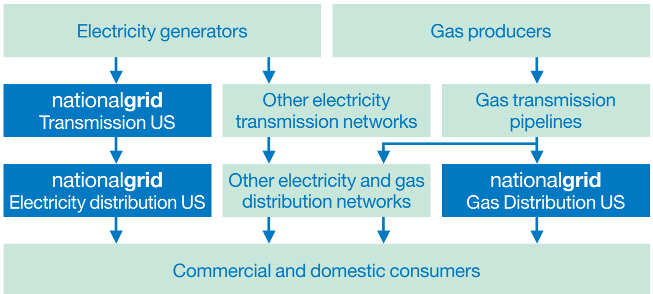
The other principal infrastructure owners and operators in the UK are EDF Group, which owns three electricity distribution networks, Scottish & Southern Energy, Iberdrola, E.ON, Western Power Distribution, and MidAmerican Energy, each of which own two electricity distribution networks, and Electricity North West, which owns one electricity distribution network. Scottish & Southern and Iberdrola also each own an electricity transmission network in Scotland, which we operate in both cases. The gas distribution networks in Scotland and southern England are owned by Scotia Gas Networks, in the north of England by Northern Gas Networks and in Wales and the west of England by Wales & West Utilities.

### Energy delivery in the northeastern US

In most states in the northeastern US, consumers are able to purchase their energy through independent energy suppliers. While a number of large customers have chosen suppliers other than the local utility provider, the majority of residential and small commercial consumers still purchase electricity or gas from their local electricity or gas distribution network business.

The major alternative fuel source to gas is oil, which is used by many consumers for domestic heating purposes.

Electricity is transported either directly from generators into local electricity distribution networks or via electricity transmission networks, while gas is obtained from import terminals or inter-state pipelines and then transported through local gas distribution networks. Certain end customers, primarily large industrial users, receive electricity or gas directly from the electricity transmission networks or inter-state gas transmission pipelines.




Our US electricity and gas distribution businesses support regulatory policies that encourage customers to purchase their energy from independent suppliers. Where this occurs, we deliver that energy to consumers on behalf of those suppliers. For the majority of consumers in our operating areas who continue to purchase their energy from us, we source energy from electricity generators or gas suppliers on behalf of our customers in accordance with regulatory approved arrangements. We are generally responsible for billing customers both for our delivery services and for electricity and gas consumed (on which we do not charge any additional margin).

On Long Island, we operate the electricity transmission and distribution network on behalf of its owner, the Long Island Power Authority (LIPA). We own numerous electricity generation plants on Long Island that supply power under contract to LIPA.

Electricity transmission and distribution networks, including the ones we own, are members of the regional transmission operators or independent system operators that have the responsibility for balancing electricity supply with demand and for the reliability of the regional transmission network. Gas distribution networks, including the ones we own, are each responsible for balancing gas supply with demand within their respective distribution area.

There are more than 25 companies and organisations that own or operate energy delivery infrastructure in the northeastern US, including National Grid, Consolidated Edison, NSTAR, Iberdrola and Northeast Utilities.

## Other areas in which we operate

Our other businesses primarily operate in energy related markets in the UK and the US or are directly connected to our regulated businesses as described above. This includes our metering services businesses in the UK, incorporating our legacy regulated metering business which owns approximately 80% of the domestic gas meters in the UK and our competitive metering services business which has about a 9% market share of the domestic gas meters in the UK. In addition, we have a significant property portfolio and management business.

## Regulation

Due to our position in, and importance to, the economies we serve, our electricity and gas transmission and distribution businesses are subject to UK, European Union and US federal and state laws and regulations. Therefore, we have multiple regulators, each of which exercises power over how we operate within their respective jurisdictions.

Our businesses are also subject to safety legislation in the UK and the US, which is enforced by the Health and Safety Executive (HSE) in the UK and by federal safety bodies and state and local authorities in the US. Our UK gas operations work under a permissioning regime, whereby our organisation, processes and procedures are documented in safety cases that are subject to acceptance by the HSE.

Our principal market regulators and associated rate plans and price controls can be summarised as follows:

**UK**

In the UK, energy networks are regulated by the Office of Gas and Electricity Markets (Ofgem).

Ofgem operates under the direction and governance of the Gas and Electricity Markets Authority and has established price control mechanisms that restrict the amount of revenue that can be earned by regulated businesses.

We have eight price controls in the UK, comprising two for our UK electricity transmission operations, two for our gas transmission operations, and one for each of our four regional gas distribution networks. These price controls provide a financial incentive to invest, as we receive a return on efficiently incurred capital expenditure that increases our regulatory asset base, and also provide incentives by which we can gain or lose for our performance in managing system operation, in controlling internal costs, and for our service quality.

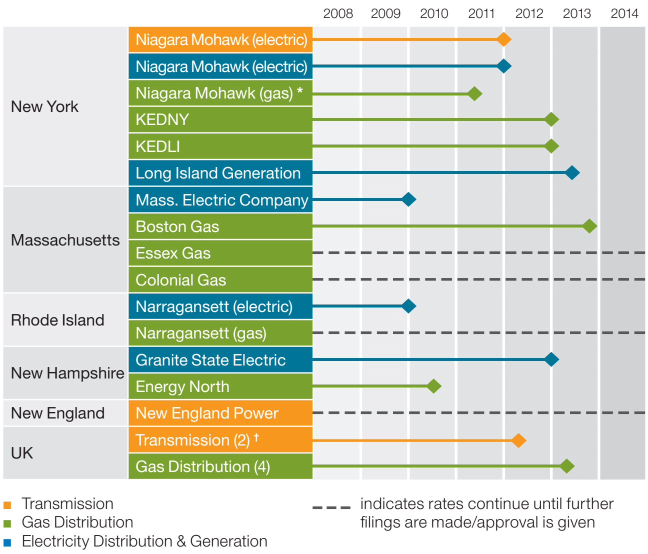
**US**

In the US, public utilities are regulated by the Federal Energy Regulatory Commission (FERC) and by utility commissions in each of the states, including the New York Public Service Commission, the Massachusetts Department of Public Utilities, the Rhode Island Public Utilities Commission and the New Hampshire Public Utilities Commission. These US regulators set service standards, determine allowable levels of return and usually approve mergers and acquisitions of public utilities. The FERC also regulates public utility holding companies, including the US business of National Grid.

We have four electricity rate plans and nine sets of gas rates in the US, covering our electricity distribution operations in upstate New York, Massachusetts, Rhode Island and New Hampshire and our gas distribution networks in upstate New York, New York City, Long Island, Massachusetts, New Hampshire and Rhode Island. Our electricity rate plan in upstate New York also covers our electricity transmission network in that state. Our rates for our electricity transmission network in New England are subject to federal regulatory approval.

Our rate plans are based on our cost and regulatory asset base, together with a return on capital expenditure. Some rate plans include earned savings mechanisms that allow us to retain a proportion of the savings we achieve through improving efficiency, with the balance benefiting customers. We are also permitted to recover commodity and other pass-through costs which we incur, together with the recovery of stranded costs. Stranded cost recoveries represent the recovery of historical generation related costs for assets that are no longer owned. Our reliability performance under certain rate plans is subject to performance targets established by the relevant regulator, under which we can be subject to monetary penalties for failing to meet those targets.

Our major current UK price control periods and indicative US rate plan periods can be summarised as follows:




* Based on settlement filed, awaiting approval

† System operator price control reviews for electricity and gas are not illustrated and are in effect until 31 March 2010

More information about the regulatory environments in which we operate, and on the nature of our rate plans and price controls, is provided in each of the business sections starting on pages 48, 57 and 66.

As a public company with shares and other securities listed on the London and New York stock exchanges, we are subject to regulation by the UK Financial Services Authority, the US Securities and Exchange Commission and the exchanges themselves.

# Current and future developments

## External market developments

### Market structure and ownership

There have been no significant changes in either the structure of the UK energy infrastructure market or in ownership during 2008/09.

In the northeastern US, there have been no significant structural or ownership changes to the electricity and gas transmission and distribution networks during the year other than the acquisition by Iberdrola of Energy East, a utility company operating in New York, Connecticut, Massachusetts and Maine in September 2008.

### Energy market developments

Despite significant declines in wholesale energy prices since mid 2008, high consumer energy prices have been experienced in both the UK and US markets during the current year. This has led to significant increases in bills to consumers for their energy supplies. The combination of higher energy prices and the current economic climate has lead to a reduction in energy demand for both gas and electricity.

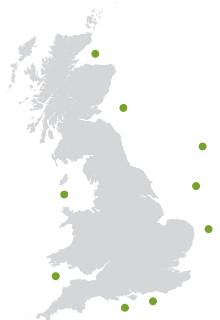
Both the UK and the US energy markets continue to undergo developments driven by the projected increased reliance on imported gas (UK) and unconventional gas sources (US), on new sources of electricity generation, including renewables, and increased focus on security of supply. In the UK, the energy sector faces significant challenges relating to the declining gas reserves in the North Sea, meeting the Government's targets on renewable generation, and significant levels of retirement of the current power generation fleet.

As a consequence of the decline in gas production from the North Sea, our latest forecast is that the UK will import around 50% of its gas requirements by the end of the decade.

National Grid has led a major assessment of the UK electricity transmission system, and the changes needed to ensure that renewable targets can be met. The assessment considered the potential locations and volume of renewable generation and the network requirements to connect it. We identified a requirement for £4.7 billion of transmission investment by 2020.

March 2009 saw the completion of the competitive tender process for round three of the offshore wind leasing programme by The Crown Estate for the nine offshore development zones. These zones have the potential to deliver up to 25 GW of offshore wind renewable generation.

**Illustration of the nine zones put forward by The Crown Estate for potential offshore wind projects in round three**



This year has seen a significant increase in nuclear connection requests and in April 2009 the Government released its list of 11 potential sites for the development of new nuclear power plants.

During April 2009, the UK Government announced its commitment to the development of future carbon capture and storage networks.

These changes are expected to impact all our electricity and gas transmission networks. In particular, they will require significant investment in our UK electricity and gas transmission networks, while in the US asset replacement and renewable power developments will require increasing investment in our US electricity transmission and distribution networks.

In December 2008, phase II of our LNG import terminal on the Isle of Grain was commissioned. Progress is continuing on phase III with commissioning expected in 2010. Once fully commissioned, it is anticipated that our facility will have the capacity to import approximately 20% of the UK's gas demand.

In the US, the administration change has brought an increased political desire to tackle the issues around climate change and security of supply. The development of smart grid technologies is expected to enable more efficient use of the transmission and distribution grid, lower line losses, facilitate greater use of renewables and provide information to utilities and their customers that will lead to greater investment in energy efficiency and reduced peak load demands.

## Regulatory developments

### UK and European regulatory developments

During the year ended 31 March 2009, there were a number of legislative changes in the UK including the introduction of new consumer arrangements, which incorporate an energy ombudsman scheme to deal with consumer complaints and a new Energy Act facilitating a roll out of smart meters in the UK by 2020.

In March 2008, Ofgem announced a review of the current RPI–X based regulatory framework. It is a two year assessment (RPI-X@20) of the current regulatory regime and its ability to address the challenges facing energy networks in the future. The outcome of this review is unlikely to impact our current regulatory settlements, but could influence future price controls from 2012.

In December 2008, the European Union approved a number of environmental proposals. Legally binding national targets have been established that dictate the proportion of energy production to be provided from renewable sources by 2020. For the UK the target is 15%. In order to achieve this, it is believed the proportion of electricity generated by renewable sources will need to rise to around 35%. At present, it is unclear specifically how these targets will impact National Grid, however, they will significantly influence the UK regulatory framework and UK price control reviews in the future.

The European Commission's third package of legislative proposals for the European gas and electricity markets has been submitted for final adoption by the EU Council of Ministers, following approval by the European Parliament in April 2009. The new legislation consists of two directives on rules for the internal gas and electricity markets, two regulations on conditions for access to those markets, and one regulation establishing an Agency for the Cooperation of Energy Regulators. The original legislation, published in September 2007, contained measures to force energy companies to unbundle their transmission businesses from supply and generation activities. The revised draft proposals include alternatives to full unbundling. Adoption is expected in summer 2009.

### US regulatory developments

The principal US regulatory policy developments continue to focus on reducing carbon emissions, involving the need for significant increases in energy efficiency and the development of renewable generation. State regulatory commissions and other policy makers in the various jurisdictions are taking different approaches, including the establishment of targets for reductions in electricity load growth, utility energy efficiency programmes, and renewable generation. There is also an ongoing debate about the potential for revenue decoupling mechanisms to address disincentives to implementing energy efficiency programmes. Massachusetts and New York regulatory bodies have instructed utilities to file decoupling proposals as part of their next rate cases. There is also an increasing interest in exploring the deployment by utilities of smart grid technologies.

At the federal level, the new administration and congress have focused new energy and environmental legislation in two main areas: the economic stimulus bill and emerging comprehensive climate and energy legislation. In February 2009, the $787 billion American Recovery and Reinvestment Act was passed. The Act, which covers all sectors of the economy, has significant provisions for the energy industry, including amounts for the expansion of the electricity transmission network with focus on smart grid development, a broad array of energy efficiency programmes, clean fuel transportation incentives, and research and development programmes.

There is also a high priority on passing comprehensive climate change and energy policy legislation in 2009, including a proposal for a cap and trade regime that would reduce carbon emissions over 80% by 2050.

## Price controls, rate plans and other agreements

### UK price controls

New price controls with respect to our role as owner of four of the eight gas distribution networks in the UK, covering the period from 1 April 2008 to 31 March 2013, came into effect and have been implemented successfully. The key elements are a 4.3% post-tax real rate of return (equivalent to a 4.94% vanilla return) on our regulatory asset value, a £2.5 billion baseline five year capital expenditure allowance and a £1.6 billion five year operating expenditure allowance. We were subject to one year system operator price controls for our electricity and gas transmission operations for 2008/09. One year system operator price controls for our electricity and gas transmission operations for 2009/10 have been agreed with Ofgem.

### US rate plans

We were granted a $13.6 million (£9.5 million) gas distribution rate increase in Rhode Island, effective 1 December 2008. In New Hampshire, we reached settlement in our gas distribution rate application on all issues with the exception of the return on equity. The rate increase is dependent on the outcome of the litigation on the return of equity issue.

We have also filed, or are planning to file, rate plan applications that would increase gas distribution rates in upstate New York, increase electricity generation rates on Long Island and increase electricity distribution rates in Massachusetts and Rhode Island.

We have also applied for deferred recovery of incremental investment, and deferred recovery of electricity related costs and revenue items in upstate New York.

### Other agreements

We have agreements with the Long Island Power Authority (LIPA) for the period until 2013 with respect to our role as operator of their electricity transmission and distribution network on Long Island. Our agreements with LIPA also give them an option to purchase one generation plant that we own, and cover our provision of energy procurement and management services.

We also have a joint venture arrangement with TenneT to construct an electricity interconnector between the UK and The Netherlands and an agreement with Elia to explore the feasibility of constructing an electricity interconnector with Belgium.

Alliance contracts with various contractors have been entered into by the Gas Distribution businesses in the UK and Transmission businesses in the UK and US. These contracts establish a framework for contractors to carry out capital investment projects. Under the terms of the agreements our supply chain partners share in the risks and rewards, and are jointly responsible with us for work delivery.

We have contracts with E.ON, Iberdrola and Centrica for a further 6.7 billion standard cubic metres of long-term LNG importation capacity at our Isle of Grain LNG importation terminal in the Thames Estuary, this being phase III of our development of this facility. Work commenced during 2007 and a contract has been awarded to CB&I to deliver the second jetty, an additional 190,000 cubic metre storage tank and associated works (phase III). National Grid is planning to invest approximately £300 million (excluding capitalised interest and expenditure associated with gas blending) in phase III of Grain LNG.

## Legal and related matters

An update on the ongoing Metering competition and KeySpan Department of Justice investigations that were reported in last year's Annual Report and Accounts is provided on page 85. In October 2008, we informed and launched a joint investigation with Ofgem into the misreporting of gas distribution mains replacement activity, further details of this are also provided on page 85.

# External relationships

We aim to enhance our relationships with all our external stakeholders including investors, customers, regulators, governments, suppliers and the communities in which we operate.

## Investor relations

Our aim is to ensure that the value of our business is reflected in our share price. We aim to make National Grid attractive to debt investors so that we can finance our operations as effectively as possible.

We continue to be active in communicating with equity investors, conducting over 300 investor meetings during the year, maintaining a presence at 18 investor conferences, presenting to 10 broker sales teams and holding 2 investor days in October 2008.

One of our objectives is to increase the number of shareholders in the US and one of our investor days was a presentation to our US investors.

We also presented to debt investors in 12 countries including Japan, across Europe and North America.

We also operate a shareholder networking programme, the aim of which is to allow shareholders to gain a better understanding of the business. The programme includes visits to operational sites and presentations by senior managers and employees.

## Customers, regulators and governments

The primary concern of our customers, regulators and governments is that we deliver a safe, reliable and efficient service, now and into the future. Hence our relationships reflect the quality of our operational performance.

For customers, it is important that we treat them with respect, that we communicate clearly and that we make interaction with them as straightforward as possible. Our focus on customer service and operational excellence is also a critical component of our relationship with our regulators and governments, underpinning the building of trust with both. This involves being responsive to the needs of our regulators for high quality information, complying with rules and regulations, operating in an ethical way and, most importantly, delivering on our promises.

In the UK, we continue to work very closely with Ofgem on the renewal of our electricity and gas transmission and gas distribution networks, and in expanding those networks to meet new and changing demand. In addition, we seek to maintain a professional approach with Ofgem in areas where we disagree, in particular with respect to their investigation into metering services in the UK as discussed on page 85.

In the US, we strive to achieve and maintain strong working relationships with our state regulatory commissions and the Federal Energy Regulatory Commission.

## Suppliers

We aim to work in partnership with our suppliers, developing constructive relationships and working together effectively. Our objective is to develop contractual arrangements with our suppliers that align their interests with our own as far as possible and share financial risks appropriately.

Our objective is to use the scale and breadth of our activities to get the best value for money from our suppliers. We continue to work in partnership with our suppliers, developing constructive relationships and working together effectively. Our focus in these areas has increased, in response to the greater uncertainties from credit market volatility and the global economic downturn.

We have developed our procurement operating model further over the past year and details of this are provided on page 34.

A key element of our approach in creating a new procurement operating model includes placing increasing emphasis on the linkages between procurement and our overall business strategy.

In addition, as an enhancement to our commercial focus, we are explicitly investing in skills and capabilities to help deliver our social and environmental ambition.

Collectively, all of the areas we have developed or are working towards make National Grid an attractive company to do business with. They also enhance our ability to drive value from our supply chain and provide an excellent opportunity for suppliers who are aligned to our approach and ambition.

## Community involvement

National Grid's role in the community supports our ambitions, and is delivered through a sustained and consistent approach.

We have completed an external review of our community activities and we have developed a new community impact framework. We have set targets to improve our community profile around our key themes of education and skills, energy and environment, and community investment. Our key aims are:

- to improve employee engagement in Company community activities;
- to maintain and improve our supply of talent by promoting science, technology, engineering, and maths subject take up and achievement in schools;
- to use volunteering to develop employee skills; and
- to strengthen our corporate reputation.

We continue to use the London Benchmarking Group model to provide a framework for measuring and reporting our community investment contributions, through the capture of spend on the key themes. We invested £10 million (2007/08 and 2006/07: £9 million) in support of community programmes and relationships across our operations in 2008/09.

Working closely with Ofgem, we have developed the framework for connecting fuel poor communities to the gas distribution network under the newly formed Affordable Warmth Solutions Community Interest Company. This will result in the connection of a number of communities to the gas distribution network in the future.

In our 2009 employee engagement survey, 64% (2008: 55%) of respondents considered National Grid makes a positive contribution to the communities in which we operate.

# Business drivers



## Business drivers

Our principal activities include the operation of complex energy infrastructure networks. Overall, we have a highly developed business with numerous drivers; we continue to seek improvements in our business to maximise returns in the context of these. We consider the following to be our principal business drivers:

### Price controls and rate plans

The prices we charge for use of our electricity and gas transmission and distribution networks are determined in accordance with regulator approved price controls in the UK and rate plans in the US. The terms of these arrangements have a significant impact on our revenues.

Their duration is significant in providing stability, allowing us to plan and invest with confidence that we will obtain financial returns.

Our price controls and rate plans contain incentive and/or penalty arrangements that can affect us financially based on performance targets.

### Multi-year contracts

Revenues in our Long Island electricity distribution and generation operations are subject to long-term contracts with the Long Island Power Authority.

In addition, revenues in our UK metering services businesses and our Grain LNG importation terminal are determined by contractual arrangements that are long term with 'blue chip' customers.

### Safety, reliability and efficiency

Our ability to operate safely and reliably is of paramount importance to us, our employees, our contractors, our customers, our regulators and the communities we serve. Our financial performance is affected by our performance in these areas.

Operating efficiently allows us to minimise prices to our customers and improve our own financial performance to benefit our shareholders.

### Customer service

The quality of the service we deliver to customers, and the experiences they have when dealing with us, is important as it feeds through to the attitudes of regulators and is also linked to our financial performance.

### Capital investment

Capital investment is a significant driver for organic growth.

In our regulated energy networks, the prices we charge include an allowed return for capital investment determined in accordance with our price controls and rate plans. These provide incentives for us to enhance the quality and reach of our networks through capital improvements.

Capital investment in non-regulated assets allows us to develop new revenue streams or to increase revenues from existing assets.

### Other investment

Investment in new businesses is also a significant driver of growth, provided we can create value through operational improvements, synergies and financial benefits.

Disposals can crystallise value for shareholders, where the price on offer is better than the long-term return we can obtain ourselves or where a business does not fit with our principal operations.

### Inflation and deflation

During periods of inflation, without action to improve efficiency, our operating costs increase each year as a result of wage increases and inflation in external costs. In general, our revenues also increase each year, although not necessarily at the same rate, depending on our regulatory or contractual arrangements. Correspondingly, during periods of deflation our revenues can decrease, the timing and extent of which may not be offset by equivalent reductions in our operating costs. Consequently, our ability to control costs and improve efficiency is important in order to maintain and increase operating profits.

Our price controls in the UK and a proportion of our UK borrowings are linked to retail price inflation, while certain of our electricity and gas regulatory settlements in the US allow us to recover additional distribution revenues if there is a significant change in inflation.

### Relationships and responsibility

Our reputation is critical to us. Delivering sustainable value depends on the trust and confidence of our stakeholders and this can only be earned by conducting our business in a responsible manner.

A number of other factors also affect our financial performance but are either less significant than our principal business drivers, or are mitigated by the way our operations are structured:

### Weather and volumes

In the US, changes in the quantities of electricity and gas delivered through our transmission and distribution networks may result in an increase or decrease in our revenues. Volumes are affected by weather, consumer demand and network availability as well as other factors. The impact of changing volumes may sometimes be offset by changes in costs or may sometimes result in an under- or over-recovery against our allowable revenues, with a corresponding increase or decrease in revenues in future periods.

### Seasonality

Revenues from our gas distribution networks in the US are weighted towards the end of the financial year, as gas demand is typically higher during the winter. In the UK, revenues from our gas transmission and distribution networks are less affected as under our current price control agreements the volume driven component of revenue is relatively small. Seasonality does not have a significant impact on revenues from our other operations.

With the exception of commodity and other volume related costs passed through to customers, our operating costs are generally not seasonal.

### Exchange rates

The reported results, cash flows and financial position of our US operations are affected by movements in the US dollar to sterling exchange rate. However, we hedge a proportion of this exposure through the use of US dollar debt and derivative financial instruments.

### Commodity and other pass-through costs

We are allowed to recover commodity costs in the US and certain other direct costs in both the UK and the US, through charges to customers. The timing of recovery of these costs can vary leading to an under- or over-recovery within any particular financial period.

We are affected by commodity prices to the extent that they affect our own energy requirements, most significantly gas purchases for the operation of our gas transmission and gas distribution networks. In the US, we are exposed to potential bad debts related to commodity costs, although under the majority of our rate plans our exposure is either fully or partially mitigated by the recovery of such costs in current or future revenues.

Certain US commodity contracts are recorded in our balance sheet at their fair values. Although remeasurements of these are reflected in our income statement, we expect to recover the actual costs incurred from customers in the current or future periods.

### Interest rates

The costs of financing our operations are affected by changes in prevailing interest rates, as some of our debt is at floating rates. We hedge some of our exposure to interest rates with fixed-rate debt and derivative financial instruments to maintain a proportion of our debt at fixed interest rates. The cost of funding our future growth is dependant upon future interest rates and the rate at which we can issue debt.

# Vision, strategy and objectives

Our vision is the long term aspiration for National Grid – what we want to be in the future.

## Vision

**We, at National Grid, will be the foremost international electricity and gas company, delivering unparalleled safety, reliability and efficiency, vital to the well-being of our customers and communities.**

**We are committed to being an innovative leader in energy management and to safeguarding our global environment for future generations.**

Our strategy and objectives are a medium term step in the journey towards the vision – what we are doing over the next few years.

## Strategy and Company objectives

**We will build on our core UK and US, electricity and gas, regulated business base and financial discipline to deliver sustainable growth and superior financial performance.**

- Driving improvements in our safety, customer and operational performance
- Delivering strong, sustainable regulatory and long-term contracts with good returns
- Modernising and extending our transmission and distribution networks
- Expanding our capabilities and identifying new financeable opportunities to grow
- Becoming more efficient through transforming our operating model and increasingly aligning our processes
- Building trust, transparency and an inclusive and engaged workforce
- Developing our talent, leadership skills and capabilities
- Positively shaping the energy and climate change agenda with our external stakeholders in both regions

## Responsibility

Our strategy and Company objectives are underpinned by our commitment to corporate responsibility. We will operate to the highest standards of corporate governance and conduct our business in a lawful and ethical manner.

The vision, strategy and Company objectives flow down into every employee's annual performance objectives – what we are doing now and how we ensure we achieve our strategy and vision.

## Line of sight


Our strategy and Company objectives provide the basis for the annual priorities for each line of business and global function.

These annual priorities form the basis of the objectives for the Executive Directors and flow down the organisation into the individual objectives for every manager and employee. Consequently the actions required to deliver the strategy are allocated and aligned with employee responsibilities.

Our aim is that every employee is able to trace their objectives through to the Company's objectives, strategy and vision.

## Strategy and Company objectives

Our strategy and objectives provide direction and clarity on how we are going to achieve our vision. During the year, we have launched our line of sight framework that establishes a direct link between our strategy and Company objectives and employees' individual objectives. The fundamental principles behind our strategy and Company objectives are below:

### We will build on our core UK and US, electricity and gas, regulated business base and financial discipline to deliver sustainable growth and superior financial performance

Sustainable growth is key to our business and is vital to delivering our promise to shareholders of an 8% dividend growth per annum until 2012. The delivery of superior financial returns within our low risk business model will be through focusing on our core regulated business in the UK and US.

### Driving improvements in our safety, customer and operational performance

The safety of our people, contractors and the communities we serve is central to everything we do. We strive for an environment where there are zero work-related injuries and where we set the industry benchmark for world-class safety processes. We will work towards a more consistent and improved experience for all our customers and to achieving top quartile satisfaction rates compared to our peers.

### Delivering strong, sustainable regulatory and long-term contracts with good returns

The successful delivery of acceptable regulatory agreements will enable us to recover our investment and costs and earn good returns.

We will negotiate strong sustainable regulatory arrangements to fund our ongoing operational costs and future network investment at acceptable levels of return. We will drive continuous improvement to deliver services and investment as efficiently as possible without compromising safety, reliability and customer service.

### Modernising and extending our transmission and distribution networks

The capital investment that is required for security of supply and to meet climate change targets is a significant driver of organic growth. We will maintain a sustainable programme of capital investment. Our infrastructure replacement programme will ensure that we adapt our networks for the future and are able to identify opportunities arising from the changes in sources of energy and technology. We aim to increase our returns on capital expenditure through disciplined management of our workload ensuring investment is delivered on budget, to schedule and within our regulatory allowances.

We will improve our reliability performance by sustained investment and enhanced operational performance. We aim to achieve first quartile reliability performance in the majority of our businesses by 2011/12.

### Expanding our capabilities and identifying new financeable opportunities to grow

We will evaluate potential acquisitions and new organic investment opportunities currently outside of our regulatory agreements (such as renewable power and Grain LNG), and pursue those with an acceptable risk return profile that build on our existing regulated business model.

### Becoming more efficient through transforming our operating model and increasingly aligning our processes

Owning and operating complementary businesses within the UK and US provides us with a great opportunity to create value for our shareholders. Our aim is to reduce the number of systems that we have and to simplify and standardise processes where possible. This will enable us to drive reductions in controllable operating costs.

### Building trust, transparency and an inclusive and engaged workforce

Developing and communicating a clear line of sight between our vision, our strategy and individual objectives is important to help develop trust and transparency with our employees. It will enable them to be actively engaged in the journey towards our vision. It will help them understand the challenges we face and also feel that their contribution is valued. We aim to establish a genuinely inclusive working environment where collaboration and sharing best practice is instinctive in the way we work.

### Developing our talent, leadership skills and capabilities

The attraction and retention of talent and the quality of skills and capabilities of our employees are fundamental to the delivery of our strategy. We will establish training, coaching and performance management frameworks enabling the creation of a high performance environment where employees at every level are developed and supported to reach their full potential.

### Positively shaping the energy and climate change agenda with our external stakeholders in both regions

Delivering sustainable shareholder value depends on the trust and confidence of our stakeholders. We will build strong relationships with government and regulators, taking a leading role in shaping future energy policy including security of supply and the UK and US regulatory frameworks. We will become a trusted and innovative partner in meeting the changing needs of our customers and local communities.

## Performance indicators

We use a variety of performance measures to monitor progress against our objectives. Some of these indicators are considered to be key performance indicators and are set out below. Details of our performance indicators are provided in the performance summary section on pages 28 and 29.

| Strategy and Company objectives | KPIs |
|---|---|
| Sustainable growth and superior financial performance | Earnings per share<br>Total shareholder return |
| Driving improvements in our safety, customer and operational performance | Employee lost time injury frequency rate |
| Delivering strong, sustainable regulatory and long-term contracts with good returns | Group return on equity |
| Modernising and extending our transmission and distribution networks | Network reliability targets |
| Becoming more efficient through transforming our operating model and increasingly aligning our processes | Regulated controllable operating costs |
| Building trust, transparency and an inclusive and engaged workforce | Employee engagement index based on employee survey |
| Positively shaping the energy and climate change agenda with our external stakeholders in both regions | Greenhouse gas emissions reduction against baseline |

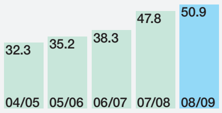
# Performance summary: Key performance indicators

| Objective | KPI | Description and performance | Target and page reference |
|---|---|---|---|

**Objective:** Delivering superior financial performance

**KPI:** Adjusted EPS ‡ †

Adjusted earnings divided by the weighted average number of shares (pence)

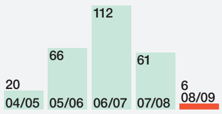



To increase

See page 30

**KPI:** Total shareholder return

Growth in share price assuming dividends are reinvested (% cumulative three year growth)



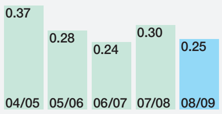

To increase

See page 30

**Objective:** Driving improvements in our safety, customer and operational performance

**KPI:** Employee lost time injury frequency rate *

Injuries resulting in employees taking time off work (per 100,000 hours worked)



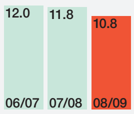

Zero

See page 31

**Objective:** Delivering strong, sustainable regulatory and long-term contracts with good returns

**KPI:** Group return on equity ^

Adjusted earnings with certain regulatory based adjustments divided by equity (% – three year average)




To increase

See pages 32 and 33

**Objective:** Modernising and extending our transmission and distribution networks

**KPI:** Network reliability

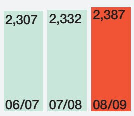
| | Performance | | | | | Measure | Target |
|---|---|---|---|---|---|---|---|
| | 04/05 | 05/06 | 06/07 | 07/08 | **08/09** | | |
| Electricity transmission – UK | 99.99998 | 99.9999 | 99.9999 | 99.9999 | **99.9999** | % | 99.9999 |
| Gas transmission – UK | 100 | 100 | 100 | 100 | **100** | % | 100 |
| Gas distribution – UK | 99.999 | 99.999 | 99.999 | 99.999 | **99.9999** | % | 99.999 |
| Electricity transmission – US | 385 | 348 | 259 | 437 | **266** | MWh losses | <303 |
| Electricity distribution – US | 120 | 141 | 121 | 110 | **114** | Mins of outage | <110-120 |

See pages 53, 62 and 70 for additional details on network reliability

**Objective:** Becoming more efficient through transforming our operating model

**KPI:** Controllable cost ~

Regulated controllable operating costs (£m – comparatives stated on a constant currency basis and inflated to current performance year)



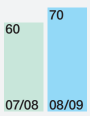

To decrease

See page 35

**Objective:** Building trust, transparency and an inclusive and engaged workforce

**KPI:** Employee engagement index

Employee engagement index calculated using responses to our employee survey (%)



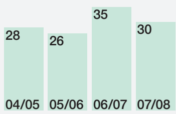

To increase

See page 35

**Objective:** Positively shaping the energy and climate change agenda

**KPI:** Greenhouse gas emissions # *

Reduction in greenhouse gas emissions against baseline (% – cumulative reduction)




80% reduction by 2050

45% reduction by 2020

See pages 37 and 38

‡ Adjusted earnings per share excludes exceptional items, remeasurements and stranded cost recoveries
† 2007/08 includes continuing operations acquired with KeySpan for the period from 24 August 2007 to 31 March 2008 or as at 31 March 2008
* 2007/08 data restated as if KeySpan acquisition had occurred at the beginning of the year, previously published figure excluding KeySpan was 0.24 for employee lost time injury frequency rate and 38% for greenhouse gas emissions
^ 2007/08 results include KeySpan operations on a pro forma financial performance basis assuming the acquisition occurred on 1 April 2007
~ 2006/07 and 2007/08 results include KeySpan operations on a pro forma financial performance basis assuming the acquisition occurred at the beginning of the fiscal year
# 2008/09 result not currently available. Result will be published on our website www.nationalgrid.com in July 2009

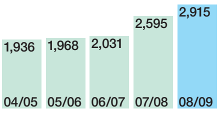
# Performance summary: Achievements and other performance measures



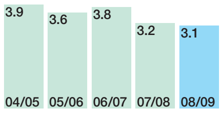
## Delivering superior financial performance

See pages 41 to 47

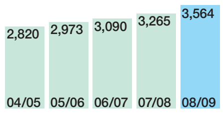
**Adjusted operating profit ‡†**
(£m)




**Interest cover †**
Long-term target: range 3.0-3.5



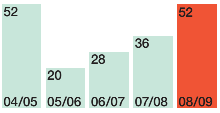

**Cash generated by continuing operations †** (£m)




## Driving improvements in our safety, customer and operational performance

See pages 31 and 32

**Injuries to the public *** (number)
Target: zero

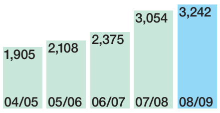



- Electricity Distribution & Generation ranked in lower quartile for customer satisfaction in J.D. Power and Associates survey in the US
- Employee sickness absence rate was 3.06% in 2008/09, an increase from 2.46% in 2007/08

## Modernising and extending our transmission and distribution networks

See page 33

**Total capital expenditure †**
(£m)




- Phase II of Grain LNG commissioned in December 2008
- Commencement of the New England East-West Solution (NEEWS) transmission project in the US

## Becoming more efficient through transforming our operating model

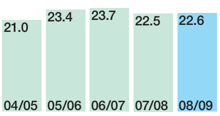
See pages 34 and 35

- Synergy savings of $74 million achieved in the year representing a run rate of $129 million at 31 March 2009
- Phase II implementation of common ERP operating platform across UK businesses
- Continuing restructuring plans in the US including consolidation of premises. Our new Reservoir Woods office in Waltham, Massachusetts is due for completion in spring 2009
- Transformation of operations within the lines of business focused on projects that maximise tangible returns in the near term

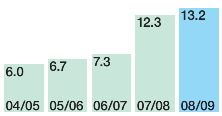
## Building trust, transparency and an inclusive and engaged workforce

See pages 35 and 36

**Proportion of female employees** (%)




**Proportion of ethnic minority employees** (%)




- 91.8% response rate in our employee survey (2007/08: 86.4%)
- 73% (2007/08: 62%) of employees said that they would recommend National Grid as a place to work
- We launched our global inclusion charter that explains what employees can expect from the Company, as well as what National Grid expects from employees

## Developing our talent, leadership skills and capabilities

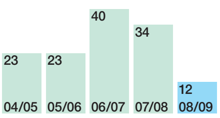
See pages 36 and 37

- Recruited a total of 272 advanced apprentices, foundation engineers and graduates in the UK
- Launched workforce planning as a methodology to identify and proactively address the gaps both in people and skills necessary to deliver our strategy
- Launched two new management development programmes

## Positively shaping the energy and climate change agenda

See pages 37 to 39

**Significant direct environmental incidents *** (number) Target: zero




- Steve Holliday member of the RPI-X@20 advisory panel looking at regulation and future energy challenges in the UK
- 80% of employees working to certified ISO 14001 systems

‡ Adjusted operating profit excludes exceptional items, remeasurements and stranded cost recoveries
† 2007/08 includes continuing operations acquired with KeySpan for the period from 24 August 2007 to 31 March 2008 or as at 31 March 2008
* 2007/08 excludes KeySpan operations

Following a realignment of our strategy and Company objectives during 2008/09 some of our KPIs and other performance measures are still under review – any new performance measures identified as a result will be reported in the 2009/10 Annual Report and Accounts.

# Performance against our objectives

Our performance and the progress we have made against the objectives we have set ourselves are described below and on the following pages. This includes commentary on our financial results on pages 41 to 47 and information on the performance and financial results of each business in the business sections on pages 48 to 78.

We measure the achievement of our objectives through the use of qualitative assessments and through the monitoring of quantitative indicators, called key performance indicators (KPIs). In line with our operating objectives, we use both financial and non-financial KPIs. Where relevant, KPIs are used as our primary measures of whether we are achieving our objectives. However, the scale and size of our operations means we use many other detailed performance measures in addition to KPIs. We also use KPIs to measure performance against our principal aim of sustainable growth and superior financial performance building on our core UK and US regulated business base. We use qualitative assessments to judge progress against our objectives in areas where numerical measures are less relevant.

During 2008/09, we have realigned our strategy and Company objectives. As a result we have undertaken a detailed assessment of our performance measures that resulted in a rationalisation of our performance indicators, directly aligning them with our objectives and providing a clear distinction between key performance indicators and our other performance indicators. This revised presentation is illustrated in the performance summary on pages 28 and 29. We have also introduced two new KPIs regarding the measurement of our efficiency relating to the transformation of our operating model and the engagement of our employees. The new efficiency KPI measures the year-on-year movement in our regulated controllable operating costs on an inflation and foreign exchange adjusted basis. The new employee engagement KPI uses an employee engagement score derived from our annual employee survey administered by Sirota, an independent consultancy firm. We have retained the KPI for greenhouse gas emissions reduction but, due to a change in the timing of when gas leakage performance data are reported by the four UK gas distribution network owners through Ofgem, this year's performance data is not currently available. It is anticipated that the current year's performance data will be available in July 2009 and will be presented on our website. Going forward, the year-on-year performance presented in the Annual Report and Accounts will continue to lag by one year.

We are currently developing a new KPI to monitor our performance on customer service. We will define and report our performance against this new KPI in next year's Annual Report and Accounts.

Last year's comparative figures for certain performance indicators incorporate the KeySpan acquisition. In particular, financial KPIs reflect the results of operations acquired from their acquisition on 24 August 2007, together with the associated increase in interest expense on debt used to finance the acquisition.

## Delivering superior financial performance

We aim for superior financial performance, to deliver returns appropriate to our risk profile and to be financially disciplined. We also aim to ensure that the value we create is reflected in our share price.

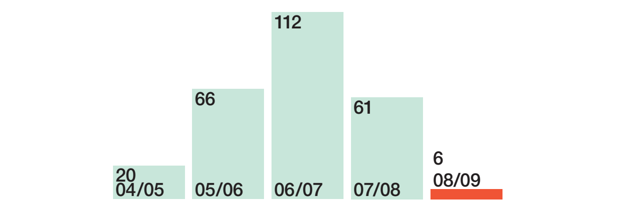
### Shareholder returns

We aim to increase our dividend each year to ensure shareholders receive an appropriate level of return on their investment in us. We also endeavour to communicate with investors so that as much as possible of the value that we create is reflected in our share price to the benefit of shareholders.

We measure our overall performance through total shareholder return, being the increase in our share price over the course of the financial year, assuming dividends are reinvested.

### Total shareholder return

**Total shareholder return**
% cumulative three year growth




We measure total shareholder return on a cumulative three year basis. Cumulative total shareholder return between 1 April 2006 and 31 March 2009 was 6%.

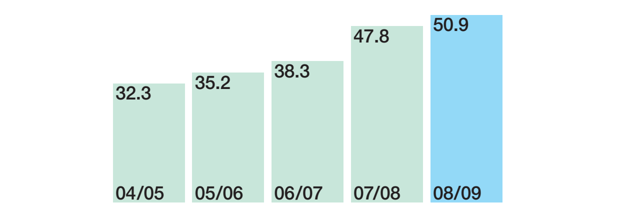
The 6% three year cumulative return represents a strong annual return in 2006/07 partially offset by falls in 2007/08 and 2008/09. These recent reductions over the last two years have occurred in an environment of significant instability in the financial markets and sharp declines in global share indices. We believe that our 6% shareholder gain, in the context of a 34% fall in the FTSE 100 UK share index in the same period, illustrates our low risk, stable business model combined with the potential for strong organic growth and our strong dividend policy.

### Earnings

We aim to increase our adjusted earnings each year to support our dividend policy and return value to our shareholders.

The key performance measure we use to monitor our overall performance on earnings is adjusted earnings per share.

**Adjusted earnings per share**
pence



| 50.9p | 6% | £597m | 17% |
|---|---|---|---|
| Adjusted earnings per share | Increase in adjusted earnings per share | Returned to shareholders through the share repurchase programme | Reduction in employee lost time injury frequency rate |

Adjusted earnings per share for 2008/09 increased by 3.1 pence, an increase of 6% compared with 2007/08 (2007/08: increased by 9.5 pence, an increase of 25% compared with 2006/07).

This increase reflected the higher adjusted profit for the year from continuing operations and the effects of the share repurchase programme that returned £597 million of value to shareholders (2007/08: the increase in adjusted profit from continuing operations and £1,516 million returned under the share repurchase programme).

A more comprehensive analysis of our financial performance is provided on pages 41 to 47. This includes a description of, and our reasons for using, adjusted profit measures on page 42.

## Driving improvements in our safety, customer and operational performance

We aim for operational excellence by performing to the highest standards of safety and by improving customer service.

### Safety

Safety is paramount. Our most important goals are: to ensure that members of the public are not injured as a direct result of our operations; to deliver a working environment where there are zero work-related injuries and illnesses; to reduce gas leaks on our distribution networks; and to improve the health of our employees so they are fit for work every day.

We use a range of indicators to monitor our performance including: members of the public injured as a direct result of our operations; employee lost time injury frequency rate; kilometres of gas distribution mains replaced in the UK; and employee sickness absence rate. Our key performance indicator is our employee lost time injury frequency rate.

Operating major hazard sites and pipelines means we remain vigilant to process safety risks as well as personal safety risks. During the year, there was one serious explosion in the UK and three explosions in the US as a result of escapes from our gas distribution networks. In the UK, we continue to replace our metallic gas mains in line with a programme agreed with the Health and Safety Executive (HSE) to reduce the risks of this type of incident. In the US, we continue to implement targeted replacement programmes to reduce the risk of incidents. In the last year, we have implemented revised processes to manage gas escapes in the UK satisfying the requirements of an enforcement notice served by the HSE.

We have continued to embed our trusted to work responsibly approach that builds on our well established safety framework and gives greater ownership for safety to our employees. We received external plaudits for this approach with the Safety and Health Practitioner/Institution of Occupational Safety and Health award for the best campaign of 2008, and the Confederation of British Industry publishing a case study on 'trusted'.

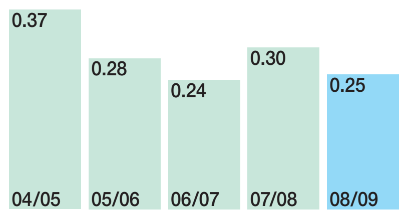
### Employee safety

We report our lost time injury frequency rate, expressed as lost time injuries per 100,000 hours worked, as a key measure that can be compared with other companies. This rate takes into account the number of employees and the hours worked. As well as reporting our lost time injury frequency rate, we also report the number of lost time injuries.

This is the first year we have included parts of the business that were acquired with KeySpan. This increase in the size of the organisation is the reason for an increase in the number of lost time injuries to 140 in 2008/09 compared with 88 in 2007/08 and 97 in 2006/07. KeySpan had a lower level of safety performance than the existing business and this has contributed to the lost time injury frequency rate rising slightly to 0.25 in 2008/09 compared with 0.24 in 2007/08 and 0.24 in 2006/07. If KeySpan had been included in the 2007/08 performance indicators, there would have been 157 lost time injuries with a rate of 0.30. Therefore, on a comparable basis performance has improved. The results prior to 2007/08 did not include KeySpan and so are not directly comparable. Definitions for lost time injury and lost time injury frequency rate are included in the glossary on page 195.

The principal causes of lost time injuries to our employees are road traffic collisions, musculoskeletal injuries, impact injuries, and slips, trips and falls. Behavioural change initiatives have been targeted in these areas to improve performance.

**Employee lost time injury frequency rate**
Per 100,000 hours worked — Target: zero

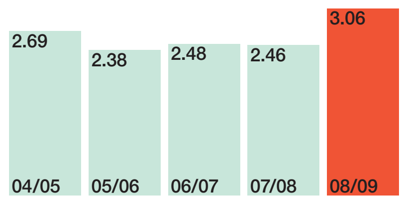



2007/08 data restated as if KeySpan acquisition had occurred at beginning of year. Previously published figure, excluding KeySpan, was 0.24.

In our 2009 employee engagement survey, 74% (2008: 71%) of respondents felt confident that safety concerns or issues raised would be addressed. In 2009, 76% (2008: 73%) of respondents also considered that National Grid never compromises safety in order to meet other goals.

### Employee health

**Employee sickness absence rate**
% — Target: zero




Data prior to 2008/09 excludes KeySpan.

Improving the health and well-being of our employees continues to be a major focus for National Grid. For several years we have had a comprehensive occupational health service to deal with work related health issues. We are now extending our approach to look at the health and well-being of our employees in a more holistic way. As well as the obvious benefits to individuals, there are significant business and societal benefits to having a fit and

# Performance against our objectives continued

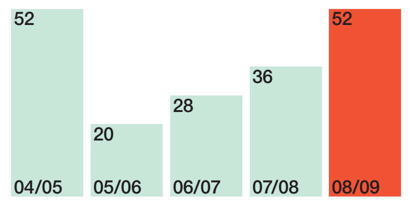
healthy workforce. In January we launched a new health and well-being strategy to provide a series of innovative initiatives that engage staff and encourage the restoration and maintenance of an individual's health, function and fitness. An early focus has been cardiovascular risk with screening being offered to UK employees over 45. Over the year, our sickness absence rate increased to 3.06% compared with 2.46% in 2007/08 and 2.48% in 2006/07. Data prior to 2008/09 does not include KeySpan, so is not directly comparable.

### Contractor safety

We are committed to the safety of all our workforce, not only direct employees. In 2008/09, there were 108 contractor lost time injuries compared with 105 in 2007/08 and 131 in 2006/07. Data prior to 2008/09 does not include KeySpan, so is not directly comparable. We are very sad to report there have been 3 contractor fatalities in the US: 2 contractors died following an incident while using a drilling rig and 1 died after coming into contact with an energised electricity line.

### Public safety

**Injuries to members of the public**
Number
Target: zero




Data prior to 2008/09 excludes KeySpan.
Includes fatalities, injuries requiring the person to attend hospital and, in the UK, any other injuries reportable under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR).

The safety of the public in the communities we serve is of prime importance to us. In 2008/09, 52 members of the public were injured as a result of our activities compared with 36 in 2007/08 and 28 in 2006/07, predominantly as a result of road traffic collisions and trips and falls around our street works. Sadly, 1 member of the public died in the US resulting from a road traffic accident.

### Gas safety

We discuss our performance relating to consumer gas safety in the Gas Distribution section on pages 60 and 61.

## Customer service

We aim to impress our customers with the quality of the services we provide, with our responsiveness when things go wrong, and with our dedication to continued improvement.

We use business specific service quality performance measures to measure our performance in this area.

We will achieve our aim by enhancing or replacing the systems we use, providing our employees with the training, empowerment and support they need to deliver, and by improving the quality of our internal and customer communications.

An implementation programme will begin during 2009/10 to enhance our US customer experience across all areas. This includes ensuring complete alignment of all customer contact activities, streamlining work for the benefit of our customers, and prioritising resolution of customer issues at the first point of contact with National Grid.

In Gas Distribution, we will focus on standardising our practices and maximising collective learning. This will enable us to create a more consistent offering to all our customers. Greater levels of analysis and focus will be given to specific areas of low customer satisfaction.

In our 2009 employee survey, 57% (2008: 47%) of our employees believed National Grid is a good company for customers to do business with.

Further information on our customer service during the year is provided within each of the business sections on pages 53, 61, 69 and 75.

### Delivering strong, sustainable regulatory and long-term contracts with good regulatory returns

We will work with our regulators and governments to develop the changes that are required to address climate change and security of supply in a way that is affordable for consumers and ensures timely delivery. Significant levels of investment over the next few years means that it is vital that we optimise our regulatory returns and ensure we are appropriately compensated for our investments.

In the US, we are committed to filing new rate cases whenever current rates do not represent a fair return on our assets. We have made significant progress in rate filings this year, further details of which are provided in the current and future developments section on page 23, and in the business sections on pages 52, 60 and 68.

## Regulatory returns

Our aim is to deliver good financial returns compared to the regulatory allowances within our UK price controls and US rate plans and agreements.

We measure the performance of our UK regulated businesses through an operational return metric comparable to the vanilla return defined in the UK price controls. In the US, our performance is measured against the allowed regulatory return on equity under the terms of the relevant rate plan or agreement.

Our performance during the year is measured against each of our UK price controls and our US rate plans. Details of our results are provided in the business sections on pages 53, 61 and 70.

## Returns on our investments

We aim to generate value from our investments by improving the operating performance of our networks, by selecting investments that will provide the best return or, in the case of acquisitions, by selecting businesses where we can obtain synergies for the benefit of our customers and our shareholders.

We measure the value we generate from our investments by our consolidated return on equity.

Our group return on equity measure allows us to monitor our performance in generating value from our businesses and from the investments we make. Return on equity is calculated by dividing our annual return by the equity base. The annual return is our earnings

| 3.06% | 10.8% | £3.2bn | £3.4bn |
|---|---|---|---|
| Employee sickness absence rate | Three year average return on equity | Total capital expenditure in 2008/09 | Planned total annual capital expenditure for 2009/10 |

(excluding exceptional items, remeasurements and stranded cost recoveries) plus various regulatory based adjustments. The most significant regulatory adjustments relate to the replacement of IFRS depreciation and capital expenditure with regulatory based treatments, retail price index (RPI) linked UK regulatory asset value indexation uplift, and a pension deficit revenue adjustment. The equity base is invested capital less opening net debt. Invested capital is the opening UK regulatory asset value inflated to mid year based on RPI linked inflation, plus opening US invested capital (excluding stranded cost assets and assets disposed in the year), plus the closing net book value for assets and liabilities of UK based non-regulated businesses, corporate activities and joint ventures. Opening net debt is adjusted for significant individual transactions during the year such as disposal proceeds and share buybacks.

We monitor our performance using a three year average return rather than a return for a specific year. This provides a better measure of our ongoing performance as it helps to reduce short-term fluctuations due to temporary market conditions such as inflation volatility. For 2008/09, our three year average return on equity is 10.8%, down from 11.8% in 2007/08 and 12.0% in 2006/07. Despite an increase in our adjusted earnings during 2008/09, the decrease is primarily driven by UK RPI linked inflation that has reduced the inflation uplift on the regulatory asset value recognised in our return.

## Modernising and extending our transmission and distribution networks

Significant capital investment is needed in the next few years to ensure we meet the challenges around the security of supply, renewable generation targets and maintaining and improving the reliability of our networks.

This planned capital expenditure is a significant driver for our future growth.

### Reliability

Our principal operations are critical to the functioning of the economies we serve. The reliability of our energy networks is one of our highest priorities after safety.

We use business specific reliability performance indicators to measure our reliability performance.

Our approach to maintaining and improving reliability involves: investing in infrastructure and systems to provide the operational tools and techniques necessary to manage our assets and operations to high standards and investing in the renewal of assets; investing in the skills and capabilities of our people to give them the ability to operate our networks to a high degree of service excellence; maintaining a constant focus on reliability as one of our principal objectives; and ensuring we are proactive about planning to ensure reliability and that we react quickly to factors that could compromise reliability.

Overall we continued to meet or exceed agreed performance targets. More information on the reliability of each of our main businesses is included in the business sections on pages 53, 62 and 70.

### Capital investment

Capital investment is one of the principal drivers to future growth, as the majority of the capital investment we make enables us to earn an increased financial return.

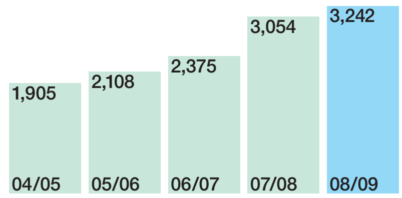
The principal measure we use to monitor organic investment is capital expenditure, which includes investment in property, plant and equipment as well as in internally created intangible assets such as software.

Our capital investment plans reflect changing energy infrastructure requirements.

The capital investment programme in our regulated businesses usually takes place within defined regulatory frameworks that permit us to earn a return on allowed investments. Capital investment in our non-regulated businesses is based on the financial return that we expect to generate.

Our planned total annual capital expenditure for 2009/10 is around £3.4 billion and we expect it to remain at around this level over the medium term.

**Total capital expenditure**
£m




Our total capital expenditure during 2008/09 was £3,242 million compared to £3,054 million in 2007/08 and £2,375 million in 2006/07. More detail on capital expenditure is provided in the business sections on pages 54, 62, 71 and 75.

## Expanding our capabilities and identifying new financeable opportunities to grow

We are committed to the growth of National Grid through organic capital expenditure and potential acquisitions of new businesses. Acquisitions will only be considered when we believe we can derive added shareholder value and they can be readily financed without undermining our external credit ratings.

### New businesses

We will consider acquiring new businesses in our core markets of electricity and gas delivery in the UK and the US. This may include generation assets where our exposure to commodity price fluctuations is limited.

We use the aggregate of consideration paid and debt assumed to monitor our investment in acquisitions. There is no numerical target as each investment is different and is considered on its own merits. As part of our monitoring of the transformation of our operating model we monitor synergy savings generated following an acquisition (see page 35).

# **Performance against our objectives** continued

### Acquisitions
While there have been no new acquisitions during the current year, this is our first full year of ownership of KeySpan following the acquisition on 24 August 2007 for consideration of £3.8 billion together with the assumption of £2.2 billion of net debt.

The acquisition of KeySpan significantly expanded our operations in the northeastern US. The results of KeySpan's operations are included in our results since the date of acquisition on 24 August 2007. In note 28 of the financial statements on page 159 we have included pro forma financial information in accordance with IFRS to present our financial results as if the acquisition had occurred on 1 April 2007. The pro forma information has been provided as we believe it provides the user of the financial statements with additional useful information relating to the KeySpan acquisition and aids the comparison of our financial performance between periods.

There were no other acquisitions during the years ended 31 March 2009 or 31 March 2008, while during the year ended 31 March 2007, we completed the acquisition from Southern Union Company of the Rhode Island gas distribution assets for £269 million, including transaction costs of £3 million.

Recent financial market volatility has led most utility companies to conserve cash and refrain from significant acquisitions that require funding through either the debt or equity markets. We continue to monitor the energy market and assess potential targets for strategic fit, good regulatory returns and the potential to add value to our business. If required, we believe that our ability to access the financial markets to fund transactions remains strong.

## Exit non-core businesses

Our focus on our energy delivery markets in the UK and the US means that we have sought to dispose of operations deemed to be non-core.

Our principal objective on exiting a business is to maximise the proceeds we can generate from each sale.

### Disposals
During 2008/09, we completed the disposal of the Ravenswood generation station for cash proceeds of $2.9 billion (£1.6 billion). Its disposal was a condition of regulatory approval for the KeySpan acquisition.

There were no other significant disposals during the year ended 31 March 2009.

During 2007/08, we completed the disposal of several non-core businesses including our UK and US wireless infrastructure operations and our Basslink electricity interconnector in Australia.

## Becoming more efficient through transforming our operating model and increasingly aligning our processes
We are in the process of transforming National Grid in line with our strategy.

Last year we successfully created our lines of business and established our shared services functions for procurement, information services, business development, human resources and finance.

During 2008/09, we have continued to transform our business, however, now that our lines of business and shared services functions are established we are focusing on transforming our operating model within each line of business.

We remain committed to our long-term aim of a global operating model and the convergence of operating principles, processes, systems and organisations. However, in order to maximise our near-term benefits and return on investments, our focus during the current year and in the short term is on maximising efficiencies in the operating model within each line of business.

Through targeted reductions in the number of processes, as well as through their standardisation and simplification, we aim to maximise efficiencies and reduce our costs.

## Operating model

Our operating model is based on ensuring that activities are carried out at the most appropriate level, either locally, within lines of business or across National Grid.

Our operating model is focused on the delivery of services to customers, developing the sharing of best practice and positioning ourselves to deliver improvements in operating and financial performance.

In designing and implementing an operating model to deliver our vision of being the foremost international electricity and gas company we believe we can deliver the following:
- a significantly improved customer experience;
- a high performance culture;
- structural changes in the way we operate;
- long-term labour agreements that enable us to deliver improved operational performance and rewarding work for our employees;
- rationalised locations from which we operate;
- refreshed system operation technology;
- improved productivity and efficiency; and
- advanced decision support tools and analytic capabilities.

### Activities during the year
#### Lines of business – transforming our operating model
Our focus this year has been on the operating model within each line of business. Further information on transforming our operating model during the year is provided within each of the business sections on pages 54, 62, 71 and 76.

#### Global procurement model
We continue to develop our procurement operating model and are now structured on a strategic spend category basis. This structure drives greater focus in delivering value from our supply chain. We have strengthened our management team and increased the level of international industrial experience in particular, as we seek to improve the performance of this part of our business.

We have implemented new technology tools that better enable our capacity to plan, monitor, report spend and undertake e-commerce events. We have also introduced a system that provides robust financial monitoring services, focusing on our critical suppliers. We have developed common global spend reporting techniques that are able to consolidate information from our different enterprise resource planning platforms. Together, these developments have significantly enhanced visibility and control of spend.

| £2,387m | $200m | $129m | 91.8% |
|---|---|---|---|
| 2008/09 regulated controllable operating costs | Total target synergy savings from KeySpan acquisition | Run rate cost savings from KeySpan acquisition achieved by 31 March 2009 | Response rate to 2008 employee engagement survey |

We have continued to selectively expand our use of alliance models in our construction activities, in particular developing this model in the US using a rigorous process based methodology to adapt our approach as necessary to suit any structural market differences and to drive value. Overall, as market conditions are affected by current economic uncertainty, we continue to benefit from the closer and more constructive working relationships that can be achieved when project objectives are aligned and financial risks are shared between ourselves and our supplier base.

## Efficiency

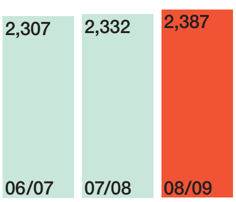
By improving efficiency, we can constrain the cost of our operations borne by customers and improve returns to shareholders. We review our operations continually to identify opportunities to improve the operational productivity of our assets and our employees and to identify areas in which we can reduce costs or restrict cost increases.

The key performance indicator we use to monitor improvements in our efficiency is our year-on-year movement in regulated controllable operating costs. In addition, we track synergy cost savings related to the integration of KeySpan as a performance indicator, as well as monitoring our overall financial performance.

### Regulated controllable operating costs

Controllable operating costs are monitored through the comparison of year-on-year movements in regulated controllable operating costs on a constant currency and inflation adjusted basis. The results illustrated in the graph present 2006/07 and 2007/08 comparatives on a currency adjusted and inflation adjusted basis, as well as including an adjustment to include pro forma KeySpan costs as if its operations were owned for a full year. We believe this provides a comparable measure of our controllable costs on a like-for-like basis. A definition of regulated controllable operating costs is provided in the glossary on page 196.

**Regulated controllable operating costs**
£m




On a like-for-like basis, during 2008/09 our regulated controllable operating costs slightly increased to £2,387 million compared with £2,332 million and £2,307 million in 2007/08 and 2006/07 respectively.

Regulated controllable operating costs increased by £55 million in 2008/09 compared with 2007/08. If the impact of bad debts is excluded from the cost base the year-on-year increase is only £17 million. Our bad debt costs relate to our US operations. Under the majority of our US rate plans such costs are either fully or partially recoverable from customers in either the current or future periods.

We also monitor our regulated controllable operating costs (on a non inflated basis and excluding bad debts) as a percentage of our total adjusted regulated asset base. Our regulated controllable operating costs as a percentage of our asset base decreased from 8.2% in 2007/08 to 8.1% in 2008/09. The total adjusted regulated asset base represents an estimated mid year position based on opening UK regulated asset values inflated to mid year, plus US rate bases, and an adjustment for a proportion of capital additions and regulatory depreciation.

We believe cost savings will be delivered in the future through the continued development and deployment of our global procurement model and other cost reduction initiatives. Further information on our efficiency and controllable cost initiatives is provided within each of the business sections on pages 55, 63, 72 and 76.

### Synergy savings from KeySpan acquisition

We continue to integrate the operations acquired with KeySpan in the US, which will enable us to achieve significant synergies. When we acquired KeySpan we set ourselves a total target of $200 million synergy cost savings by 31 March 2010 along with a target cost savings run rate of $100 million by 31 March 2009.

At 31 March 2009, we had surpassed our run rate target and achieved a rate of $129 million, and therefore are on schedule to achieve our total savings target by the end of 2009/10.

Information on our financial performance during the year is set out on pages 41 to 47.

# Building trust, transparency and an inclusive and engaged workforce

In order to maximise the potential of our workforce and achieve our objectives it is important to develop their belief and engagement in National Grid's vision.

## Engagement and performance

To be successful, we will continue to engage our employees to strive for continued improvement. For that purpose our aim is to implement a world-class performance management process.

Our key performance indicator is the employee engagement index based on our independent annual employee survey.

Our approach involves adopting National Grid wide integrated common performance processes and a single set of performance criteria, with pay linked to leadership qualities (how we deliver) as well as operational and financial performance (what we deliver), providing for clearer differentiation between levels of performance.

### Employee engagement

In February 2009, we conducted our second annual employee survey. A total of 24,727 employees took part, representing 91.8% of our workforce. During 2008, we undertook intensive action planning at the Company, line of business and individual employee level, to address the key themes of improving communications, providing greater clarity on vision and direction and providing stronger links between performance and reward. The 2009 survey reported a 10% increase in the employee engagement index, up to 70%. Improvements were reported across all survey dimensions, with significant improvements in the areas of vision, direction and communications which were key action items from the 2008 survey. Employees continue to believe National Grid's safety culture and supportive management are significant strengths but would like to see improvements on how the Company creates the context for change, raises accountability and takes further steps to

# **Performance against our objectives** continued

create links between performance and reward. Action plans are being developed and will form part of the management annual objective process for 2009/10 to ensure we further build upon this survey success.

**Performance management**
We are continuing the task of building a high performance culture and, further to our work with senior managers, we have now completed training for the majority of middle and first line managers in the UK and US on 'performance for growth', our global performance management system. The process continues to focus on raising the performance bar and supporting high quality conversations. We have established support and challenge groups which continue to review best practice, share knowledge and enable managers to have a peer support network. Our performance programmes are driving stronger personal accountability and the leadership within National Grid is now actively involved in creating a culture where everyone across the business understands that business results are of primary importance and that they can directly influence these.

## Inclusion and diversity

In order to develop, recruit and retain talented people, we aim to achieve a more inclusive and diverse workforce, reflecting the composition of the communities in which we operate and to be seen as an employer of choice across diverse communities.

Performance measures we use to monitor our objective of promoting inclusion and diversity include the percentage of female employees and the percentage of ethnic minority employees, along with measuring our employee perceptions.

Following a thorough review of policies throughout National Grid, we have reaffirmed our commitment to inclusion and diversity by highlighting its importance to employee engagement and productivity, the recruitment and retention of talent and our external reputation within our business case.

During the year we launched our global inclusion charter. The charter explains what employees can expect from the Company, as well as what National Grid expects from employees and builds on work in progress throughout the UK and US.

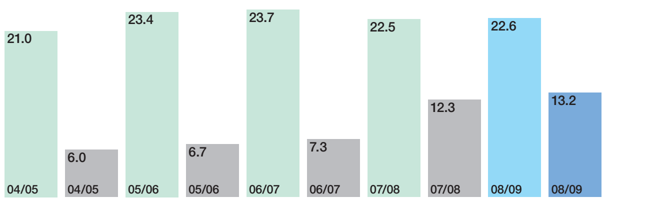
In addition, an inclusion and diversity transition group has been established to develop the necessary communications, governance and human resource processes to support our efforts. Training has continued to offer greater awareness of inclusive behaviours and we have recently launched a new inclusive leadership learning programme.

Employee network groups led the effort in creating and managing a fortnight of events called mobilising inclusion. These events provided an opportunity for employees to learn about all the ways we are different and how we could become more inclusive. We also had the first winner of the Chairman's award for inclusion and diversity, recognising all the efforts that employees have put in across the business.

We are fortunate to have vibrant employee networks focusing on gender, ethnicity, faith, disability, sexual orientation, families and new starters. They are helping us to understand better the different communities represented within our workforce and to provide support and information to our employees.

At 31 March 2009, 22.6% of our employees were female and 13.2% were from ethnic minority groups. This compares with 22.5% and 12.3% at 31 March 2008 and 23.7% and 7.3% at 31 March 2007 respectively. The results prior to 2008 did not include KeySpan, so are not directly comparable.

**Inclusion and diversity**
%




Our progress has already received external recognition. We were in The Times/Aurora Where Women Want to Work TOP 50 list for the third year running; made the Stonewall Top 100 for the first time and were short-listed for an ethnicity award. In the US, we scored 100% in the US Human Rights Campaign's 2008 Corporate Equality Index.

In our 2009 employee survey, 70% (2008: 61%) of respondents considered they were treated fairly by National Grid, while 78% (2008: 76%) of respondents considered that their colleagues treated them with respect and dignity.

We aim to maximise the contribution of our employees by motivating them to strive for continued improvement, developing their skills and talents and promoting a culture that recognises and respects inclusion and diversity.

## Developing our talent, leadership skills and capabilities

Identifying, recruiting and developing talented people is critical to our future success.

### Talent and skills

We aim to support all our employees so that they can operate to the best of their abilities by creating an environment that allows them to realise their full potential.

Our performance in this area is the qualitative monitoring of our various projects and initiatives aimed at addressing these issues.

We have strengthened our talent management processes in 2008/09, creating talent management plans for senior management and for business critical roles. We are now conducting regular cross-business talent planning sessions using consistent processes to support senior management in developing employees within each business area and to address succession issues. We are carrying out an annual global review of talent for all our businesses and functions and have implemented metrics that will help us track the depth of our talent pool on a regular basis.

Our focus on developing the talent of our current and future business leaders has moved forward with the launch of our developing future leaders programme for senior managers, around 75 of whom will be invited to participate in 2009. We have also launched a foundations of leadership programme for first line leaders and supervisors. It was launched in April with a one day

| 22.6% | 13.2% | 45% by 2020 | Carbon budgets |
|---|---|---|---|
| Percentage of female employees | Percentage of ethnic minority employees | Our intermediate greenhouse gas emissions reduction target | Being implemented across the Company during 2009/10 |



orientation of managers of first line leaders so that they are better prepared to support their supervisors' development. The first training for about 200 front line leaders followed in May and focused on understanding how our business operates and makes money, in addition to understanding the critical behaviours of motivating and managing teams of individuals toward higher levels of performance. The future leaders programme launched in May with a focus on enhancing business acumen and the demonstration of our leadership qualities.

We continue to invest in the recruitment and development of skilled employees for the future, recruiting 184 advanced apprentices, 58 foundation engineers and 30 graduates in the UK. In addition, we are currently reviewing our US approach to bring it into line with our UK efforts. These programmes are designed to facilitate the entrance into National Grid and the training and progression of talented people, with special emphasis on key engineering roles.

Through our e-futures strategy, we continue to organise and sponsor a number of educational initiatives in the UK. These initiatives continue to increase the number and diversity of young people interested in engineering careers and, ultimately, create and sustain a greater pool of skilled talent from which we can recruit. Key to this success has been the dedicated involvement of our employees.

In addition, we have formally launched workforce planning as a methodology to identify and proactively address the gaps both in people and skills necessary to deliver our ambitious business strategies. We are completing the first phase in Transmission UK and are planning on a full National Grid roll out during the coming year.

We will continue to use our annual employee survey to help determine the human resource initiatives we put in place to maximise our employees' contribution to the delivery of our vision.

## Positively shaping the energy and climate change agenda with our external stakeholders in both regions

Our aim is to embrace, address and lead on the current and future issues affecting the energy market. We are committed to safeguarding the global environment for future generations, taking positive action to reduce our contribution to climate change and other impacts on the environment. We strive to be an environmental leader and will work with our UK and US regulators to develop the regulatory framework required to address the changes in future energy supplies.

This year has seen significant changes to UK government policy with the introduction of the Climate Change and Energy Acts, which will implement a wide range of measures including setting carbon budgets on a national scale and enshrining climate change targets in law. In the US, energy policy is expected to change significantly following the administration change. In addition, energy efficiency, security of supply and the cost of energy will be key areas of focus.

### Positively shaping the agenda

We aim to take the lead on the energy and climate change issues facing society. We will not allow ourselves to simply react to the initiatives of other relevant bodies. Instead, we will be proactive in leading the agenda to make sure we help safeguard the environment.

Our performance measure in this area is the qualitative monitoring of our contribution to various projects, committees, task forces and other initiatives aimed at addressing these issues.

In the last year, National Grid has raised its profile in the UK and US in the area of climate change. We have partnered with Ceres in the US and with the Worldwide Fund for Nature (WWF) in the UK to seek their review and comment on our internal and external efforts to reduce our climate change impacts and shape our positive influence on legislators and regulators.

We have also been active participants in the UK, with such programmes and organisations as the RPI-X@20 group and Business in the Community, and in the US, with the shaping of state climate change regulations through our membership of the Clean Energy Group and collaboration with other entities such as Environment Northeast.

### Climate change

We continued with our climate change initiative and increased our energy efficiency programmes, focusing on initiatives that are cost effective and regulated. We see our 80% greenhouse gas emissions reduction target as being industry leading within the UK and US.

Our key performance indicator to monitor our performance in this area is the percentage reduction in our greenhouse gas emissions against our baseline. We also measure absolute emissions.

As reported last year, we have adopted a long-term target of reducing our Scope 1 and 2 greenhouse gas emissions by 80% against our baseline by 2050. We have now set an intermediate objective of a 45% reduction in our emissions by 2020. These targets remain at the centre of our efforts to identify and implement measures to meet our commitment to safeguard our global environment for future generations. In 2009/10, we will be evaluating the inclusion of Scope 3 emissions into these targets.

This year, we have focused our efforts on educating our workforce on the targets and the means by which we will achieve them. We have conducted an inventory of our greenhouse gas emissions to ensure that we have up-to-date information on the magnitude of the reductions necessary and the areas of the operations where reductions can take place. We have also established internal working teams tasked with developing opportunities to achieve our 80% target.

Our climate change initiative is being embedded in all areas and operations of the Company through the establishment of teams working in such areas as introducing low emission vehicles for our fleets, developing low carbon design features for our asset replacement programmes and incorporating a cost of carbon methodology in our investment decision making processes.

During 2009/10, we will implement carbon budgets. For each financial year, each business will be set a maximum level of greenhouse gas emissions which can be emitted. Subsequent years will see a reduction in these budgets that is needed to achieve our 2020 and 2050 targets.

In 2008/09, we completed a detailed review of our greenhouse gas emission inventory for the year ended 31 March 2008 and included the operations acquired as part of the KeySpan transaction as if we had owned them for the entire year. On this basis, our total Scope 1 and 2 emissions for 2007/08 would have been approximately 12.1 million tonnes $CO_2$ equivalent compared with the approximate 4.1 million tonnes reported.

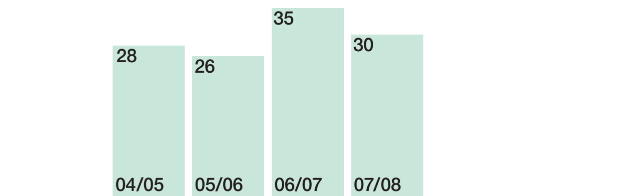
# **Performance against our objectives** continued

Emissions from the electricity generating plants on Long Island account for approximately 50% of the total for National Grid.

Currently, we are using a reporting baseline of 1990 for the majority of our greenhouse gas emissions.

As noted on page 30, the 2008/09 performance is currently unavailable. We expect it to become available in July 2009 and it will then be presented on our website.

**Greenhouse gas emissions (Scope 1 and 2)**
% reduction against baseline — Target: 80%




2007/08 data restated as if KeySpan acquisition had occurred at beginning of year. Previously published figure, excluding KeySpan, was 38%.

## Protecting the environment

We will help to protect the environment for future generations and we are committed to continuously improving our environmental performance.

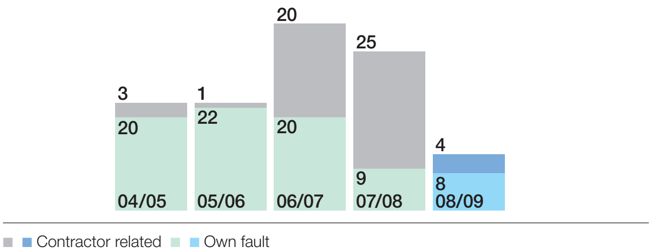
The performance indicators that we monitor in this area include the amount of waste we generate and recycle, activity in land contamination management and the number of significant direct environmental incidents.

At 31 March 2009, approximately 80% of our employees worked to certified ISO 14001 environmental management systems compared to 66% at the same time last year. The main reason for this increase is the certification in November 2008 of the gas operations we acquired as part of the KeySpan acquisition. During 2009, we will be seeking certification of KeySpan electricity operations acquired.

The number of significant environmental incidents in 2008/09 arising directly from our operations was 12, which included 4 contractor-related incidents, compared with 34, including 25 contractor-related incidents in 2007/08 and 40, including 20 contractor-related incidents in 2006/07. Incidents outside of our control resulting from third party or weather-related damage to our networks were 1 compared with 1 in 2007/08 and 13 in 2006/07. The results prior to 2008/09 did not include KeySpan and so are not directly comparable. There was 1 contractor-related prosecution resulting from these incidents. In the US, we received 6 environmental citations in 2008/09 compared with 6 in 2007/08 and 9 in 2006/07, attracting a total of $86,500 in fines. Data prior to 2008/09 does not include KeySpan, so is not directly comparable. In the UK, we received 1 improvement notice.

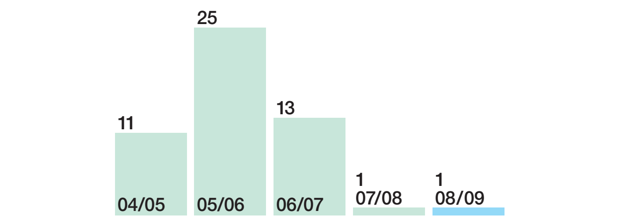
In our 2009 employee survey, 62% (2008: 55%) of respondents considered National Grid acts responsibly in all its business dealings, including environmental management.

**Significant environmental incidents**
Direct — Target: zero




Data prior to 2008/09 excludes KeySpan.

**Significant environmental incidents**
Third party/weather




Data prior to 2008/09 excludes KeySpan.

We manage an inherited portfolio of historically contaminated land including former manufactured gas plants, industrial landfills, former and current gas holders and electricity substations on our transmission and distribution networks. Sites can sometimes have a complex mix of contamination dating back over 100 years.

National Grid manages land contamination issues on 678 sites, the majority of which were previously used for gas production. In the US, this includes obligations in relation to land owned by third parties.

During 2008/09, environmental work stages were completed on 316 sites of which 22 included remediation. As a proportion of the programme in the UK is linked to the redevelopment of brownfield sites, the economic downturn has adversely influenced the number of remediation work stages completed.

We also take seriously the issues that surround electric and magnetic fields. We recognise that there is scientific uncertainty as to whether the electric and magnetic fields that are produced by some of our assets have an effect on health or not, and that this produces public concern. We monitor the science carefully (this year has seen new studies on issues such as Alzheimer's disease and damage to genes) but we look to relevant independent bodies such as the World Health Organization and the UK's Health Protection Agency for authoritative advice. In all our operations, as a minimum, we aim to comply with the relevant regulations, guidelines or practices in force in the different jurisdictions in which we operate. In addition, we actively support high-quality research and open communication (including maintaining a website at www.emfs.info) and we look for more constructive and less confrontational ways of handling this issue. All these activities are governed by our public position statement on electric and magnetic fields, which we review annually.

| 80% | 316 | 63% | Platinum |
|---|---|---|---|
| Percentage of employees working to ISO 14001 | Number of sites where environmental work stages were completed | Reduction in significant environmental incidents | Our BITC corporate responsibility index status for the 7th consecutive year |

On our website (www.nationalgrid.com), we provide further information on the steps we are taking to reduce our impact on the environment, including our use of natural resources and minimising the impact on the environment of waste.

## Responsibility

We believe operating responsibly is essential to the way we conduct our operations, invest in our business, develop our people and manage our relationships. It underpins everything we do and is a prerequisite to delivering our vision to be the foremost international electricity and gas company, delivering unparalleled safety, reliability and efficiency.

We always strive to operate to the highest standards of corporate governance and we believe in strong business ethics, based around our Framework for Responsible Business and our core values of respecting others and valuing diversity, demonstrating integrity and openness in all relationships, taking ownership for driving performance and operating as one team.

Our Framework defines the principles by which we manage our business and our day-to-day dealings with our customers, employees, shareholders, suppliers and local communities. It is underpinned by Company wide policies and position statements that are available on our website.

We continue to enjoy external recognition of our responsible business approach. We remain on the Dow Jones Sustainability World and FTSE4Good indices and maintained a platinum status in the Business in the Community corporate responsibility index; the seventh successive year we have been accorded this top tier ranking. National Grid is a signatory to the United Nations Global Compact.

Our Standards of Ethical Business Conduct provide a common set of practical guidelines to help ensure that our behaviours are lawful, comply with our policies and licences and follow the values set out in our Framework and our core values. In 2008/09, there were 11.3 substantiated breaches per 1,000 employees compared with 11.6 in 2007/08 and 8.0 in 2006/07. Offences include such things as fraud, internet and email abuse, drugs and alcohol abuse and misuse of company vehicles and other assets. We take all breaches very seriously and disciplinary action can range from a verbal warning to dismissal.

In our 2009 employee survey, 66% (2008: 61%) of respondents considered something would be done if they reported an inappropriate business practice or an ethical issue.

More information on our corporate responsibility and business ethics objectives is included in the Corporate Governance section on pages 90 to 99.

On our website, we provide information on our method for assuring the corporate responsibility information and data in this report and our other public corporate responsibility reporting.

# Risks and opportunities

## Risks and opportunities

We believe that the principal opportunities to achieve our vision and to deliver growth in shareholder value have been identified in our strategy and objectives. Conversely, we risk failure in achieving our vision and in delivering growth in shareholder value if we do not fulfil our strategy or if we fail to achieve our objectives.

### Financial performance

Financial performance and operating cash flows are the basis for funding our future capital investment programmes, for servicing our borrowings and paying dividends, and for increasing shareholder value.

### Driving improvements in our safety, customer and operational performance

The operating profits and cash flows we generate are dependent on our operating performance – operating safely, reliably and efficiently and providing a quality service to customers.

### Delivering strong, sustainable regulatory and long-term contracts with good returns

Our relationships with our stakeholders are critical to our future success. Maintaining these good relationships is dependent on focusing on the areas that are important to them, such as the quality of service we provide to customers, the quality of information we provide to regulators and the way we address the concerns of, and interact with, all our stakeholders.

### Modernising and extending our transmission and distribution networks

Our future organic growth is dependent on the delivery of our capital investment plans. In order to deliver sustainable growth with a superior financial performance, we will need to finance our investment plans. Turmoil in the financial markets may restrict our ability to raise finance.

### Expanding our capabilities and identifying new financeable opportunities to grow

Identifying, evaluating, and acquiring new businesses that build on our core regulated operations is important. If we are unable to acquire businesses with the correct strategic fit it will restrict our future sustainable growth and our ability to increase shareholder value. Acquisition of new businesses is dependent on our ability to fund transactions through the issuance of new debt or new shares. Volatility in financial markets may restrict our financing opportunities.

### Becoming more efficient through transforming our operating model and increasingly aligning our processes

Transforming the way we operate through the simplification and standardisation of our systems and processes, will drive efficiency and reduce costs. Transforming our operating model will enable us to deliver increased value to our shareholders.

Conversely, if we do not achieve this transformation, or associated benefits in efficiency, then shareholder value will not grow as we hope or will diminish.

### Building trust, transparency, and an inclusive and engaged workforce

Our workforce is a vital part of our business and is critical to our future success. Failure to maintain a trusting, engaged, and motivated workforce, who can see how their actions directly contribute to achieving our strategy and objectives will restrict our ability to meet those objectives.

### Developing our talent, leadership skills and capabilities

The skills and talents of our employees, along with succession planning and the development of future leaders, are critical to the achievement of our objectives. Failure to develop our existing employees or to attract and recruit talented new employees could hamper our ability to deliver in the future.

### Positively shaping the energy and climate change agenda with our external stakeholders in both regions

Safeguarding our global environment for future generations is dependent on integrating sustainability and climate change considerations into our business decisions, influencing legislators and regulators to reshape energy markets to meet the climate change challenge, and helping our employees, customers and suppliers to change their behaviour to be more environmentally aware.

### Responsibility

Strong corporate governance is essential to operating responsibly and the achievement of all our objectives. Our reputation as a responsible business depends on our behaviours being lawful and ethical, on complying with our policies and licences, and on living up to our core values.

If we do not live up to these high standards we could be exposed to adverse financial or other consequences.

## Risk management

Our approach to risk management is described in the Corporate Governance section on pages 96 and 97. This sets out how we have established an enterprise wide risk management process with the objective of identifying risks that could have an adverse impact on National Grid.

In addition, information on how we have addressed certain of our financial risks is included in the financial position and financial management section of this Operating and Financial Review on pages 79 to 86.

## Risk factors

Through our risk management process, we have identified a number of significant risks and uncertainties in achieving our objectives as follows:

- changes in laws or regulations;
- breaches of environmental or health and safety law or regulations;
- network failure or inability to carry out critical non-network operations;
- achievement of business performance objectives, including regulatory targets and delivering anticipated cost and efficiency savings;
- business development activity, including acquisitions and disposals;
- regulatory treatment of commodity costs passed through to consumers;
- reputation damage from disruptions to supply, even if outside our control;
- fluctuations in exchange rates, interest rates and commodity prices and their impact on borrowings, derivatives and commodity contracts;
- restrictions in borrowings, changes in credit ratings, volatility and disruption of global financial markets, reduced liquidity and access to funding opportunities;
- periods of deflation;
- future funding requirements of our pension schemes;
- changes in accounting standards or in tax rates;
- consumers, suppliers or other counterparties failing to perform their obligations; and
- impact of seasonal or weather-related fluctuations.

Not all these factors are within our control and, in addition, there may be other factors besides those listed that may have an adverse effect on National Grid. These risk factors are described in more detail within the Corporate Governance section on pages 97 to 99.

# Financial performance

Our performance against the key performance indicators for delivering superior financial performance is described on pages 30 and 31. In the following section we provide a more detailed analysis of our financial results.

## Financial discipline

In order to deliver sustainable growth we must be disciplined in the way we manage our balance sheet. This means that we will return cash to shareholders to the extent it is not required for our investment objectives.

The principal measure we use to monitor financial discipline is interest cover, being a measure of the cash flows we generate compared to the net interest cost of servicing our borrowings. We also measure our progress against our promise to return cash to shareholders.

Our long-term target range for interest cover is between 3.0 and 3.5. Interest cover for the year ended 31 March 2009 remained within our target range although it decreased to 3.1 from 3.2 for the year ended 31 March 2008 (year ended 31 March 2007: 3.8). The primary reason for the decrease in 2008/09 was due to increased interest expense resulting from higher average net debt levels during the year partially offset by higher levels of cash inflows from operations. In addition, decreased interest receipts on cash and financial investments compared with 2007/08 contributed to the decrease.

In 2006, we committed to return approximately $1.9 billion cash between calendar years 2006 and 2011 to shareholders through a share repurchase programme based on the after-tax cash flows generated from the recovery of stranded costs in the US. In addition, following the successful disposal of our UK wireless infrastructure operations in the UK for £2.5 billion on 3 April 2007, we announced the return of a further £1.8 billion to shareholders.

During the year ended 31 March 2009, we repurchased £597 million of our shares, £1,516 million in 2007/08, which together with the £169 million repurchased in 2006/07 totals £2.3 billion of returns to shareholders in the last three years through share repurchases. This now completes our promise to return the 2008/09 stranded cash flows and the return of £1.8 billion from our wireless disposals. However, in the current economic climate we believe that it is now financially prudent to suspend our remaining share repurchase programme.

## Profit, cash flow and dividends

If we achieve our objectives, we should be able to achieve continued improvements in financial performance, so that we deliver on our commitment to increase our dividend by 8% each year to 2012.

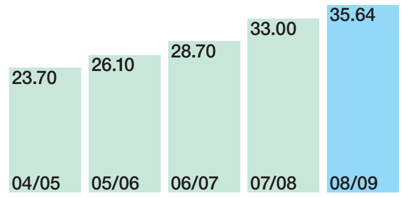
The key performance indicator we use to monitor our financial performance is adjusted earnings per share. Adjusted earnings per share is basic earnings per share before exceptional items, remeasurements and stranded cost recoveries.

We report our financial results and position in accordance with International Financial Reporting Standards (IFRS).

### Dividends in respect of the financial year

Our target is to increase dividends by 8% each year until 31 March 2012.

**Dividends per share**
pence




| Dividends | 2009 pence | 2008 pence | 2007 pence | 2006 pence | 2005 pence |
|---|---|---|---|---|---|
| Interim | **12.64** | 11.70 | 10.90 | 10.20 | 8.50 |
| Final | **23.00** | 21.30 | 17.80 | 15.90 | 15.20 |
| Total | **35.64** | 33.00 | 28.70 | 26.10 | 23.70 |
| **Dividends per ADS** | **$** | $ | $ | $ | $ |
| Interim | **0.95** | 1.21 | 1.03 | 0.88 | 0.79 |
| Final | **1.74** | 2.05 | 1.76 | 1.51 | 1.38 |
| Total | **2.69** | 3.26 | 2.79 | 2.39 | 2.17 |

The total ordinary dividend for 2008/09 (including the final proposed ordinary dividend of 23.00 pence) amounts to £867 million or 35.64 pence per ordinary share. This represents an increase of 8% over the previous year's ordinary dividend per share of 33.00 pence. The above amounts exclude the return of £597 million, £1,516 million and £169 million to shareholders in 2008/09, 2007/08 and 2006/07 respectively through a share repurchase programme and the return of £2 billion to shareholders in 2005/06 through the B share scheme.

The total ordinary dividend per share was covered 1.4 times by adjusted earnings from continuing operations per ordinary share (2007/08 covered 1.4 times, 2006/07 covered 1.3 times) and covered 1.0 times by earnings per ordinary share from continuing operations (2007/08 covered 1.8 times, 2006/07 covered 1.7 times).

The dividend table shows the ordinary dividends paid or payable by National Grid for the past five financial years. These dividends do not include any associated UK tax credit in respect of such dividends.

Dividends expressed in US dollars per American Depositary Share (ADS) in the table reflect the amounts paid or payable to ADS holders, rounded to two decimal places.

In accordance with IFRS, the final dividend proposed in respect of each financial year is reported in the financial statements for the subsequent year. As a consequence, the final dividend proposed to shareholders for 2008/09 of 23.00 pence per share, amounting to approximately £560 million (assuming all dividends are settled in cash), will be reported in the financial statements for the year ending 31 March 2010. This year we are offering our shareholders the option of a scrip dividend (subject to shareholder approval), whereby they can elect to receive the final dividend in the form of new ordinary shares rather than cash.

### Continuing and discontinued operations

The financial results of our businesses and segments and of our other activities, as described on page 18, are presented within continuing operations.

# **Financial performance** continued

The results of our Ravenswood generation station, KeySpan Communications and of the KeySpan engineering companies that were sold during or subsequent to the year ended 31 March 2009 are included in discontinued operations.

Our financial results incorporate activities acquired with KeySpan on 24 August 2007.

Our UK and US wireless infrastructure operations and the Basslink electricity interconnector in Australia that we sold during the year ended 31 March 2008 are included within discontinued operations for that year.

## Measurement of financial performance and use of adjusted profit measures

In considering the financial performance of our businesses and segments, we analyse each of our primary financial measures of operating profit, profit before tax, profit for the year attributable to equity shareholders and earnings per share into two components. Firstly business performance, which excludes exceptional items, remeasurements, stranded cost recoveries, and amortisation of acquisition-related intangibles. Secondly exceptional items, remeasurements, stranded cost recoveries, and amortisation of acquisition-related intangibles. Exceptional items, remeasurements, stranded cost recoveries, and amortisation of acquisition-related intangibles are excluded from the measures of business performance used by management to monitor financial performance as they are considered to distort the comparability of our reported financial performance from year to year.

Measures of business performance are referred to in this Annual Report and Accounts as adjusted profit measures in order to clearly distinguish them from the comparable total profit measures of which they are a component. Adjusted operating profit, adjusted profit before tax, adjusted earnings and adjusted earnings per share differ from total operating profit, profit before tax, profit for the year attributable to equity shareholders, and earnings per share respectively by the exclusion of exceptional items, remeasurements, stranded cost recoveries, and amortisation of acquisition-related intangibles.

Exceptional items, remeasurements, stranded cost recoveries, and amortisation of acquisition-related intangibles are items of income and expense that, in the judgement of management, should be disclosed separately on the basis that they are material, either by virtue of their nature or size, and are relevant to an understanding of our financial performance. Items of income or expense that are considered by management for designation as exceptional items include such items as significant restructurings, write-downs or impairments of non-current assets, significant changes in environmental or decommissioning provisions, the integration of acquired businesses, and gains or losses on disposals of businesses or investments.

Remeasurements comprise gains or losses recorded in the income statement arising from changes in the fair value of commodity contracts and derivative financial instruments. These fair values increase or decrease as a consequence of changes in commodity and financial indices and prices over which we have no control. Stranded cost recoveries comprise income from additional charges that we are allowed to recover from certain of our US customers arising from the divestiture of generation activities in the late 1990s. This income is scheduled largely to cease by the end of calendar year 2011. Amortisation of acquisition-related intangibles arises from intangible assets, principally customer relationships, that are only recognised as a consequence of the accounting required for a business combination. Such amortisation distorts the comparison of the financial performance of acquired businesses compared with non-acquired businesses.

Adjusted profit measures are limited in their usefulness compared with the comparable total profit measures as they exclude important elements of our underlying financial performance, namely, exceptional items, remeasurements, stranded cost recoveries, and the amortisation of acquisition-related intangibles. We believe that in separately presenting our financial performance in two components it is easier to read and interpret financial performance between periods. Adjusted profit measures are more comparable by excluding the distorting effect of exceptional items, remeasurements, stranded cost recoveries, and amortisation of acquisition-related intangibles. Exceptional items, remeasurements, stranded cost recoveries, and amortisation of acquisition-related intangibles are more clearly understood if separately identified and analysed. The presentation of these two components of financial performance is additional to, and not a substitute for, the comparable total profit measures presented.

Management uses adjusted profit measures as the basis for monitoring financial performance and in communicating financial performance to investors in external presentations and announcements of financial results. Internal financial reports, budgets and forecasts are primarily prepared on the basis of adjusted profit measures, although planned exceptional items, such as significant restructurings, amortisation of acquisition-related intangibles and stranded cost recoveries are also reflected in budgets and forecasts. Management compensates for the limitations inherent in the use of adjusted profit measures through the separate monitoring and disclosure of exceptional items, remeasurements, stranded cost recoveries, and amortisation of acquisition-related intangibles as a component of our overall financial performance.

## Exchange rates

Our financial results are reported in sterling. Transactions for our US operations are denominated in US dollars and so the related amounts that are reported in sterling depend on the US dollar to sterling exchange rate. The average exchange rate in 2008/09 was $1.54: £1 compared with the average rate of $2.01: £1 in 2007/08. The same amount of revenue and other operating income (excluding stranded cost recoveries), adjusted operating profit and operating profit in US dollars earned in 2007/08 would have been reported as £1,947 million, £260 million and £398 million higher if earned in 2008/09. In 2006/07, the average rate was $1.91: £1. If the revenue and other operating income (excluding stranded cost recoveries), adjusted operating profit and operating profit in US dollars recognised in 2006/07 were earned in 2007/08, it would have been £193 million, £26 million and £51 million lower respectively.

However, the effect of movements in the US dollar exchange rate on adjusted operating profit and operating profit in 2008/09 was largely offset by the impact of interest and tax charges denominated in US dollars, when translated into sterling. This includes the effect of derivative financial instruments that swap debt raised in other currencies into US dollars as part of the financing of our US operations. As a result, adjusted profit for the year and profit for the year from continuing operations for 2007/08 would have been £49 million and £137 million higher respectively if translated at the 2008/09 average exchange rate of $1.54: £1 (2006/07: £4 million and £17 million lower respectively if translated at the 2007/08 average exchange rate of $2.01: £1).

| £1,253m | 50.9p | 6% | 37.4p |
|---|---|---|---|
| Adjusted profit from continuing operations | Adjusted earnings per share | Increase in adjusted earnings per share | Earnings per share |

The balance sheet at the end of the financial year has been translated at an exchange rate of $1.44: £1 at 31 March 2009 ($1.98: £1 at 31 March 2008).

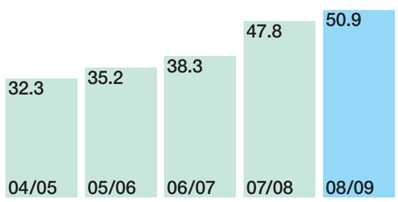
## Profit for the year from continuing operations

Profit for the year from continuing operations decreased from £1,575 million in 2007/08 to £922 million in 2008/09 (increased from £1,310 million in 2006/07 to £1,575 million in 2007/08) as a consequence of the changes in operating profit, net finance costs, exceptional finance costs and remeasurements, and taxation described in the following sections.

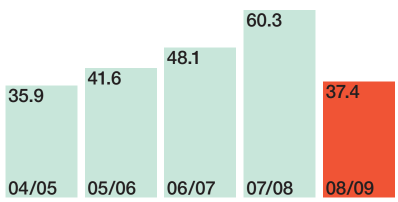
Details of the financial results of business segments and other activities are included in the business sections on pages 48 to 77.

## Earnings and earnings per share from continuing operations

**Adjusted earnings per share**
pence




**Earnings per share**
pence




## Adjusted earnings

| Continuing operations | Years ended 31 March 2009 £m | 2008 £m | 2007 £m |
|---|---|---|---|
| Adjusted operating profit | **2,915** | 2,595 | 2,031 |
| Net finance costs excluding exceptional items and remeasurements | **(1,150)** | (770) | (547) |
| Share of post-tax results of joint ventures | **5** | 4 | 2 |
| Adjusted profit before taxation | **1,770** | 1,829 | 1,486 |
| Taxation excluding tax on exceptional items, remeasurements and stranded cost recoveries | **(517)** | (579) | (442) |
| Adjusted profit from continuing operations | **1,253** | 1,250 | 1,044 |
| | **pence** | pence | pence |
| Adjusted earnings per share from continuing operations | **50.9** | 47.8 | 38.3 |

## Earnings

| Continuing operations | Years ended 31 March 2009 £m | 2008 £m | 2007 £m |
|---|---|---|---|
| Operating profit | **2,623** | 2,964 | 2,513 |
| Net finance costs | **(1,234)** | (786) | (764) |
| Share of post-tax results of joint ventures | **5** | 4 | 2 |
| Profit before taxation | **1,394** | 2,182 | 1,751 |
| Taxation | **(472)** | (607) | (441) |
| Profit from continuing operations | **922** | 1,575 | 1,310 |
| | **pence** | pence | pence |
| Earnings per share from continuing operations | **37.4** | 60.3 | 48.1 |

## Earnings per share from continuing operations

The following table sets out the adjusted earnings per share and earnings per share from continuing operations for 2008/09, 2007/08 and 2006/07 and reconciles the differences between them. Reconciling items are net of tax.

| Continuing operations | Years ended 31 March 2009 pence | 2008 pence | 2007 pence |
|---|---|---|---|
| Adjusted earnings per share | **50.9** | 47.8 | 38.3 |
| Exceptional items | **(10.1)** | (0.1) | (1.5) |
| Commodity cost remeasurements | **(10.8)** | 5.1 | 1.3 |
| Derivative financial instrument remeasurements | **(3.0)** | (1.3) | 0.6 |
| Stranded cost recoveries | **10.4** | 8.8 | 9.4 |
| Earnings per share – continuing operations | **37.4** | 60.3 | 48.1 |

Adjusted earnings per share for 2008/09 increased by 3.1 pence, an increase of 6% compared with 2007/08 (2007/08: increased by 9.5 pence, an increase of 25% compared with 2006/07). The reasons for this increase are our growth in adjusted profit and the share buyback programme during 2008/09.

Earnings per share from continuing operations decreased from 60.3 pence per share in 2007/08 to 37.4 pence per share in 2008/09 reflecting the increase in adjusted earnings per share, combined with the higher net exceptional items, remeasurements and stranded cost recoveries on a per share basis (2007/08: increase from 48.1 pence per share in 2006/07 to earnings of 60.3 pence per share).

Diluted earnings per share from continuing operations were 37.1 pence per share in 2008/09, 0.3 pence lower than basic earnings per share from continuing operations, compared with 59.9 pence per share in 2007/08 (0.4 pence lower) and 47.8 pence per share in 2006/07 (0.3 pence lower). The principal reason for the dilution in 2008/09, 2007/08 and 2006/07 relates to employee share plans.

## Adjusted profit measures

The following tables reconcile the adjusted profit measure to the corresponding profit measure in accordance with IFRS.

# **Financial performance** continued

a) Reconciliation of adjusted operating profit to operating profit

| Continuing operations | 2009 £m | Years ended 31 March 2008 £m | 2007 £m |
|---|---|---|---|
| Adjusted operating profit | **2,915** | 2,595 | 2,031 |
| Exceptional items | **(275)** | (242) | (22) |
| Commodity contract remeasurements | **(443)** | 232 | 81 |
| Stranded cost recoveries | **426** | 379 | 423 |
| Operating profit | **2,623** | 2,964 | 2,513 |

Adjusted operating profit is presented on the face of the income statement under the heading Operating profit before exceptional items, remeasurements and stranded cost recoveries.

b) Reconciliation of adjusted profit before taxation to profit before taxation

| Continuing operations | 2009 £m | Years ended 31 March 2008 £m | 2007 £m |
|---|---|---|---|
| Adjusted profit before taxation | **1,770** | 1,829 | 1,486 |
| Exceptional items | **(275)** | (242) | (67) |
| Commodity contract remeasurements | **(445)** | 223 | 62 |
| Derivative financial instrument remeasurements | **(82)** | (7) | (153) |
| Stranded cost recoveries | **426** | 379 | 423 |
| Profit before taxation | **1,394** | 2,182 | 1,751 |

Adjusted profit before taxation is presented on the face of the income statement under the heading Profit before taxation before exceptional items, remeasurements and stranded cost recoveries.

c) Reconciliation of adjusted earnings to earnings (profit for the year from continuing operations attributable to equity shareholders of the parent company)

| Continuing operations | 2009 £m | Years ended 31 March 2008 £m | 2007 £m |
|---|---|---|---|
| Adjusted earnings | **1,250** | 1,247 | 1,042 |
| Exceptional items | **(247)** | (2) | (41) |
| Commodity contract remeasurements | **(266)** | 133 | 37 |
| Derivative financial instrument remeasurements | **(74)** | (35) | 16 |
| Stranded cost recoveries | **256** | 229 | 254 |
| Earnings | **919** | 1,572 | 1,308 |

Adjusted earnings is presented in note 10 to the consolidated financial statements, under the heading Adjusted earnings – continuing operations.

## Discontinued operations

During 2008/09, discontinued operations included the Ravenswood generation station, KeySpan Communications and KeySpan engineering companies, which were sold during the year or subsequent to it. As at 31 March 2008, all these operations were classified as held for sale on the balance sheet and their results included in discontinued operations from their acquisition under KeySpan on 24 August 2007 to 31 March 2008. In addition, during 2007/08, discontinued operations included our wireless infrastructure operations in the UK and the US and the Basslink electricity interconnector in Australia that we sold during 2007/08. The results of these operations are also included within discontinued operations for 2006/07. Details of the results of these operations are provided on page 78.

We sold the Ravenswood generation station for $2.9 billion (£1.6 billion) on 26 August 2008.

Earnings per share from discontinued operations in 2008/09 were 1.1 pence per share (including 0.7 pence per share relating to gains on the businesses sold during the year) compared with 62.0 pence per share in 2007/08 (including 60.6 pence per share relating to gains on the businesses sold during the year) and 3.2 pence per share in 2006/07 with no gains from disposals.

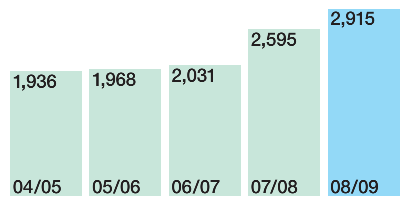
## Net profit and total earnings per share for the year

Net profit from both continuing and discontinued operations was £947 million in 2008/09, compared with £3,193 million in 2007/08 and £1,396 million in 2006/07.

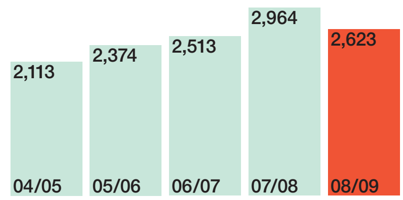
Total earnings per share from both continuing and discontinued operations were 38.5 pence per share in 2008/09, 122.3 pence per share in 2007/08 and 51.3 pence per share in 2006/07.

## Adjusted operating profit and operating profit

**Adjusted operating profit**
£m




**Operating profit**
£m




During 2008/09, KeySpan operations contributed £556 million ($855 million) and £203 million ($313 million) to adjusted operating profit and operating profit for continuing operations respectively. During the year ended 31 March 2008, KeySpan was acquired on 24 August 2007 and consequently only contributed seven months of results for that period. During 2007/08, KeySpan contributed £368 million ($740 million) and £453 million ($911 million) to the adjusted operating profit and operating profit for continuing operations respectively.

KeySpan's operations are significantly affected by seasonality. Therefore, during 2007/08 the results of KeySpan that were consolidated from 24 August 2007 provide a larger contribution on a time apportioned basis compared with a full year's contribution. Weather driven seasonality results in higher revenues and operating profit in the second half of the financial year. This seasonality is due to higher energy demands in the US during the colder winter period.

| £15.6bn | £2,915m | 12% | £2,623m |
|---|---|---|---|
| Revenue | Adjusted operating profit | Increase in adjusted operating profit | Operating profit |

The following tables set out the consolidated revenue, adjusted operating profit and operating profit by business segment.

### Revenue by business segment

| Continuing operations | 2009 £m | Years ended 31 March 2008 £m | 2007 £m |
|---|---|---|---|
| Transmission UK | **3,487** | 2,956 | 2,816 |
| Transmission US | **420** | 299 | 270 |
| Gas Distribution UK | **1,466** | 1,383 | 1,193 |
| Gas Distribution US | **4,786** | 2,845 | 638 |
| Electricity Distribution & Generation US | **4,972** | 3,508 | 3,430 |
| Other activities | **719** | 642 | 567 |
| Total segmental revenues | **15,850** | 11,633 | 8,914 |
| Less: sales between business segments | **(226)** | (210) | (219) |
| Total | **15,624** | 11,423 | 8,695 |

### Segmental operating profit before exceptional items, remeasurements and stranded cost recoveries

| Continuing operations | 2009 £m | Years ended 31 March 2008 £m | 2007 £m |
|---|---|---|---|
| Transmission UK | **1,126** | 1,021 | 946 |
| Transmission US | **175** | 128 | 108 |
| Gas Distribution UK | **672** | 595 | 409 |
| Gas Distribution US | **612** | 392 | 71 |
| Electricity Distribution & Generation US | **265** | 330 | 364 |
| Other activities | **65** | 129 | 133 |
| Adjusted operating profit | **2,915** | 2,595 | 2,031 |

### Segmental operating profit

| Continuing operations | 2009 £m | Years ended 31 March 2008 £m | 2007 £m |
|---|---|---|---|
| Transmission UK | **1,063** | 1,013 | 936 |
| Transmission US | **173** | 122 | 107 |
| Gas Distribution UK | **629** | 574 | 412 |
| Gas Distribution US | **226** | 487 | 67 |
| Electricity Distribution & Generation US | **531** | 696 | 859 |
| Other activities | **1** | 72 | 132 |
| Operating profit | **2,623** | 2,964 | 2,513 |

### 2008/09 compared with 2007/08

Changes in revenue and other operating income, operating costs and operating profit for 2008/09 compared with 2007/08 are summarised in the following table.

| Continuing operations | Revenue and other operating income £m | Operating costs £m | Operating profit £m |
|---|---|---|---|
| 2007/08 results | 11,498 | (8,534) | 2,964 |
| Add back exceptional items and remeasurements | – | 10 | 10 |
| Deduct stranded cost recoveries | (382) | 3 | (379) |
| 2007/08 adjusted results | 11,116 | (8,521) | 2,595 |
| Exchange movements | 1,947 | (1,687) | 260 |
| 2007/08 constant currency results | 13,063 | (10,208) | 2,855 |
| Transmission UK | 561 | (456) | 105 |
| Transmission US | 30 | (22) | 8 |
| Gas Distribution UK | 77 | – | 77 |
| Gas Distribution US | 1,068 | (968) | 100 |
| Electricity Distribution & Generation US | 454 | (620) | (166) |
| Other activities | 15 | (79) | (64) |
| Sales between businesses | (16) | 16 | – |
| 2008/09 adjusted results | 15,252 | (12,337) | 2,915 |
| Exceptional items and remeasurements | – | (718) | (718) |
| Stranded cost recoveries | 435 | (9) | 426 |
| 2008/09 results | 15,687 | (13,064) | 2,623 |

Revenue and other operating income excluding stranded cost recoveries was £4,136 million higher than in 2007/08. This primarily reflected a £1,947 million increase as a result of exchange movements on our US operations and the first full year contribution from KeySpan.

In addition, due to the pass-through nature of our commodity costs in the US, revenues have increased during 2008/09 due to a rise in average commodity costs during 2008/09 compared with 2007/08. This has not resulted in a significant increase in our operating profit.

There was a decrease of £12 million in other operating income, which primarily reflects a £49 million reduction in the sale of property by our property management business in the UK, partially offset by a £30 million increase in our Transmission UK business and a net £7 million increase from the other regulated and non-regulated businesses.

The increase in operating costs excluding exceptional items, remeasurements and stranded cost recoveries reflects a £1,687 million increase as a result of exchange movements, and the first full year contribution from KeySpan.

KeySpan operations contributed £4,635 million of revenue and £4,084 million of costs excluding exceptional items, remeasurements and stranded cost recoveries in 2008/09 compared with £3,262 million and £2,782 million respectively in 2007/08, on a constant currency basis.

Apart from the impact of a full year contribution from KeySpan and exchange movements, the other principal reasons for the increased revenue and operating costs were: in Transmission, higher UK regulated revenue and interconnector auction income; in Gas Distribution, increased allowed regulatory revenue and increased revenue due to colder weather partially offset by higher bad debt costs; and in Electricity Distribution & Generation, increased revenue, storm costs and depreciation.

# **Financial performance** continued

Adjusted operating profit in 2008/09 was £320 million higher than 2007/08, comprising a £260 million increase as a result of exchange movements on US operations and a net increase of £60 million from the movements in revenue, other operating income and costs on a constant currency basis.

Net operating exceptional charges of £275 million in 2008/09 primarily related to restructuring costs incurred in the UK and US, and increases in environmental provisions resulting from significant movements in discount rates during the year. The majority of the restructuring costs related to the ongoing KeySpan integration programme, restructuring of our LNG storage facilities, and costs associated with initiatives related to the transformation of our operating model.

There were £443 million of operating remeasurement losses in 2008/09 compared with £232 million of gains in 2007/08. The losses relate to changes in the value of commodity contracts in the US carried in the balance sheet at fair value, primarily arising from movements in energy prices.

Stranded cost recoveries relate to the recovery of historical generation-related costs in the US that are no longer owned following divesture of generation assets. Such costs can be recovered from customers as permitted by regulatory agreements. Revenue and costs associated with stranded cost recoveries were £435 million and £9 million respectively (2007/08: £382 million and £3 million).

As a consequence of the increase in adjusted operating profit of £320 million, the net movement in operating exceptional items and remeasurements of £708 million and an increase in operating profit from stranded cost recoveries of £47 million, total operating profit decreased by £341 million in 2008/09 to £2,623 million compared with £2,964 million in 2007/08.

### 2007/08 compared with 2006/07

Changes in revenue and other operating income, operating costs and operating profit for 2007/08 compared with 2006/07 can be summarised as follows:

| **Continuing operations** | Revenue and other operating income £m | Operating costs £m | Operating profit £m |
|---|---|---|---|
| 2006/07 results | 8,778 | (6,265) | 2,513 |
| Add back exceptional items and remeasurements | – | (59) | (59) |
| Deduct stranded cost recoveries | (426) | 3 | (423) |
| 2006/07 adjusted results | 8,352 | (6,321) | 2,031 |
| Exchange movements | (193) | 167 | (26) |
| 2006/07 constant currency results | 8,159 | (6,154) | 2,005 |
| Transmission UK | 134 | (59) | 75 |
| Transmission US | 42 | (17) | 25 |
| Gas Distribution UK | 192 | (6) | 186 |
| Gas Distribution US | 2,239 | (1,915) | 324 |
| Electricity Distribution & Generation US | 272 | (288) | (16) |
| Other activities | 71 | (75) | (4) |
| Sales between businesses | 7 | (7) | – |
| 2007/08 adjusted results | 11,116 | (8,521) | 2,595 |
| Exceptional items and remeasurements | – | (10) | (10) |
| Stranded cost recoveries | 382 | (3) | 379 |
| 2007/08 results | 11,498 | (8,534) | 2,964 |

Revenue and other operating income excluding stranded cost recoveries was £2,764 million higher than in 2006/07, including a £193 million decrease as a result of exchange movements on US operations. KeySpan contributed £2,498 million to this increase in revenue. There was a decrease of £8 million in other operating income. Operating costs excluding exceptional items, remeasurements and stranded cost recoveries increased by £2,200 million including a £167 million decrease as a result of exchange movements on US operations. KeySpan contributed £2,130 million to this increase in operating costs.

Excluding the significant uplift in revenue and costs associated with KeySpan there was a £459 million increase in revenue and other operating income and a £237 million increase in costs on a constant currency basis. This primarily related to higher allowed revenues in Transmission UK, and from Gas Distribution US with the first full year of contribution from the Rhode Island gas business.

Adjusted operating profit in 2007/08 was £564 million higher than 2006/07, comprising a £26 million decrease as a result of exchange movements on US operations and an increase of £590 million from the movements in revenue, other operating income and costs on a constant currency basis, primarily due to the acquisition of KeySpan.

Net operating exceptional charges of £242 million in 2007/08 related to restructuring costs incurred in the UK and US and to increases in environmental provisions. The majority of the restructuring costs related to the integration programme following the KeySpan acquisition.

There was a £151 million increase in operating remeasurement gains to £232 million in 2007/08 compared with £81 million in 2006/07. The gains relate to changes in the value of commodity contracts in the US carried in the balance sheet at fair value, primarily arising from movements in energy prices.

Stranded cost recoveries relate to the recovery of historical generation-related costs in the US that are no longer owned following divesture of generation assets. Such costs can be recovered from customers as permitted by regulatory agreements. Revenue and costs associated with stranded cost recoveries were £382 million and £3 million respectively (2006/07: £426 million and £3 million).

As a consequence of the increase in adjusted operating profit of £564 million, the net movement in operating exceptional items and remeasurements of £69 million and the decrease in operating profit from stranded cost recoveries of £44 million, total operating profit increased by £451 million in 2007/08 to £2,964 million compared to £2,513 million in 2006/07.

## Net finance costs

Net interest excluding exceptional items and remeasurements was £1,150 million in 2008/09, compared with £770 million in 2007/08. The increase was primarily due to higher average net debt balances during the year reflecting the KeySpan acquisition, exchange movements and increased pension interest, partially offset by a lower effective interest rate reflecting lower floating and RPI linked rates.

| 29.2% | 9% | £3.6bn | £1.6bn |
|---|---|---|---|
| Effective tax rate before exceptionals, remeasurements and stranded cost recoveries | Increase in cash generated from continuing operations | Cash inflow from continuing operations | Net cash inflow from borrowings |

Net interest excluding exceptional items and remeasurements was £223 million higher in 2007/08 compared with £547 million in 2006/07. The increase was a consequence of higher average net debt balances following the KeySpan acquisition.

### Exceptional finance costs and remeasurements

There were no exceptional finance costs in 2008/9 and in 2007/08. In 2006/07, there were £45 million of charges primarily relating to the early redemption of debt.

Financial remeasurements in 2008/09 relate to net losses on derivative financial instruments of £82 million (2007/08: £7 million, 2006/07: losses of £153 million) and the financial element of commodity contract revaluations, totalling £2 million (2007/08: £9 million, 2006/07: £19 million). Net losses on derivative financial instruments in 2008/09 includes £nil (2007/08: £3 million, 2006/07: £126 million) arising from a difference in the tax treatment of certain derivative instruments that offset on a post-tax basis.

### Taxation

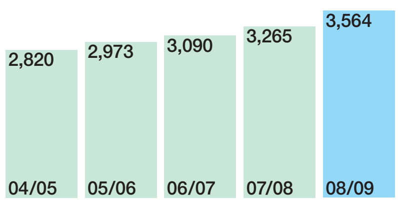
A net charge of £472 million arose in 2008/09 comprising £517 million on profit before tax excluding exceptional items, remeasurements and stranded cost recoveries, and a £45 million credit on exceptional items, remeasurements and stranded cost recoveries, compared with £607 million in 2007/08 (comprising £579 million and a £28 million expense respectively) and £441 million in 2006/07 (comprising £442 million and a credit of £1 million respectively).

In 2008/09, exceptional items, remeasurements and stranded cost recoveries included a £49 million expense for increased deferred tax liabilities due to a change in the UK industrial allowance regime. In 2007/08, it included an exceptional tax credit in 2007/08 of £170 million relating to the release of deferred tax provisions arising from the change in the UK corporation tax rate.

The effective tax rates before and after exceptional items, remeasurements and stranded cost recoveries were 29.2% and 33.9% respectively (2007/08: 31.7% and 27.8%, 2006/07: 29.7% and 25.2%).

### Cash flows

**Operating cash flows**
£m




#### Cash flows from operating activities

Cash generated from continuing operations was £3,564 million in 2008/09, compared with £3,265 million in 2007/08 and £3,090 million in 2006/07. This included cash outflows for continuing operations relating to exceptional items of £131 million, £132 million and £86 million respectively and cash inflows from stranded cost recoveries of £359 million, compared with £278 million and £288 million respectively.

After reflecting cash flows relating to discontinued operations and tax paid, net cash inflow from operating activities was £3,413 million, compared with £3,165 million in 2007/08 and £2,958 million in 2006/07. This included net corporate tax payments amounting to £143 million in 2008/09, £110 million in 2007/08 and £313 million in 2006/07.

#### Cash flows from investing activities

Cash outflows from investing activities were £1,998 million in 2008/09, compared with an outflow of £3,023 million in 2007/08 and an outflow of £4,061 million in 2006/07. There were no payments in respect of business acquisitions in 2008/09, compared with £3,502 million spent on acquiring KeySpan in 2007/08 and £269 million on business acquisitions in 2006/07. Proceeds from sales of financial investments were £99 million (2007/08: net sales of £45 million, 2006/07: net purchases of £1,725 million). Proceeds from disposals of businesses in 2008/09 were £1,617 million (2007/08: £3,064 million, 2006/07: £27 million) and proceeds from sales of joint ventures and other investments were £nil (2007/08: £55 million, 2006/07: £19 million).

Excluding acquisitions, disposals and financial investments, cash outflows increased in 2008/09 compared with 2007/08 as a result of purchases of property, plant and equipment within continuing operations increasing to £3,107 million during the year (2007/08: £2,832 million, 2006/07: £2,185 million). Investing activities of discontinued operations in the period resulted in a cash inflow of £1,049 million in 2008/09 (2007/08: £3,050 million inflow, 2006/07: £105 million outflow).

#### Cash flows from financing activities

Net cash outflows from financing activities were £877 million in 2008/09, compared with £1,592 million in 2007/08 and a £1,278 million inflow in 2006/07. This reflected net inflows from borrowings of £1,641 million (2007/08: £1,589 million, 2006/07: £3,045 million) and £627 million of share repurchases (2007/08: £1,498 million, 2006/07: £169 million).

In both 2007/08 and 2006/07 £26 million was paid in respect of the B share £2 billion return of value to shareholders.

Payments to providers of finance, in the form of interest and dividends, totalled £1,899 million in 2008/09 compared with £1,680 million in 2007/08 and £1,588 million in 2006/07.

Net interest cash outflows increased from £694 million in 2007/08 to £976 million in 2008/09 (increased from £597 million in 2006/07 to £694 million in 2007/08). The increase in 2008/09 compared with 2007/08 reflected higher average net debt (primarily the full year impact of the acquisition of KeySpan and higher capital expenditure) and the impact of the stronger US dollar partially offset by lower effective interest rates on our debt due to lower floating and RPI rates. The increase in 2007/08 compared with 2006/07 reflected higher average net debt during the year, primarily as a consequence of the acquisition of KeySpan. This was partially offset by the beneficial impact of the weaker US dollar.

# Transmission

This year we have delivered more than £1.4 billion worth of electricity and gas projects to upgrade and reinforce ageing infrastructure and adapt our networks to cope with changing sources of energy.

Our fundamental priorities remain safety, reliability and efficiency. We have also created an enhanced line of sight from National Grid's objectives to Transmission's objectives and annual priorities.

We are focused on the long-term security of supply and environmental challenges arising from the transition to a low carbon economy and the decline of UK gas production from the North Sea.

### Key Facts

- Over 20,900 kilometres of electrical overhead lines
- Over 800 kilometres of electrical underground cable
- 296 TWh of electricity transmitted in the UK
- Over 7,600 kilometres of gas pipeline
- 1,158 TWh of gas throughput

| Adjusted operating profit | Capital investment |
|---|---|
| £1,301m | £1,441m |
| 2007/08: £1,149m | 2007/08: £1,711m |

| Employees | UK energy transmitted |
|---|---|
| 3,874 | 1,454 TWh |
| 2007/08: 3,678 | 2007/08: 1,437 TWh |

## About Transmission

Our Transmission business operates in both the UK and the US. As a consequence of the different economic and regulatory environments, we report the results of Transmission as two segments: Transmission UK and Transmission US.

This section should be read in conjunction with the rest of this Operating and Financial Review, in particular the external market and regulatory environment; current and future developments; business drivers; vision, strategy and objectives; and risks and opportunities set out on pages 20 to 27 and page 40.

## Principal operations

### Transmission UK

Our transmission operations in the UK encompass both electricity and gas transmission, comprising the following principal activities:

#### Electricity transmission owner

We own the electricity transmission system in England and Wales. Our electricity assets comprise approximately 7,200 kilometres of overhead line, about 690 kilometres of underground cable and 337 substations at 241 sites.

#### Gas transmission owner

We own the gas national transmission system in Great Britain. This comprises approximately 7,600 kilometres of high pressure pipe and 26 compressor stations, connecting to 8 distribution networks and to third party independent systems for onward transportation of gas to end consumers.

#### Electricity system operator

We are the Great Britain System Operator, responsible for managing the operations of both the England and Wales transmission system that we own and also the two high voltage electricity transmission networks in Scotland.

Day-to-day operation of the Great Britain electricity transmission system involves the continuous real-time matching of demand and generation output, ensuring the stability and security of the power system and the maintenance of satisfactory voltage and frequency. We are also designated as system operator for the new offshore electricity transmission regime.

#### Gas system operator

We operate the gas national transmission system. Day-to-day operation includes balancing supply and demand, maintaining satisfactory system pressures and ensuring gas quality standards are met.

#### French interconnector

We own and operate the UK assets, and a portion of the subsea cables, that comprise the electricity interconnector between England and France as part of a joint arrangement with the French transmission operator.

#### LNG storage

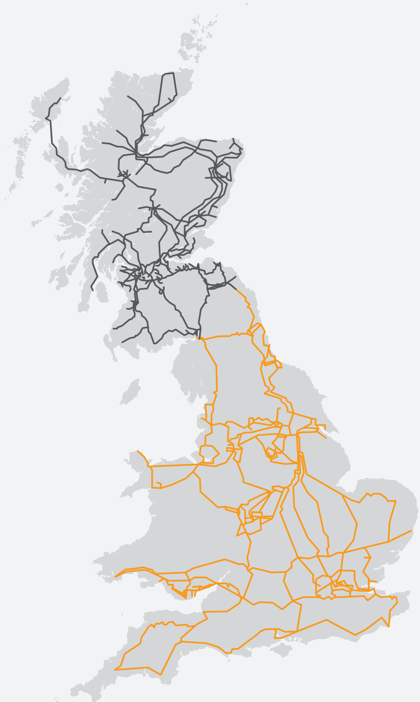
We own and operate four liquefied natural gas (LNG) storage facilities in Great Britain. With the scheduled closure of Dynevor Arms during 2009 the number of facilities will decrease to three.

| 337 | 99.9999% | 26 | 100% |
|---|---|---|---|
| UK electricity substations | UK electrical system reliability | UK gas compressor stations | UK gas system reliability |



## Transmission UK – electricity system

— Scottish electricity transmission system
— English and Welsh electricity transmission system



Commissioned 434 circuit kilometres of overhead line, 18 super grid transformers and 41 circuit breakers.

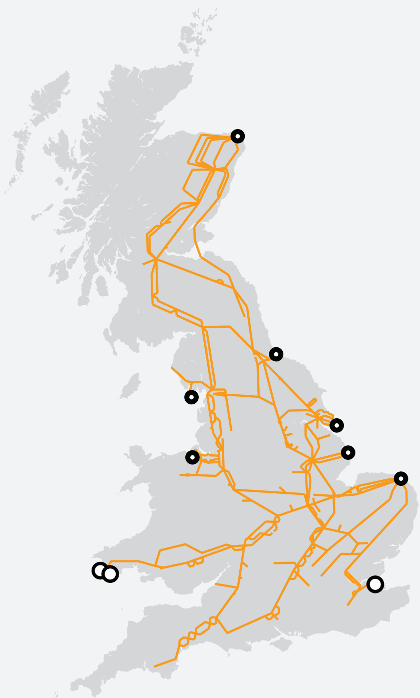
Diverted two existing overhead line circuits into a newly constructed cable tunnel on the site of the 2012 Olympic Park.

Developed a strategic plan for infrastructure investment to support the UK Government to meet its climate change targets.

Implemented a mobile flood defence system to protect substations from flooding.

## Transmission UK – gas system

— Gas transmission system
Terminal
LNG terminal



Completed Trans-Pennine high pressure gas pipeline connecting the two main north-south pipelines to provide greater operational flexibility.

Commissioned two new pipelines in southern England to connect new gas fired power stations.

New electric drive compressor station completed at Wormington, allowing greater flexibility of flows.

We are exploring carbon capture and storage – a technology that transports $CO_2$ emissions from power stations to depleted gas fields under the North Sea.

# **Transmission** continued

As electricity transmission owner and gas transmission owner, we own and maintain the physical assets, develop the networks to accommodate new connections and disconnections, and manage a programme of asset replacement and investment to ensure the long-term reliability of the respective networks.

As electricity transmission system operator and gas transmission system operator, we undertake a range of activities necessary for the successful, efficient delivery, in real-time, of secure and reliable energy. In the case of electricity, this involves the continuous real-time balancing of supply and demand, and management of balancing services that include commercial arrangements with market participants that enable electricity demand or generation output to be varied. In the case of gas, we ensure the system supply and demand is balanced at the end of each day. We are also required to maintain levels of short-term gas reserves to ensure domestic and other non-interruptible gas supplies can be maintained during prolonged cold conditions.

## Transmission US

In the US, we are involved in electricity transmission and our principal activities are as follows:

### Electricity transmission owner

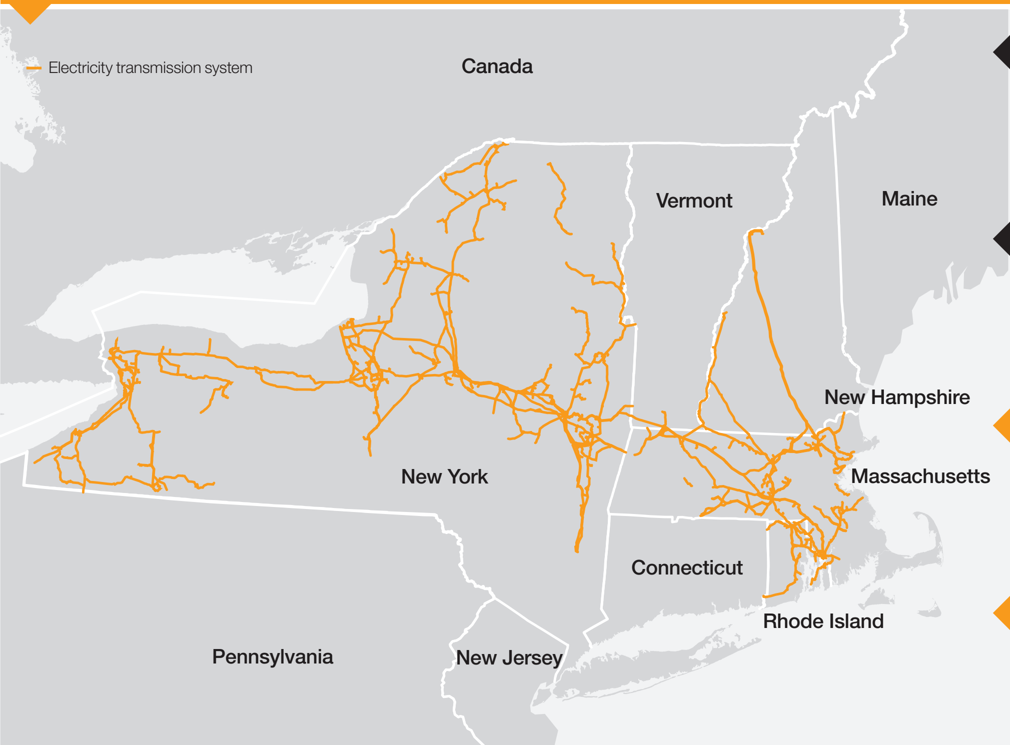
We own and operate an electricity transmission network of approximately 13,800 kilometres spanning upstate New York, Massachusetts, Rhode Island, New Hampshire and Vermont. Our US electricity transmission facilities operate at voltages ranging from 69 kV to 345 kV, utilising nearly 13,700 kilometres of overhead line, nearly 140 kilometres of underground cable and 524 substations.

We are the largest electricity transmission service provider in New England and New York by reference to the length of these high voltage transmission lines.

### Canadian interconnector

We own and operate a 224 kilometre direct current transmission line rated at 450 kV that is a key section of an interconnector between New England and Canada.

### Transmission US – electricity networks




Significant expenditure on asset replacement to increase system reliability.

Capital investment delivered in New York in line with KeySpan merger commitment.

New England East-West Solution (NEEWS) project is under way to enhance the transmission system in three states.

Five year contract signed with the New Energy Alliance to support investment programme in New England.

| 524 | 98.8% | 5.05% | £10.8bn |
|---|---|---|---|
| US electricity substations | US electricity system availability | UK price control allowed vanilla return for electricity and gas | Estimated UK regulatory asset value |



As one of several transmission owners, we work with two distinct independent system operators in New England and New York. These non profit system operator entities for New England and New York are responsible for operating organised wholesale markets for energy, for operating reserves and capacity, for maintaining the operating reliability of the New England and New York networks, for coordinating the activities of the transmission owners, and for managing transparent transmission expansion planning processes.

The transmission owners are responsible for certain aspects of the operation of the facilities they each own, such as maintenance, equipment restoration and switching operations.

National Grid also works closely with the independent system operators in New England and New York to support efficient market and network operations and transmission investment.

## Regulation

### Transmission UK

Through our subsidiary, National Grid Electricity Transmission plc, we are the sole holder of an electricity transmission licence for England and Wales. This licence also covers our role as system operator for the transmission networks in Great Britain. Under the Electricity Act 1989, we have a duty to develop and maintain an efficient, coordinated and economical system of electricity transmission and to facilitate competition in the supply and generation of electricity.

Through our subsidiary, National Grid Gas plc, we hold a gas transporter licence in respect of the national transmission system in Great Britain. Under the Gas Act 1986, we have a duty to develop and maintain an efficient and economical pipeline system for the conveyance of gas. Our LNG storage business is managed as a separate business from the gas transmission business; however, some elements of its operations are regulated under our gas transporter licence.

Ofgem sets price controls in respect of the amounts that can be recovered by the owners and operators of electricity and gas network infrastructure in the UK. These controls are reviewed every five years and the current price controls for both electricity and gas transmission activities cover the period 1 April 2007 to 31 March 2012.

We accepted Ofgem's final proposals for the system operator incentive schemes that applied to the year ended 31 March 2009 for both gas transportation and electricity transmission. We have also accepted their proposals for the one year schemes from 1 April 2009.

The key elements of the current price control for both gas and electricity transmission are that we earn a 4.4% post-tax real rate of return on our regulatory asset value (equivalent to a 5.05% vanilla return), a £4.4 billion baseline five year capital expenditure allowance and a £1.2 billion five year controllable operating expenditure allowance.

The charges that we can make for access to our UK electricity and gas transmission systems are determined by formulae linked to the UK retail price index (RPI). These formulae are based upon Ofgem's estimates of operating expenditure, capital expenditure and asset replacement, together with an allowed rate of return.

In addition, we are subject to a number of incentives that can adjust our transmission network revenue. These include the transmission network reliability incentive scheme and the sulphur hexafluoride ($SF_6$) incentive scheme.

Both our UK electricity and gas system operation activities are also subject to financial incentive schemes to promote efficiency. If we operate our networks more efficiently than Ofgem's forecasts, we can increase our revenues, with penalties for underperformance.

For electricity transmission, we also have a balancing services incentive scheme that covers the external costs incurred in balancing the system. For 2009/10, we have accepted an incentive scheme with a cost target between £600 million and £630 million, such that we retain 25% (up to a cap of £15 million) of any savings below £600 million, and we lose 15% (down to a collar of £15 million) of any costs in excess of £630 million.

For gas transmission, we have a number of incentive schemes covering activities such as cost of investment for additional capacity to facilitate new connections to the system, managing capacity constraints, the provision of market information, and the cost of purchasing shrinkage gas (gas used in operating the system) and other gas system operation costs.

### Transmission US

Revenue for our transmission business in New England and New York is collected from transmission customers, including from our Electricity Distribution & Generation business, pursuant to tariffs approved by state utility commissions and by the Federal Energy Regulatory Commission (FERC).

In New York, our rates allow for capital expenditure on our transmission network based on historic levels, which are significantly lower than required to maintain a safe and reliable network. Over recent years our investment has been three to four times greater than the levels in the rate plan. We are permitted to petition for additional revenues with respect to incremental capital expenditure, which we have done with respect to the 2008 calendar year.

In New England, the transmission tariff allows for recovery of, and a return on, capital expenditures as new investment enters service, bringing immediate revenue benefits.

In New York, Massachusetts and Rhode Island, we are subject to penalties if the reliability of our electricity distribution and transmission networks fail to meet specific targets related to customer impacts.

The New York rate plan is orientated around efficient operations. To the extent that we perform necessary activities and spend less than the forecast operating costs set in the rate plan, it equates to increased income for us. Part of the rate plan deals with forecast energy delivery. To the extent that more energy is delivered, we increase revenue. Conversely, if we deliver less

# **Transmission** continued

than forecast, our revenue goes down. In New England, working efficiently is also vital. However, the rate structure is such that network availability, energy delivery and operational expenditure are all pass-through items.

## Current and future developments

In addition to the current and future developments described on pages 22 and 23, the following developments are relevant to the Transmission business.

### Security of supply and climate change

The decline of the UK's North Sea gas reserves and the transition to a low carbon economy, are the two long-term security of supply and environmental challenges we are focused on. We are working with the UK electricity generators and Ofgem to ensure that the connection of renewable generation to the transmission network can be facilitated quickly and within our current licencing framework. In the US, we have major projects under way to increase the capacity of the transmission system to meet future demand. We are also working with the US Government and regulatory bodies to ensure that we help facilitate the implementation of the new climate change initiatives and stimulus package.

### Other UK developments

The price controls contain allowances for transmission reinforcement works to accommodate the growing impact of renewable energy from Scotland. Works to upgrade the two double circuits connecting Scotland and England are under way and due for completion in 2010 at a total cost of around £110 million. Further works are being carried out to increase the capability of the transmission system in the northeast and northwest of England so that increased transfers from Scotland can be transported to demand centres in England and Wales. The further works will be completed in 2011 at a total cost of around £230 million.

At this time, network access is being sought by approximately 9 GW of renewable generation projects in Scotland consisting of just over 100 projects, each with connection agreements with National Grid. For England and Wales, connection offers have been made to an additional 8 GW of renewable generation projects. We have continued to work closely with the Scottish transmission companies to find innovative solutions to advancing new generation projects in Scotland. We have introduced measures to allow generators who are ready and able to connect to do so before wider reinforcement works. Importantly, on 8 May 2009, Ofgem confirmed that they will agree derogations from the GB Security and Quality Standards of Supply to advance the connection of 450 MW of Scottish renewable generation.

We continue to develop a strategic plan for our networks up to 2050, recognising the unique role they play in meeting the UK's climate change objectives. In respect of electricity transmission, our plan is aligned with meeting the UK's 2020 renewables target and remaining on the trajectory towards the 2050 greenhouse gas reduction target. Comprising £4.7 billion of mainly onshore strategic infrastructure investment, this plan has been shared with and is supported by the multi agency Electricity Networks Strategy Group. It facilitates the connection of up to 34 GW of new renewable wind generation. These new connections will occur alongside an unprecedented replacement of the ageing generation fleet.

A network incorporating variable and potentially large and inflexible generators will be challenging to operate. We are a leading member of a cross-industry working group considering these issues and we are consulting the industry on the future requirements for balancing services.

### US regulatory developments

In New England, incentives applicable to transmission investments in service after 31 December 2008 require a separate petition filing with the FERC. On 17 September 2008, we and Northeast Utilities jointly filed a petition with the FERC to recover financial incentives for the New England East-West Solution (NEEWS) project, a series of interrelated transmission upgrades in the tri-state area of Connecticut, Massachusetts and Rhode Island, in which National Grid will invest approximately $0.6 billion (approximately £0.4 billion). The FERC granted incentives returns for NEEWS in November 2008.

We are seeking improvements to the New York regional planning process, and are working with the New York Independent System Operator (NYISO) and the New York Public Service Commission (NYPSC) to achieve this. The New York transmission owners are conducting a joint study to identify improvements needed to address ageing transmission infrastructure and the integration of renewables.

As permitted under our rate plan, in December 2007 we petitioned the NYPSC for deferred recovery of incremental investment on major capital programmes for calendar year 2008. The NYPSC issued its order on our deferral petition in September 2008 that recognised that the total programme of investment could be considered incremental to the existing rate plan but required us to file an additional petition based upon our actual 2008 investments after the end of the calendar year. This supplemental petition was filed on 21 April 2009. We anticipate that we will also petition for deferred recovery of qualifying incremental investment for calendar years 2009 and 2010.

| 50% | 17% | 4.7% | 6.9% |
|---|---|---|---|
| Reduction in Transmission UK employee lost time injury frequency rate | Reduction in Transmission US employee lost time injury frequency rate | Transmission UK electricity operational 2008/09 vanilla rate of return | Transmission UK gas operational 2008/09 vanilla rate of return |



## Performance against our objectives

Our progress against all National Grid's objectives is set out on pages 30 to 39. We include below further information specific to Transmission with respect to the objectives that are closely aligned to the lines of business.

### Driving improvements in our safety, customer and operational performance

#### Safety

Our objective is to reduce employee lost time injuries to zero.

To monitor our safety performance we use employee lost time injury frequency rate as our key performance indicator.

The safety of our employees, contractors and operations is of paramount importance and we have focused our efforts on safety messages that really matter and empowering our professionals to deliver continuous improvement in safety performance. The impact is illustrated through improvements in our safety performance in 2008/09.

In the UK, during 2008/09 there were 8 lost time injuries compared with 15 in 2007/08. The lost time injury frequency rate was 0.14 in 2008/09 compared with 0.28 in 2007/08.

Our US electricity transmission lost time injury frequency rate decreased to 0.20 in 2008/09 from 0.24 in 2007/08. There were 2 lost time injuries in 2008/09 compared with 2 in 2007/08.

#### Customer service

Our aim is to support generators and distribution network customers, including our own networks operated by Gas Distribution in the UK and Electricity Distribution & Generation in the US, in delivering energy efficiently and effectively to consumers, in particular in connecting new sources of supply to our transmission networks.

Our transmission customer service activities principally relate to facilitating new connections and maintaining existing connections and relationships with the customers who are already connected. In the US, much of the interconnection work with our transmission customers is performed in conjunction with the independent system operators in the areas within which we operate.

### Delivering strong, sustainable regulatory and long-term contracts with good returns

#### Returns on investment

Our aim is to meet or exceed the base financial returns in our price controls in the UK and our rate plans in the US.

The performance indicator we use to monitor our return on investment is the vanilla return in the UK and the return on equity per rate plan in the US.

We measure the financial performance of our UK regulated businesses using an operational return metric comparable to the vanilla return defined in the UK price controls from 1 April 2007. In our electricity transmission operations we achieved a 4.7% operational return in 2008/09 (2007/08: 5.2%), performing broadly in line with regulatory assumptions. In our gas transmission operations we achieved a 6.9% return in 2008/09 (2007/08: 6.9%), significantly outperforming regulatory assumptions mainly as a result of a strong performance under our incentive schemes.

In the US, we measure our financial performance against the allowed regulatory return on equity under the terms of our rate plans or rate agreements. In New England, we achieved a weighted average 11.8% return on equity broadly in line with the prior year. In New York, our electricity transmission activities are combined with electricity distribution under a single rate plan and the combined returns for these activities are included within the Electricity Distribution & Generation business commentary on page 70.

### Modernising and extending our transmission networks

In the US, we are entering into new agreements with supply chain partners to deliver our commitments for significantly increased investment to replace ageing transmission assets. In the UK, we have also agreed with Ofgem to commit significant investment into planning new infrastructure to connect low carbon power generation ahead of the traditional timescales. In addition, we have committed to developing new processes to enable investment in new physical network capacity, which provides customers with easier access to our network.

#### Reliability

Our aim is to meet or exceed network reliability and availability objectives.

To monitor our reliability performance we use network reliability percentages as our key performance indicator.

In the UK, the total amount of electricity transmitted in 2008/09 was 296.1 TWh compared with 303.0 TWh for 2007/08 and 303.7 TWh for 2006/07. Gas transmitted amounted to 1,158 TWh compared with 1,134 TWh in 2007/08 and 1,086 TWh in 2006/07.

In the UK, the winter of 2008/09 saw demand from the electricity transmission network in England and Wales hit a peak of 52.9 GW. This compares with 54.2 GW in 2007/08 and 52.1 GW in 2006/07.

2008/09 saw a maximum gas demand of 443 million standard cubic metres on 6 January 2009. This is higher than last year's peak of 419 million standard cubic metres.

In the US, the summer of 2008 saw demand from the electricity transmission networks in New England and New York hit a combined peak load of 13.0 GW. This compares with 13.2 GW in 2007 and 14.0 GW in 2006.

# **Transmission** continued

Our reliability and availability performance during the year can be summarised as follows:

| Measure | Years ended 31 March 2009 | 2008 | 2007 |
|---|---|---|---|
| UK electricity transmission network reliability – target 99.9999% | **99.9999%** | 99.9999% | 99.9999% |
| UK gas transmission network reliability – target 100% | **100%** | 100% | 100% |
| US electricity transmission network reliability – target < 303 MWh | **266 MWh** | 437 MWh | 259 MWh |
| UK average annual availability for electricity transmission network | **94.64%** | 95.09% | 95.02% |
| UK electricity system availability at winter peak demand | **97.7%** | 98.0% | 98.2% |
| UK gas compressor fleet performance – mean time between failures | **405 hrs** | 259 hrs | 430 hrs |
| US annual network availability | **98.8%** | 98.6% | 98.1% |

In the US, our electricity system reliability performance broadly improved over the previous year as well as the average of the previous five years. However, continued improvement remains an objective for 2009/10.

## Capital investment

Our aim is to deliver our planned capital investment programme involving approximately £5 billion of capital expenditure between 1 April 2009 and 31 March 2012.

### UK investment

Investment in electricity and gas transmission systems is, by its nature, variable and is largely driven by changing sources of supply and asset replacement requirements. The gas transporter and electricity transmission licences also oblige us to provide connections and capacity upon request.

We have increased our level of investment as we replace parts of our UK electricity network as the assets become due for renewal. In addition, parts of the gas transmission network are reaching the end of their technical lives. These are mainly compressor stations, control systems and valves. This, together with work required to meet changing supply sources, means that the UK electricity and gas transmission business will continue to see a significant increase in investment and network renewal.

Capital investment in the replacement, reinforcement and extension of the UK electricity and gas transmission systems in 2008/09 was £1,259 million, compared with £1,600 million in 2007/08 and £1,235 million in 2006/07. 2008/09 has seen a substantial decrease in the level of investment in gas pipeline projects, some £363 million lower than 2007/08 (2007/08: £138 million higher than 2006/07) as the south Wales project is now substantially complete. Capital investment included £18 million with respect to intangible assets, principally software applications (2007/08: £22 million, 2006/07: £17 million).

Capital investment continues to include high levels of expenditure on the replacement of electricity transmission network assets, many of which were commissioned in the 1960s, and also increasing expenditure on load related infrastructure. Total investment in electricity network assets amounted to £863 million in 2008/09, compared with £800 million in 2007/08 and £607 million in 2006/07.

### US investment

Capital investment in the replacement, reinforcement and extension of the US electricity transmission networks in 2008/09 was £182 million compared with £111 million in 2007/08 and £108 million in 2006/07. After excluding the £33 million effect of exchange rate movements, capital investment increased by £38 million in 2008/09 compared with 2007/08. The change principally reflects an increase in regional reliability projects in New England and additional asset replacement in New York to improve system reliability.

We expect increasing investment in New England to deliver our regional system expansion projects including the NEEWS project.

NEEWS is a large scale, regional transmission solution involving improvements to the transmission systems of National Grid and Northeast Utilities. In total it has an estimated cost of approximately \$2.1 billion (£1.5 billion) with National Grid's share estimated at approximately \$0.6 billion (£0.4 billion). The NEEWS project is designed to address reliability problems in the southern New England transmission system. The complexity and geographical coverage is on a larger scale than any other transmission infrastructure project built in New England in more than 20 years and represents the most significant addition to the New England 345 kV transmission system since it was first built.

Other investment projects in New York will also deliver our asset replacement plans and improve the reliability of the system.

## Becoming more efficient through transforming our operating model and increasingly aligning our processes

### Key areas of focus

Key areas of focus for our Transmission business in 2008/09 have been safety, securing funds for strategic investment in the UK, better operational planning and establishing construction alliances in the US.

Much of the focus for Transmission has been on preparing for the significant increase in capital investment that will occur in future years. In the UK, this has included developing the strategic investment plan. In the US, this has involved setting up new construction alliances, based on the established UK model, to manage the asset replacement programme more efficiently.

The new operational planning way of working brings together consistent planning information from all parties across a longer timeframe. This has improved the alignment of workload, resources and system access across multiple years between National Grid and supply chain partners to drive the efficient and timely delivery of work on our assets.

| £1,126m | £175m | £1,259m | £182m |
|---|---|---|---|
| Transmission UK adjusted operating profit up 10% | Transmission US adjusted operating profit up 5% | Transmission UK capital expenditure | Transmission US capital expenditure |



### Efficiency

Our objective is to increase the efficiency of Transmission's operations.

Transmission has continued to focus on incremental efficiencies and is committed to further improving the levels of efficiency in our operations. This is how we will reduce controllable costs on an enduring basis contributing to an improved financial performance.

Efficiency is reflected in our financial performance, which is discussed below.

## Financial performance

### Profit

Our objective is to drive continuous profit growth.

Our combined adjusted operating profit, excluding exceptional items, for Transmission in the UK and the US of £1,301 million is 10% higher than 2007/08 on a constant currency basis, which in turn was 10% higher than in 2006/07, also on a constant currency basis.

### Financial results – Transmission UK

The results for the Transmission UK segment for the years ended 31 March 2009, 2008 and 2007 were as follows:

| | Years ended 31 March | | |
|---|---|---|---|
| | **2009 £m** | 2008 £m | 2007 £m |
| Revenue and other operating income | **3,517** | 2,956 | 2,822 |
| Operating costs excluding exceptional items | **(2,391)** | (1,935) | (1,876) |
| Adjusted operating profit | **1,126** | 1,021 | 946 |
| Exceptional items | **(63)** | (8) | (10) |
| Operating profit | **1,063** | 1,013 | 936 |

### 2008/09 compared with 2007/08

The principal movements between 2007/08 and 2008/09 can be summarised as follows:

| | Revenue and other operating income £m | Operating costs £m | Operating profit £m |
|---|---|---|---|
| 2007/08 results | 2,956 | (1,943) | 1,013 |
| Add back exceptional items | – | 8 | 8 |
| 2007/08 adjusted results | 2,956 | (1,935) | 1,021 |
| Allowed revenues | 232 | – | 232 |
| Timing on recoveries | (20) | – | (20) |
| BSIS | 318 | (330) | (12) |
| French interconnector | 43 | (4) | 39 |
| Depreciation | – | 3 | 3 |
| Other | (12) | (125) | (137) |
| 2008/09 adjusted results | 3,517 | (2,391) | 1,126 |
| Exceptional items | – | (63) | (63) |
| 2008/09 results | 3,517 | (2,454) | 1,063 |

Revenue and other operating income increased by £561 million in 2008/09 compared with 2007/08, mainly driven by recovery of higher incentivised costs associated with balancing the electricity system (BSIS) and an increase in allowed revenues. French interconnector revenue was up £43 million due to higher capacity auction revenues. Other movements mainly comprise lower LNG storage auction income.

Operating costs, excluding exceptional items, increased by £456 million in 2008/09 compared with 2007/08. This was primarily due to higher incentivised BSIS costs relating to higher constraint, margin and energy balancing costs (largely covered by the revenue increase above). Higher other operating costs reflect an increase in gas shrinkage costs, due to higher energy prices, and higher pass-through costs.

The increase in UK adjusted operating profit in 2008/09 reflects the movements in revenue and operating costs, excluding exceptional items, as described above.

The £63 million exceptional charge in 2008/09 primarily consists of a £50 million charge relating to the restructuring of our LNG storage facilities.

### 2007/08 compared with 2006/07

The principal movements between 2006/07 and 2007/08 can be summarised as follows:

| | Revenue and other operating income £m | Operating costs £m | Operating profit £m |
|---|---|---|---|
| 2006/07 results | 2,822 | (1,886) | 936 |
| Add back exceptional items | – | 10 | 10 |
| 2006/07 adjusted results | 2,822 | (1,876) | 946 |
| Allowed revenues | 176 | – | 176 |
| Timing on recoveries | 10 | – | 10 |
| Lower French interconnector and LNG storage auctions | (62) | – | (62) |
| Depreciation and amortisation | – | (20) | (20) |
| Other | 10 | (39) | (29) |
| 2007/08 adjusted results | 2,956 | (1,935) | 1,021 |
| Exceptional items | – | (8) | (8) |
| 2007/08 results | 2,956 | (1,943) | 1,013 |

Revenue and other operating income increased by £134 million in 2007/08 compared with 2006/07. Allowed revenues increased by £176 million, driven by the five year transmission price controls that came into effect on 1 April 2007. As expected, revenues from our French interconnector and LNG storage businesses were lower in 2007/08, down by a combined £62 million on 2006/07, as demand for capacity returned closer to normal levels following the abnormal demand in 2006/07.

Operating costs, excluding exceptional items, increased by £59 million in 2007/08 compared with 2006/07. As expected, depreciation and amortisation increased by £20 million as a result

# **Transmission** continued

of increasing capital investment. Other items increased costs by £39 million, principally because of higher pass-through costs and increased non-regulated activities, both recovered through revenue.

The £8 million exceptional charge in 2007/08 relates to costs incurred in establishing a shared services function in the UK and from the continuation of our review of business processes, compared with £10 million in 2006/07.

As a consequence, adjusted operating profit, excluding exceptional items, increased by £75 million in 2007/08 compared with 2006/07, while operating profit increased by £77 million.

### Financial results – Transmission US

The average exchange rates used to translate the results of US operations during 2008/09, 2007/08 and 2006/07 were \$1.54: £1, \$2.01: £1 and \$1.91: £1 respectively.

| | Years ended 31 March **2009** **£m** | 2008 £m | 2007 £m |
|---|---|---|---|
| Revenue | **420** | 299 | 270 |
| Operating costs excluding exceptional items | **(245)** | (171) | (162) |
| Adjusted operating profit | **175** | 128 | 108 |
| Exceptional items | **(2)** | (6) | (1) |
| Operating profit | **173** | 122 | 107 |

### 2008/09 compared with 2007/08

The principal movements between 2007/08 and 2008/09 can be summarised as follows:

| | Revenue £m | Operating costs £m | Operating profit £m |
|---|---|---|---|
| 2007/08 results | 299 | (177) | 122 |
| Add back exceptional items | – | 6 | 6 |
| 2007/08 adjusted results | 299 | (171) | 128 |
| Exchange movements | 91 | (52) | 39 |
| 2007/08 constant currency results | 390 | (223) | 167 |
| Allowed revenues | 25 | – | 25 |
| Timing of recoveries | 4 | – | 4 |
| Other | 1 | (22) | (21) |
| 2008/09 adjusted results | 420 | (245) | 175 |
| Exceptional items | – | (2) | (2) |
| 2008/09 results | 420 | (247) | 173 |

Adjusted operating profit increased by £47 million in 2008/09, of which £39 million was caused by the movement in exchange rates when compared with 2007/08. On a constant currency basis, revenue and operating costs increased by £30 million and £22 million respectively, resulting in an £8 million, or 5%, increase in adjusted operating profit in 2008/09.

Allowed revenues increased by £25 million in 2008/09. This growth was in New England where we have seen the benefit of our investment in regional reliability projects coming through in higher sustainable revenue streams.

In addition, revenue was £4 million higher in 2008/09 because of the timing of recoveries under our New York rate plan.

Operating costs were £22 million higher, on a constant currency basis, in 2008/09 than in 2007/08 reflecting our commitment to improve the operational performance of the networks in both New England and New York. The majority of the increase was driven by reliability enhancements and maintenance programmes aimed at improving system reliability. In addition, both depreciation and property taxes have increased as a direct consequence of the growth in network capital investment brought into service.

The £2 million exceptional charge in 2008/09 relates to restructuring costs arising from the integration of the operations acquired with KeySpan.

### 2007/08 compared with 2006/07

The principal movements between 2006/07 and 2007/08 can be summarised as follows:

| | Revenue £m | Operating costs £m | Operating profit £m |
|---|---|---|---|
| 2006/07 results | 270 | (163) | 107 |
| Add back exceptional items | – | 1 | 1 |
| 2006/07 adjusted results | 270 | (162) | 108 |
| Exchange movements | (13) | 8 | (5) |
| 2006/07 constant currency results | 257 | (154) | 103 |
| Allowed revenues | 27 | – | 27 |
| Timing on recoveries | 15 | – | 15 |
| Other | – | (17) | (17) |
| 2007/08 adjusted results | 299 | (171) | 128 |
| Exceptional items | – | (6) | (6) |
| 2007/08 results | 299 | (177) | 122 |

Revenue and operating costs decreased by £13 million and £8 million in 2007/08 respectively as a consequence of exchange rate movements when compared with 2006/07. On a constant currency basis revenue and operating costs increased by £42 million and £17 million respectively. This reflected an increase in allowed revenues of £27 million and £15 million arising from the timing of revenue recoveries, while operating costs increased by £17 million as a consequence of higher wages and other expenditure.

The £6 million exceptional charge in 2007/08 relates to the integration of the operations acquired with KeySpan, in particular costs arising from voluntary early redundancies, compared with £1 million incurred in 2006/07. As a consequence adjusted operating profit increased by £25 million in 2007/08 compared with 2006/07 on a constant currency basis and by £20 million in total. After reflecting exceptional items, operating profit was £15 million higher in 2007/08 than in 2006/07.

# Gas Distribution




**We continue to share best practice ideas between the UK and US to improve our operating model and make it more consistent.**

**In the UK, we are one year into the new price control period, which will bring considerable challenge and opportunity over the remaining four years as we look to become more efficient and effective.**

**Once again, we have achieved our objective to replace metallic main with plastic this year, totalling over 1,900 kilometres in the UK, and reduced the amount of cast iron and unprotected steel mains by 398 kilometres in the US, improving the safety and reliability of our networks.**

### Key Facts

- Around 190,000 kilometres of gas pipe
- Delivery of 317 and 205 TWh of gas to over 10.8 and 3.5 million consumers in the UK and US respectively

| Adjusted operating profit | Capital investment |
|---|---|
| **£1,284m** | **£1,019m** |
| 2007/08: £987m | 2007/08: £702m |

| Employees | Gas delivered |
|---|---|
| **9,534** | **522 TWh** |
| 2007/08: 9,136 | 2007/08: 455 TWh |

## About Gas Distribution

Our Gas Distribution business operates in both the UK and the US. As a consequence of the different economic and regulatory environments, we report the results of Gas Distribution as two segments: Gas Distribution UK and Gas Distribution US.

This section should be read in conjunction with the rest of this Operating and Financial Review, in particular the external market and regulatory environment; current and future developments; business drivers; vision, strategy and objectives; and risks and opportunities set out on pages 20 to 27 and page 40.

## Principal operations

### Gas Distribution UK

Our Gas Distribution UK segment comprises four of the eight regional gas distribution networks in Great Britain.

Our networks comprise approximately 132,000 kilometres of gas distribution pipelines and we transport gas on behalf of approximately 25 active gas shippers from the gas national transmission system to around 10.8 million consumers.

We also manage the national gas emergency number (0800 111 999) for all the gas distribution networks and for other transporters in the UK. During 2008/09, we handled approximately 2 million calls to the national gas emergency number and a further 1.4 million calls to the enquiries line, appliance repair helpline and meter number enquiry service.

### Gas Distribution US

Our Gas Distribution US segment comprises gas distribution networks providing services to around 3.5 million consumers across the northeastern US, located in service territories in upstate New York, New York City, Long Island, Massachusetts, New Hampshire and Rhode Island.

Our network of approximately 58,000 kilometres of gas pipelines covers an area of approximately 26,400 square kilometres.

In the US, our core services are the operation and maintenance of each of our gas distribution networks, in addition to billing, customer service and supply services.

Except for residential and small commercial consumers in Rhode Island, customers may purchase their supply from independent providers, with the option of billing for those purchases to be provided by National Grid. The gas industry is less deregulated in the US than in the UK, in that the majority of gas supplied is still sold by local regulated utilities such as National Grid, to customers. Regulated utilities purchase gas from gas producers, and gas transporters then transport this gas on the independent inter-state pipeline system and into regulated utilities' gas distribution networks for delivery to customers. In our case, we receive gas from the inter-state pipeline system at 95 gate stations. The inter-state pipeline system and local gas distribution networks are also used to deliver gas on behalf of customers who have purchased gas from independent suppliers or direct from gas producers.

# **Gas Distribution** continued

## Gas Distribution UK – operating area

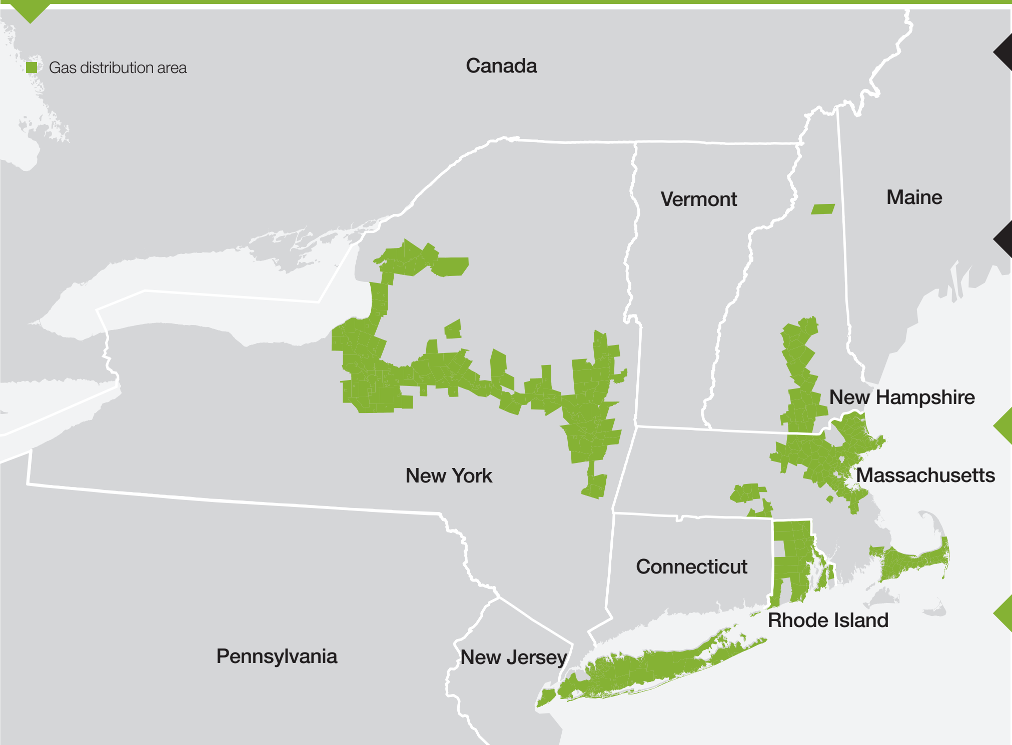

Met all standards of service as defined by our UK regulators.

Retained our PAS 55 certification in recognition of optimal management of our UK infrastructure assets.

Exceeded Health and Safety Executive mains replacement target for the third consecutive year.

Ongoing management of around 15,350 pressure reduction sites, and over 8.4 million standard cubic metres of gas storage capacity.

## Gas Distribution US – operating area




Over $160 million invested in infrastructure replacement in 2008/09.

More than 60,000 new gas heating customers in 2008/09.

16 liquefied natural gas (LNG) sites to meet peak customer demand and mitigate price volatility.

Significant improvements made in gas rate plans in Rhode Island, upstate New York and New Hampshire.

| Over 1,900km | £6.6bn | $8.1bn | 14.3m |
|---|---|---|---|
| Metallic gas main replaced within the UK | Estimated UK regulatory asset value | Estimated US rate base (based on latest filings) | Gas consumers served in the UK and the US |



## Regulation

### Gas Distribution UK

We hold a single gas distribution transporter licence in the UK, which authorises us to operate the four gas distribution networks we own. Detailed arrangements for transporting gas are provided through the Uniform Network Code. This defines the obligations, responsibilities and roles of industry participants and is approved by Ofgem.

Our four regional gas distribution networks each have a separate price control that determines the prices we can charge to gas shippers for our gas delivery service. These maximum prices are based on Ofgem's allowances for operating, capital and replacement expenditure, together with depreciation of, and a return on, Ofgem's allowances for our regulatory asset value.

The current price control period came into force on 1 April 2008 and covers the period up to 31 March 2013 providing for an allowed average revenue increase of 2% per annum above the retail price index. Key elements of the price control are a 4.3% post-tax real rate of return (equivalent to 4.94% vanilla return) on our regulatory asset value. Ofgem's final proposals (at 2005/06 prices) allow a £1.6 billion five year operating expenditure allowance and a £2.5 billion baseline five year capital expenditure allowance split £1.8 billion for replacement expenditure and £0.7 billion for capital expenditure.

The allowed formula revenue was decoupled from delivery volumes from 1 April 2007. This eliminated the sensitivity to warm weather and lower underlying volumes. In addition, from 1 October 2008 only a minimal proportion of our income is recovered through the volume delivery component of our charges.

At 31 March 2009, our regulatory asset value was estimated at approximately £6.6 billion.

In the UK, the price control formulae specify a maximum allowed revenue assigned to each network. Each formula consists of a fixed core revenue, cost pass-through items and an opportunity to earn additional revenue through new incentive schemes including: a mains and services replacement adjustment mechanism; shrinkage and environmental emissions incentives; an exit capacity scheme; and innovation, environmental and community incentives.

Replacement expenditure maintains the safety and reliability of the network, by replacing older gas pipes with modern polyethylene equivalents. Ofgem treats 50% of projected replacement expenditure as recoverable during the price control period and 50% as recoverable over future years. Each network is subject to its own mains replacement incentive mechanism and retains 36% of any outperformance against Ofgem's annual cost targets as additional return or, alternatively, bears 36% of any overspend if it underperforms.

In specific instances, Ofgem has agreed the price control can be re-opened in response to changes in legislation that may increase the cost of carrying out work in the public highway.

Transportation charges are set broadly to recover allowed revenue but in any year collected revenue can be more or less than allowed. Any difference is carried forward and our charges are adjusted accordingly in future periods.

Ofgem has established standards of service we are required to meet that apply to our operations. These include: standards of service incorporated within our gas transporter licence, for example, answering 90% of all calls to the national gas emergency number, enquiries line and meter number enquiry service within 30 seconds of the call being connected and attending 97% of reports of a gas escape or other gas emergency within the required timescale; and guaranteed standards of service for our other transportation services such as, restoration of supply after an unplanned interruption and complaint handling. Compensation is payable for any failures to meet guaranteed standards of service.

### Gas Distribution US

Gas Distribution US operates under franchise agreements that provide us with certain rights and obligations regarding gas facilities and the provision of gas service within each state in which we operate. In addition, there are federal and state laws and regulations covering both general business practices and the gas business in particular, especially with respect to safety, energy transactions, customer sales and service, levels of performance, rates, finances and environmental concerns. The jurisdictions include, but are not limited to: the US Department of Transportation, the US Environmental Protection Agency, the US Federal Energy Regulatory Commission (FERC), several state utility commissions, departments of transportation, and environmental agencies. Local building departments, fire departments and departments of transportation also impose regulations upon our operations. A number of these agencies issue licences and permits that govern activities under their jurisdiction.

The prices we set in the US for our customers are based on a cost of service model, whereby the prices that we agree with our regulators are designed to recover the costs we incur in providing services to customers, together with a return on equity invested. Customer bills typically comprise a commodity rate to recover the cost of gas delivered and a delivery rate to cover our gas delivery service. Delivery rates consist of a per customer charge and an additional price per therm of gas delivered. The allocation between these components varies by jurisdiction, type of customer and size of customer.

Depending on the jurisdiction, gas costs are set either monthly, semi-annually or annually based on estimated gas prices and volumes expected to be delivered to customers, which may differ from actual amounts. Gas purchases for supply to customers, which represent a substantial proportion of our costs, are pass-through costs, in that prices are adjusted on a regular basis to ensure that over- or under-recovery of these costs is returned to or recovered from customers with interest. As a consequence, we have no economic exposure to such costs assuming they were prudently incurred.

# **Gas Distribution** continued

However, as prices are typically established based on estimates of costs and volumes, there can be timing differences between the financial period when we incur such costs and the financial period when our prices are adjusted to return or charge for any over- or under-recovery.

Our rate plans include sharing arrangements, which allow us to retain some of the benefit of efficiency improvements in excess of those built into rate plan assumptions. Typically, we retain all the benefits up to a certain level of return on equity, after which we retain only a proportion of the benefits with the balance returned to customers. A summary of the key features and allowed returns within our rate plans is provided below.

| Rate plan | Equity return | Equity to debt ratio | Sharing arrangements |
|---|---|---|---|
| New York City and Long Island | 9.8% | 45/55 | 100% to 10.5%, 50% to 12.5%, 35% to 13.5%, nil above 13.5% |
| Upstate New York* | 10.2% | 44/56 | 100% to 11.35%, 50% to 13.6%, 25% to 15.6%, 10% above 15.6% |
| Boston, MA | 10.2% | 50/50 | 100% up to 14.2%, 75% above 14.2% |
| Essex, MA | 11.2% | 55/45 | None |
| Colonial, MA | 11.2% | 46/54 | None |
| Rhode Island | 10.5% | 48/52 | 50% to 11.5%, 25% above 11.5% |
| New Hampshire | 10.4% | 49/51 | None |

*Based on settlement filed, awaiting approval

We also have a number of service standards for our operations. These vary between our rate plans but include such measures as: reliability levels; responsiveness to gas emergency calls; customer satisfaction levels; customer complaints; customer meter reading performance; customer call answering; enrolment of customers into the low income customer assistance programme; outstanding gas leaks requiring repair; and other measures. Many of these service standards have penalties if we do not achieve certain specified minimum standards.

## Current and future developments

In addition to the current and future developments described on pages 22 and 23, the following developments are relevant to the Gas Distribution business.

### Rhode Island gas rate plan filing

We filed a request on 1 April 2008 with the Rhode Island Public Utilities Commission for a $20.4 million (£14.2 million) rate increase, representing a 4.6% increase on a total bill basis. In November, we were granted a $13.6 million (£9.4 million) rate increase with a 10.5% return on equity, effective as of 1 December 2008. The case has a discrete funding mechanism for a mains replacement programme, a new rate for low income customers, and an increased recovery of commodity related bad debt expense. Our decoupling proposal was rejected and the Commission indicated that full revenue decoupling was not appropriate at this time.

### Upstate New York gas rate plan filing

We filed a rate plan with the New York Public Service Commission on 23 May 2008 for an $84 million (£58 million) rate increase in natural gas delivery rates. We filed a settlement proposal on 13 February 2009, which included a two year rate plan, a $39.4 million (£27.4 million) rate increase in year one resulting in an overall 5.1% increase on customer bills. The settlement contains a 10.2% return on equity, revenue decoupling, a new rate for low income customers, a partial recovery of commodity related bad debt expense based on current gas costs, a full recovery of New York State Energy Research and Development Authority (NYSERDA) auction rate debt, and a partial recovery of new long-term debt. The Commission will rule on the settlement during 2009, with new rates expected to come into effect during the year.

### New Hampshire gas rate plan filing

On 25 February 2008, we filed a request with the New Hampshire Public Utilities Commission to increase distribution rates by approximately $9.9 million (£6.9 million). The filing marks the first request for an increase in distribution rates in 15 years and is necessary to fund ongoing operations and significant infrastructure improvements. On 23 January 2009, we filed a partial settlement addressing all issues other than the return on equity. The return on equity was fully litigated. The partial settlement includes a commodity related bad debt allowance in the first year of 2.54%, (decreasing to 1.75% in year four) increased customer charges, an enhanced collections programme and the elimination of the requirement to connect new customers to the system at no charge who are within 80 feet of the network. The Commission ruling is expected in 2009 and will cover the settlement and the return on equity.

## Performance against our objectives

Our progress against all National Grid's objectives is set out on pages 30 to 39. We include below further information specific to Gas Distribution with respect to the objectives that are closely aligned to the lines of business.

## Driving improvements in our safety, customer and operational performance

### Safety

Our objective is to reduce employee lost time injuries to zero.

To monitor our safety performance we use employee lost time injury frequency rate as our key performance indicator. In addition, we monitor kilometres of gas distribution mains replaced in the UK.

Lost time injuries totalled 76 in 2008/09, of which 24 were within the UK and 52 were within US. This was equivalent to a lost time injury frequency rate of 0.35. This compared with a total of 72 lost time injuries in 2007/08, of which 15 were within the UK and 57 within the US, equivalent to a lost time injury frequency rate of 0.36. Data for 2007/08 has been restated as if the KeySpan acquisition had occurred at the beginning of the year.

In both the UK and US, we again exceeded all our regulatory agreed targets on safety related standards.

| 5.8% | Safety | 3 rate filings | £25m |
|---|---|---|---|
| Vanilla rate of return achieved in the UK | Exceeded our UK and US targets to attend gas escapes | Three new gas rate plan filings being progressed in the US | Investment in active pressure management systems to reduce our impact on climate change |



In the UK, we have decommissioned more than 1,900 kilometres of metallic gas main in 2008/09 under our long-term main replacement programme, exceeding the target agreed with the UK Health and Safety Executive (HSE) for the third consecutive year. The HSE target this year was 1,852 kilometres. We decommissioned over 1,850 kilometres in both 2007/08 and 2006/07. We have also seen good performance in the US with the rate of mains replacement steadily increasing. As detailed on page 85, we identified that some of our mains replacement activity may have been misreported. We have notified both Ofgem and the HSE, and a full investigation is currently being conducted.

In the UK, we are also investing around £25 million in a wider roll-out of active control systems, which change the pressure in the gas mains automatically as customer demand conditions require. This investment reduces average system pressure on our gas mains, thereby reducing natural gas escapes and is a direct consequence of the new environmental emissions incentive laid out by Ofgem in this current price control period. The combined effect of the above mains replacement activity and pressure management investments ultimately reduces the number of gas escapes that impact climate change.

### Customer service

In addition to meeting customer service objectives agreed with our regulators, our objective is to be within the upper quartile of customer satisfaction in the territories we operate in.

To monitor our customer service performance we use customer satisfaction surveys as our performance measure.

In addition to meeting all service standards defined by our UK regulators, we aim to deliver a high quality customer experience, with satisfaction levels measurable through industry surveys in the geographic areas within which we operate.

In the UK, quality of service standards apply to three principal areas of activity: new connections; the telephone service; and attendance at gas emergencies. All standards have been met in 2008/09 and, in the individual cases where compensation is due, we have processes to ensure that customers receive the statutory compensation to which they are entitled. Customer satisfaction with the levels of service provided in respect of our main types of work (emergency response and repair, planned work and connections work) is measured and reported on a quarterly basis. Results of these surveys are directly comparable with the other independent distribution network operators and can be found at www.nationalgrid.com/uk/gas and www.ofgem.gov.uk. In summary, out of a maximum score of 10, we achieved the following year-to-date network average scores: 7.86 for emergency response and repair; 7.29 for planned work; and 6.74 for connections work. All scores are calculated within the Ofgem template and represent the mean scores of individual quarters. There is a programme of activities within the UK to improve these scores in future surveys.

For gas utility businesses in the US, J.D. Power and Associates formulate an annual survey and customer satisfaction rating. In 2008/09, the gas line of business experienced a decline. The business customer satisfaction scores were in the third quartile and residential customer satisfaction scores are in line to be in the third quartile. As our relationship with J.D. Power develops, we plan to implement initiatives that should improve customer satisfaction in the next three years by focusing on: communications and price; corporate citizenship; bill payment and collections; gas and electricity quality; reliability and safety; customer field services; and customer operations.

In the US, our Gas Distribution business met all gas safety related regulatory requirements on service quality indices and performance measures. These standards are set by state regulatory agencies and cover operational activities including, but not limited to, damage prevention, leak repair, emergency response, meter changes and main and service replacements.

## Delivering strong, sustainable regulatory and long-term contracts with good returns

### Returns on investment

Our aim is to meet the base financial returns in our price controls in the UK and our rate plans in the US.

The performance indicator we use to monitor our return on investment is the vanilla return in the UK and the return on equity per rate plan in the US.

In the UK, we measure our return on investment using an operational return metric comparable to the vanilla return measure as defined in our UK price controls. In the US, we measure our return on investment using our defined return on equity under the terms of each rate plan.

Gas Distribution UK achieved a 5.8% vanilla return in 2008/09 exceeding the regulatory allowance. A summary of returns under our US rate plans is provided below.

| Regulatory entity | Asset base* 2008 | Asset base* 2007 | Return on equity* 2008 | Return on equity* 2007 | Allowed return current |
|---|---|---|---|---|---|
| KEDNY | **$2,294m** | $2,239m | **11.9%** | 14.9% | 9.8% |
| KEDLI | **$1,795m** | $1,715m | **11.1%** | 10.4% | 9.8% |
| Mass. Gas | **$2,425m** | $2,137m | **8.3%** | 9.2% | 10.6% |
| Energy North | **$191m** | $173m | **4.4%** | 4.9% | 10.4% |
| Narragansett | **$337m** | $341m | **7.6%** | 3.2% | 10.5% |
| Niagara Mo. Gas** | **$1,067m** | $1,084m | **4.8%** | 5.9% | 10.2% |

* Based on regulatory returns for the 12 months ended either 31 October or 31 December

** Based on settlements filed, awaiting approval

Current returns for our downstate New York and Long Island gas businesses are above our allowed returns. We are in the second year of a five year rate plan. Returns for our gas businesses in Rhode Island, New Hampshire and upstate New York are below our allowed returns. As previously discussed, we have filed rate cases in these jurisdictions. In upstate New York, we are awaiting approval for a two year gas settlement that increases rates by $39.4 million and has a 10.2% return on equity. In our Massachusetts gas businesses, we are operating under long-term rate plans but anticipate filing for rate adjustments in April 2010 to be effective 1 November 2010.

# Gas Distribution continued

## Modernising and extending our distribution networks

### Reliability

Our objective is to meet regulatory targets and to have zero loss of supply incidents.

To monitor our reliability performance we use network reliability percentages as our key performance indicator.

In the UK, we again achieved a very high network reliability percentage of 99.9999% which reflects a low volume of unplanned customer interruptions during the year.

In the UK, actual gas consumption was 317 TWh compared with 315 in 2007/08. In the US, gas consumption was 205 TWh for 2008/09 compared with 212 in 2007/08. This was below the previous year due to the decreased gas usage among customers having dual fuel capability.

In both the UK and US, we continue to focus on improving reliability, in particular in the area of gas escapes, and targets in both regions have been met. Specifically in the US, workable gas escape backlog has been reduced by 30% over the previous year.

We continue to focus on process safety, which is the collective name for the measures, systems, procedures or policies which prevent incidents and/or protect people and the environment from the effects of major accidents. We are aligning our approach for controlling asset risks between the UK and the US.

Our asset management policies promote continual improvement in how our physical assets (plant, pipes, meters and regulators) are managed throughout their lifecycle from conception through construction, operation, maintenance and decommissioning.

### Capital investment

Our aim is to deliver capital investment by 2012 in line with our UK price control allowance and supported by our US rate plans.

During 2008/09, we successfully delivered £1,019 million of capital investment and plan to invest a further £3.3 billion by 2012.

#### UK capital investment

Gross investment including reinforcement, extension and replacement of the UK gas distribution network was £598 million in 2008/09 compared with £514 million in 2007/08 and £490 million in 2006/07. Of these amounts, £425 million in 2008/09 related to replacement expenditure that is capitalised (2007/08: £353 million, 2006/07: £333 million) and £173 million to other capital investment including new connections, new pipelines and minor capital expenditure (2007/08: £161 million, 2006/07: £157 million). Expenditure on software applications included within the above amounts was £22 million (2007/08: £18 million, 2006/07: £12 million).

Replacement expenditure increased by £72 million (20%) compared with 2007/08 reflecting an increase in workload and a higher proportion of complex large diameter mains. Performance under the mains replacement incentive scheme is expected to be broadly neutral in 2008/09.

In collaboration with our alliance partnerships, we have replaced more than 1,900 kilometres of metallic gas main this year and approximately 8,800 kilometres since 2004/05, the vast majority of which relates to the long-term mains replacement programme agreed with the HSE.

The increase in other capital expenditure in 2008/09 compared with 2007/08 is driven by the commencement of the construction of a major new pipeline in west London, which is due for completion in 2009/10 together with information technology expenditure to replace obsolete equipment in system control and operational activities.

#### US capital investment

Capital expenditure in the replacement, reinforcement and extension of our US gas distribution networks was £421 million in 2008/09, £188 million in 2007/08, and £36 million in 2006/07.

After excluding the effect of exchange movements of £58 million in 2008/09 compared with 2007/08, capital expenditure increased by £175 million. The primary reason for the increase arose from five months of additional activities from the gas distribution network of KeySpan acquired in August 2007.

After excluding the effect of exchange movements of £2 million in 2007/08 compared with 2006/07, capital expenditure increased by £154 million. The primary reason for the increase was the inclusion of £144 million representing seven months of capital expenditure on the operations acquired with KeySpan.

## Becoming more efficient through transforming our operating model and increasingly aligning our processes

### Key areas of focus

Our objective is to utilise the scale and breadth of our enlarged Gas Distribution operations, together with the benefits of common support services, to drive improvements in our operating and financial performance. In particular, we aim to adopt best practices across Gas Distribution.

We have continued the transformation of our gas business towards the National Grid operating model. During 2008, we agreed a core of eight processes that can be more common across our business. These processes have been further broken down in preparation for work to commence on detailed design of our new IT system to support a more efficient operation in the UK gas business.

We completed the alignment of the Gas Distribution organisation to a globally aligned process based structure, as opposed to the traditional geocentric approach. This, combined with piloting new ways of planning, standardising and delivering of work, will enable us to release more value from our scale of operations and the greater centralisation of our back office support tasks.

In 2009/10, we will start the progressive replacement of our ageing front office IT suite of systems. The lessons learnt from the pilots, and the advances in technology since the original front office was

| £1,466m | £4,786m | £598m | £421m |
|---|---|---|---|
| Gas Distribution UK revenue | Gas Distribution US revenue | Gas Distribution UK capital expenditure | Gas Distribution US capital expenditure |



installed, will help us drive further improvements in the efficiency and customer performance of the gas business.

We have also made significant progress towards achieving the KeySpan integration initiatives attributable to Gas Distribution. Major categories of these initiatives included process model driven cost savings, standardisation, best practices, revenue enhancement and leak management. These initiatives were an integral part of the overall KeySpan integration.

### Efficiency

Our objective is to increase the efficiency of Gas Distribution operations.

Our aim is to maintain the proper level of investment in our infrastructure to enable related operating cost reductions. The transformation of the front office programme in the UK is an example of how we are looking to execute information systems priorities to facilitate savings. US operations have achieved operating efficiencies of $15 million (annual run rate) due to initiatives related to merger integration synergies, which include, but are not limited to, consolidation of New England control centres, standardisation of fleet vehicles, organisational and office consolidations and increased utilisation of best practice technologies such as keyhole coring and remote service shut off systems.

Efficiency is reflected in our financial performance, which is discussed below.

## Financial performance

### Profit

Our objective is to increase profits each year.

The adjusted operating profit was £1,284 million in 2008/09 compared with £987 million in 2007/08 and £480 million in 2006/07.

#### Financial results – Gas Distribution UK

The results for our Gas Distribution UK segment for the years ended 31 March 2009, 2008 and 2007 were as follows:

| | Years ended 31 March | | |
|---|---|---|---|
| | **2009 £m** | 2008 £m | 2007 £m |
| Revenue | **1,466** | 1,383 | 1,193 |
| Other operating income | **2** | 8 | 6 |
| Operating costs excluding exceptional items | **(796)** | (796) | (790) |
| Adjusted operating profit | **672** | 595 | 409 |
| Exceptional items | **(43)** | (21) | 3 |
| Operating profit | **629** | 574 | 412 |

#### 2008/09 compared with 2007/08

The principal movements between 2007/08 and 2008/09 can be summarised as follows:

| | Revenue and other operating income £m | Operating costs £m | Operating profit £m |
|---|---|---|---|
| 2007/08 results | 1,391 | (817) | 574 |
| Add back exceptional items | – | 21 | 21 |
| 2007/08 adjusted results | 1,391 | (796) | 595 |
| Allowed revenues | 90 | – | 90 |
| Timing on recoveries | (15) | – | (15) |
| Pass-through costs | – | (9) | (9) |
| Non-formula | 9 | (12) | (3) |
| Other revenue and costs | (7) | 21 | 14 |
| 2008/09 adjusted results | 1,468 | (796) | 672 |
| Exceptional items | – | (43) | (43) |
| 2008/09 results | 1,468 | (839) | 629 |

Revenue and other operating income in Gas Distribution UK increased by £77 million in 2008/09 compared with 2007/08. Allowed revenue was up £90 million, driven by the five year price control that came into effect on 1 April 2008 and incentive gains through the efficient management of our capacity requirements and improved pressure management. This was partially offset by a £15 million timing impact on recoveries.

The net year-on-year timing impact against allowed revenues was a reduction of £15 million as in 2008/09 there was a net benefit of £10 million (comprising the under-recovery of £20 million relating to the previous year, partially offset by a £10 million under-recovery for 2008/09), compared with a net benefit of £25 million in 2007/08 (comprising a £20 million under-recovery in 2007/08, offset by £45 million under-recovery from 2006/07).

Operating costs for 2008/09, excluding exceptional items, were in line with 2007/08. Efficiency savings through strong operating cost performance were combined with one-off benefits in the year. As expected, this was offset by £9 million higher pass-through costs due to an increase in business rates following the changes in rateable values introduced from 1 April 2005 and shrinkage costs due to higher gas prices. Non-formula costs were £12 million higher because of increased meter work and other non-formula activities.

Exceptional charges of £43 million in 2008/09 included an increase in the environmental provision of £13 million with the remaining £30 million made up of restructuring and transformation costs, which include system related projects costs. This compared with a £21 million charge in 2007/08.

As a consequence of the above, adjusted operating profit excluding exceptional items was £77 million higher in 2008/09 than 2007/08, an increase of 13%. Including exceptional items, operating profit was £55 million higher in 2008/09 than 2007/08, an increase of 10%.

# **Gas Distribution** continued

## 2007/08 compared with 2006/07

The principal movements between 2006/07 and 2007/08 can be summarised as follows:

| | Revenue and other operating income £m | Operating costs £m | Operating profit £m |
|---|---|---|---|
| 2006/07 results | 1,199 | (787) | 412 |
| Add back exceptional items | – | (3) | (3) |
| 2006/07 adjusted results | 1,199 | (790) | 409 |
| Allowed revenues | 165 | – | 165 |
| Timing on recoveries | 59 | – | 59 |
| Depreciation and amortisation | – | (11) | (11) |
| Pass-through costs | – | (18) | (18) |
| Other revenue and costs | (32) | 23 | (9) |
| 2007/08 adjusted results | 1,391 | (796) | 595 |
| Exceptional items | – | (21) | (21) |
| 2007/08 results | 1,391 | (817) | 574 |

Revenue and other operating income in Gas Distribution UK increased by £192 million in 2007/08 compared with 2006/07. Net formula income was higher by £165 million due to the outcome of the one year price control extension. In addition, there was a £59 million timing impact on recoveries. This was partially offset by lower non-formula income, as a result of the cessation of transitional service agreements with the independent distribution networks and lower meter work activities, which was reflected in the improvement in other costs.

The allowed formula revenue is no longer linked to delivery volumes. This decoupling now eliminates the sensitivity to warm weather and lower underlying volumes. Furthermore, a smaller proportion of our income is recovered through the volume delivery component of our charges.

Cooler temperatures than the prior year increased consumption by 14 TWh, which was partially offset by the impact of underlying volumes being lower by 2 TWh. The net year-on-year timing impact against allowed revenues was £59 million as in 2007/08 there was a net benefit of £26 million (comprising the recovery of £43 million relating to the previous year, partially offset by a £17 million under-recovery for 2007/08), compared with a net detriment of £33 million in 2006/07 (comprising a £43 million under-recovery for 2006/07, partially offset by £10 million recovered relating to 2005/06).

Operating costs, excluding exceptional items, were £6 million higher in 2007/08 compared with 2006/07. Depreciation and amortisation costs were £11 million higher reflecting the increased capital investment in the distribution network. In line with 2006/07, there was a £12 million increase in business rates following the changes in rateable values introduced from 1 April 2005. From 2007/08 there is an extra allowance of £12 million for the recovery of non-active members' pension costs. This was partially offset by a reduction in operating costs of £11 million partly driven by the cessation of the transitional services agreement with the independent distribution networks and partly by efficiency savings.

Exceptional charges of £21 million in 2007/08 related primarily to the creation of the new shared services organisation in the UK and global information services function, together with pension costs associated with these restructuring programmes. This compared with a £3 million net gain in 2006/07.

As a consequence of the above, adjusted operating profit excluding exceptional items was £186 million higher in 2007/08 than 2006/07, an increase of 45%. Including exceptional items, operating profit was £162 million higher in 2007/08 than 2006/07, an increase of 39%.

## Financial results – Gas Distribution US

The average exchange rates used to translate the results of US operations during 2008/09, 2007/08 and 2006/07 were \$1.54:£1, \$2.01:£1 and \$1.91:£1 respectively.

| | Years ended 31 March | | |
|---|---|---|---|
| | **2009 £m** | 2008 £m | 2007 £m |
| Revenue | **4,786** | 2,845 | 638 |
| Operating costs excluding exceptional items and remeasurements | **(4,174)** | (2,453) | (567) |
| Adjusted operating profit | **612** | 392 | 71 |
| Exceptional items and remeasurements | **(386)** | 95 | (4) |
| Operating profit | **226** | 487 | 67 |

## 2008/09 compared with 2007/08

The principal movements between 2007/08 and 2008/09 can be summarised as follows:

| | Revenue £m | Operating costs £m | Operating profit £m |
|---|---|---|---|
| 2007/08 results | 2,845 | (2,358) | 487 |
| Add back exceptional items | – | (95) | (95) |
| 2007/08 adjusted results | 2,845 | (2,453) | 392 |
| Exchange movements | 873 | (753) | 120 |
| 2007/08 constant currency results | 3,718 | (3,206) | 512 |
| KeySpan contribution | 902 | (896) | 6 |
| Rate increases | 32 | – | 32 |
| Weather and volumes | 22 | – | 22 |
| Timing on recoveries | (6) | 52 | 46 |
| Merchant function charge | 38 | – | 38 |
| Energy efficiency programme | 19 | (12) | 7 |
| Pass-through costs | 69 | (69) | – |
| Bad debt expense | – | (29) | (29) |
| Other revenues and costs | (8) | (14) | (22) |
| 2008/09 adjusted results | 4,786 | (4,174) | 612 |
| Exceptional items | – | (52) | (52) |
| Remeasurements | – | (334) | (334) |
| 2008/09 results | 4,786 | (4,560) | 226 |

Revenue and operating costs excluding exceptional items and remeasurements increased by £1,068 million and £968 million respectively in 2008/09 compared with 2007/08 on a constant currency basis, an increase of 29% and 30% in each case. The rise in revenue and operating costs primarily arose from an increase in contributions from KeySpan operations in 2008/09 reflecting the first full year of ownership since acquisition in August 2007.

| £672m | £612m | 13% | 20% |
|---|---|---|---|
| Gas Distribution UK adjusted operating profit | Gas Distribution US adjusted operating profit | Gas Distribution UK increase in adjusted operating profit | Gas Distribution US increase in adjusted operating profit at constant currency |



Revenue increased by £1,073 million in 2008/09 compared with 2007/08. Revenue from KeySpan operations increased by £902 million compared with 2007/08. The remaining £171 million was primarily driven by New York, Long Island, Rhode Island, and New Hampshire rate increases of £32 million, colder weather and higher consumption of £22 million, higher recoveries of gas inventory carrying charges of £38 million, higher commodity pass-through costs of £69 million, and other increases of £10 million.

The weather in 2008/09 was significantly colder than 2007/08. As measured in heating degree days, weather in 2008/09 across National Grid's US gas territories was approximately 5% colder than normal and was approximately 8% colder than 2007/08.

Operating costs, excluding exceptional items were £973 million higher in 2008/09 compared with 2007/08. The increase in costs from KeySpan operations in 2008/09 was £896 million on a constant currency basis. The remaining increase of £77 million was a result of higher commodity pass-through costs, an increase in maintenance costs and higher bad debt expense as a result of the economic downturn partially offset by a favourable overcollection in commodity costs.

Exceptional charges of £52 million in 2008/09 related to integration initiatives, including the cost of voluntary early redundancies, while adverse mark-to-market commodity contract remeasurement losses were recorded as a consequence of lower energy prices compared with contracted amounts as at 31 March 2009. The losses from these transactions will be realised in subsequent periods and recovered from consumers.

### 2007/08 compared with 2006/07

The principal movements between 2006/07 and 2007/08 can be summarised as follows:

| | Revenue £m | Operating costs £m | Operating profit £m |
|---|---|---|---|
| 2006/07 results | 638 | (571) | 67 |
| Add back exceptional items | – | 4 | 4 |
| 2006/07 adjusted results | 638 | (567) | 71 |
| Exchange movements | (32) | 29 | (3) |
| 2006/07 constant currency results | 606 | (538) | 68 |
| KeySpan contribution | 2,181 | (1,832) | 349 |
| Rhode Island gas operations | 61 | (74) | (13) |
| Bad debt expense | – | (3) | (3) |
| Pension and benefit costs | – | (3) | (3) |
| Other | (3) | (3) | (6) |
| 2007/08 adjusted results | 2,845 | (2,453) | 392 |
| Exceptional items | – | (46) | (46) |
| Remeasurements | – | 141 | 141 |
| 2007/08 results | 2,845 | (2,358) | 487 |

Revenue and operating costs excluding exceptional items and remeasurements increased by £2,239 million and £1,915 million respectively in 2007/08 compared with 2006/07 on a constant currency basis. The rise in revenue and operating costs primarily arose from five months of additional activities from the gas distribution network in Rhode Island we acquired from Southern Union Company in August 2006 and seven months of activities from the gas distribution networks we acquired with KeySpan in August 2007.

Exceptional charges of £46 million in 2007/08 related to integration initiatives, including the cost of voluntary early redundancies, while favourable mark-to-market commodity contract remeasurement gains were recorded as a consequence of higher energy prices compared with contracted amounts as at 31 March 2008. The benefit of these gains will be realised in subsequent periods and passed back to consumers.

# Electricity Distribution & Generation

**Our customers are at the heart of everything we do. We continue to invest in our distribution and generation systems creating sustained improvements in our system reliability.**

**We are focused on building a branded customer experience that demonstrates our commitment to our customers and educates them on the environmental impact they have. We believe that increased energy efficiency and deployment of smart technologies are the best ways to help our customers control their energy costs while addressing the effects of climate change.**

**We are seeking regulatory agreements that decouple our revenue from customer energy usage. With decoupling, we can enable increased energy efficiency for our customers without reducing our revenue stream.**

### Key Facts

- Over 116,700 kilometres of circuit
- 3.4 million customers
- 65 TWh of electricity delivered
- 670 substations
- 57 generation units at 13 locations across Long Island
- LIPA network serving 1.1 million customers over 24,100 kilometres of circuit and 177 substations, delivering 22 TWh of electricity

| Adjusted operating profit | Capital investment |
|---|---|
| **£265m** | **£355m** |
| 2007/08: £330m | 2007/08: £257m |

| Employees | Energy saved through energy efficiency measures |
|---|---|
| **7,950** | **275 GWh** |
| 2007/08: 7,955 | 2007/08: 266 GWh |

## About Electricity Distribution & Generation

Our Electricity Distribution & Generation business operates in the northeastern US and is reported as a single segment in our financial statements.

This section should be read in conjunction with the rest of this Operating and Financial Review, in particular the external market and regulatory environment; current and future developments; business drivers; vision, strategy and objectives; and risks and opportunities set out on pages 20 to 27 and page 40.

## Principal operations

### Electricity Distribution

We are one of the leading electricity distribution service providers in the northeastern US, as measured by energy delivered, and one of the largest utilities in the US, as measured by the number of electricity distribution customers.

Our electricity distribution system spans upstate New York, Massachusetts, Rhode Island and New Hampshire, which, together with the system on Long Island owned by the Long Island Power Authority (LIPA), provides energy to homes, small businesses, and large commercial and industrial enterprises.

We are responsible for building, operating and maintaining our electricity distribution networks in New England and New York, and LIPA's transmission and distribution networks on Long Island. Our work is essential to the economies of the regions in which we operate and contributes to the comfort and well-being of the millions of people who depend on our services.

Through our electricity distribution networks we serve approximately 3.4 million electricity customers over a network of approximately 116,700 circuit kilometres (72,500 miles) in New England and New York.

We strive to provide a reliable, high quality distribution network to our customers. In all that we do, we are committed to safeguarding our global environment for future generations.

On Long Island, we are responsible for managing the electricity transmission and distribution system on behalf of LIPA. The LIPA service territory consists of most of Nassau and Suffolk counties on Long Island, together with the Rockaway Peninsula which forms part of Queens County (part of New York City). It covers approximately 3,200 square kilometres, encompassing nearly 90% of Long Island's total land area. LIPA owns approximately 2,100 kilometres (1,300 miles) of transmission line facilities that deliver power to approximately 177 substations in its electricity system. From these substations, approximately 24,100 circuit kilometres (15,000 miles) of distribution facilities distribute electricity to 1.1 million customers.

Our responsibilities include managing the day-to-day operations and maintenance of LIPA's transmission and distribution system, providing services to LIPA's retail customers, purchasing and selling electricity on behalf of LIPA and managing the delivery of the energy that we produce under contract to LIPA.

| 4.1 GW | 38 TWh | £426m | 670 |
|---|---|---|---|
| Generation facilities on Long Island | Annual electricity procurement | Stranded cost recoveries | Substations |

### Generation

We own 57 electricity generation units on Long Island that together provide 4.1 GW of power under contract to LIPA. We also manage the fuel supplies for LIPA to fuel our plants and purchase energy, capacity and ancillary services in the open market on LIPA's behalf.

Our plants consist of oil and gas fired steam turbine, gas turbine and diesel driven generating units. The smallest are 2 MW diesel driven units on the eastern end of Long Island and the largest are 375 MW steam units based at Northport. Any available power not purchased by LIPA is made available for sale in the open market.

### Stranded cost recoveries

Stranded cost recoveries capture the recovery of some of our historical investments in generating plants that were divested as part of the restructuring process and wholesale power deregulation process in New England and New York. This includes the recovery of certain above market costs of commodity purchase contracts we are committed to purchasing that were in place at the time of restructuring and deregulation.

We are able, with the approval of the utility commissions in the states in which we operate, to recover most of these costs through a special rate charged to electricity customers.

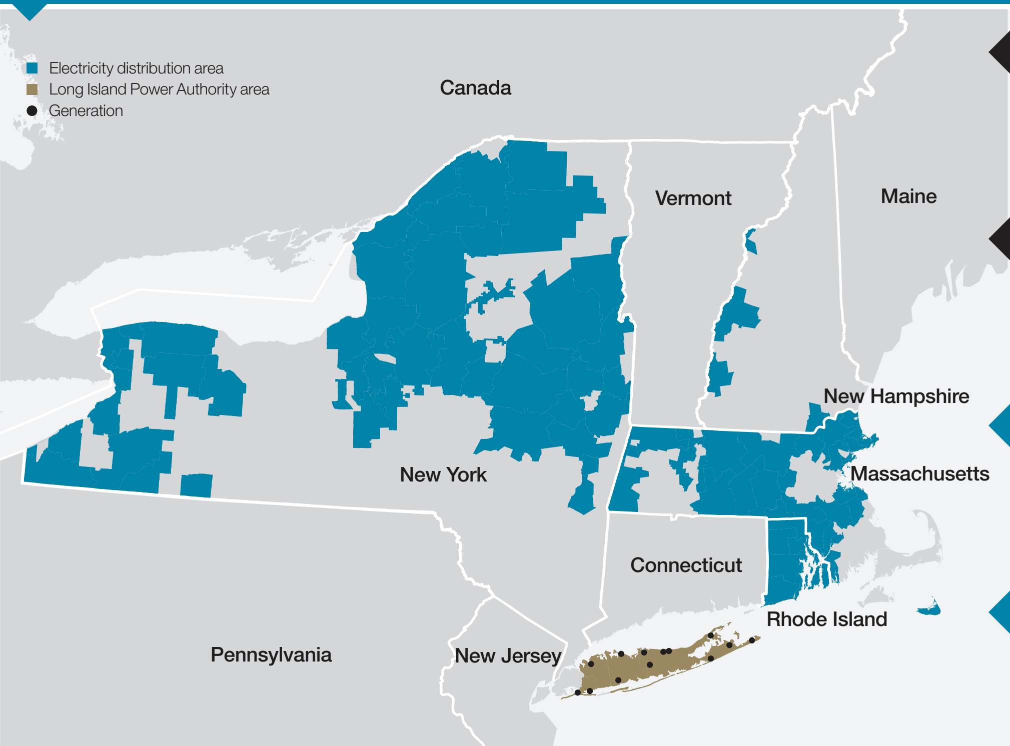
Pursuant to the settlement and stranded cost recovery agreements in effect in each of the states in which National Grid operates, this revenue stream will decline as the recovery of stranded costs is completed. As a consequence, we do not consider this to be part of our business performance and so this is excluded from adjusted operating profit.

### Energy procurement

We are responsible for the planning, procurement and administration of natural gas and electricity commodity supply for our customer base within our Electricity Distribution & Generation and Gas Distribution US businesses. Delivering on our commitment to achieve the highest reliability at low cost, we transact with a diverse group of creditworthy energy companies in order to supply approximately 500 billion standard cubic feet of natural gas, and procure 38 TWh of electricity annually across four states. We maintain a diversified and flexible portfolio of gas supply, transmission and storage assets, and are the largest shipper on major inter-state pipelines including Tennessee, Dominion, Algonquin and Iroquois. We transport 30% of all gas consumed in the northeast region of the US. We are also responsible for optimising our gas transmission and storage assets in order to provide additional benefits for our customers and shareholders.

We also provide fuel management services to power generators including LIPA and procure natural gas and oil to supply the 57 generation units on Long Island. We also provide LIPA with energy trading services.

### Electricity Distribution & Generation service area




$57 million planned investment in smart grid pilot involving approximately 15,000 customers in Massachusetts.

Proposed 5 MW of solar generation in Massachusetts, which has the capacity to power 1,200 homes cleanly.

Working with multiple policy makers in Washington, DC to help shape energy and climate change legislation.

Recipient of the Sustained Excellence Award for long standing commitment to energy efficiency.

# **Electricity Distribution & Generation** continued

## Regulation

The prices we set in the US are based on a cost of service model, whereby the prices established by our regulators are designed to cover the costs we incur in providing services to customers, together with a return on capital invested.

Customer bills typically comprise a commodity rate, covering the cost of electricity delivered and a delivery rate, covering our electricity delivery service. Delivery rates comprise a combination of a per customer charge, a demand charge and a price per additional kilowatt hour of electricity delivered. The allocation and applicability among these components vary by size of customer.

Prices set by our rate plans are based on estimates of costs and our return and estimates of volumes expected to be delivered, which may differ from actual amounts. A substantial proportion of our costs, in particular electricity purchases for supply to customers, are pass-through costs, in that prices are adjusted on a regular basis to ensure that over- or under-recovery of these costs is returned to or recovered from customers. As a consequence, we have no economic exposure to such costs, however, there can be timing differences between the financial period when we incur such costs and the financial period when our prices are adjusted to return or charge for any over- or under-recovery.

Our Long Island generation plants sell capacity to LIPA under a contract, approved by the Federal Energy Regulatory Commission (FERC), which provides a similar economic effect to cost of service rate regulation.

Our rate plans include sharing arrangements, which allow us to retain some of the benefit of efficiency improvements in excess of those built into rate plan assumptions. Typically we retain all the benefits up to a certain level of return on equity, after which we retain only a proportion of the benefits, with the balance returned to customers. A summary of the key features of our rate plans is provided below.

| Rate plan | Equity return | Equity to debt ratio | Sharing arrangements |
|---|---|---|---|
| Upstate New York | 10.6% | 47/53 | 100% to 11.75%, 50% to 14%, 25% to 16%, 10% above 16% |
| Massachusetts | * | * | Not specified |
| Rhode Island | 10.5% | 50/50 | 50% from 10.5-11.5%, 25% above 11.5% |
| New Hampshire | 9.67% | 50/50 | 50% above 11% |

* Massachusetts returns are based on the average of a peer group of utilities until 31 December 2009

We also have a number of service standards for our operations. These vary among our rate plans, but include reliability levels, customer satisfaction levels, customer complaints, customer meter reading performance, customer call answering, energy efficiency programmes and other measures. Many of these service standards have penalties if we do not achieve certain specified minimum standards.

The upstate New York rate plan also allows for subsequent recovery of specified electricity related costs and revenue items that have occurred since the rate plan was established, once these amounts exceed individual item thresholds and $100 million (£69 million) in total. These deferral account items include changes from the levels of pension and post-retirement benefit expenses from levels specified in the rate plan, as well as various other items, including storms, environmental remediation costs, and certain rate discounts provided to customers, together with costs and revenues from changes in tax, accounting and regulatory requirements.

The fourth and final filing for recovery of actual and projected deferral costs up to 31 December 2011 is anticipated to be made in August 2009 for recovery over a two year period commencing 1 January 2010.

## Current and future developments

In addition to the current and future developments described on pages 22 and 23, the following developments are relevant to the Electricity Distribution & Generation business.

### Environment

We aim to be a leader in the energy policy agenda by progressing efforts in energy efficiency and climate change. The US administration and Congress are working to pass legislation driving a federal renewable portfolio standard, an energy efficiency standard, and potentially a cap and trade regime for $CO_2$ reduction in advance of the Copenhagen climate change meeting in December 2009. National Grid is working closely with Congress, and the states to assist in the analysis of policy options and their impact on our industry and service area. We continue to lead on emissions reduction initiatives and collaborate with like minded companies through the US Clean Energy Group and community organisations.

### LIPA Power Supply Agreement (PSA) rate adjustment

On 30 January 2009, we filed with the FERC for a rate increase for the power supplied to LIPA. Rates pursuant to the PSA agreement are in effect until May 2013. They were initially set in 1998 and are reset every five years. Rates were last reset in 2004. The PSA also allows for certain annual rate adjustments such as property tax increases and certain inflationary increases. The filing seeks an increase of $92 million, $60 million of which would be allowable under the annual rate adjustment provisions. On 31 March 2009, the FERC accepted our proposed tariff effective from 1 February 2009, subject to refund. The order also encourages a negotiated settlement. Absent a settlement, the issues would be ruled on later this year by a FERC administrative law judge.

| 37% reduction | $71m | 114 minutes | Rate filings |
|---|---|---|---|
| In lost time injury frequency rate | Investment in energy efficiency programmes | SAIDI network reliability | New rate filings for New York and LIPA |



### Upstate New York capital expenditure rate filing
In New York, capital expenditure in the rate plan for electricity distribution is set at historic levels that are significantly lower than those currently required to maintain a safe and reliable network. On 21 December 2007, we petitioned the New York Public Services Commission (NYPSC) for deferred recovery of incremental investment on major capital programmes for calendar year 2008, as permitted under our rate plan.

On 5 September 2008, the NYPSC ordered that we should only file for deferred recovery of incremental investment once the calendar year of spend had finished. We filed a new petition in April 2009 for deferred recovery of incremental investments in 2008. We anticipate that we will also petition for deferred recovery of qualifying incremental investment for calendar years 2009 to 2011.

### Massachusetts and Rhode Island rate plans
In both the Massachusetts and Rhode Island rate plans, we have the right to file for rate adjustments effective from 1 January 2010. In both jurisdictions, rate applications to increase electricity distribution rates will be filed during 2009.

## Performance against our objectives
Descriptions of our progress against all National Grid's objectives are set out on pages 30 to 39. We include below further information specific to Electricity Distribution & Generation with respect to the objectives that are closely aligned to the lines of business.

### Driving improvements in our safety, customer and operational performance
### Safety

Our objective is to reduce employee lost time injuries to zero.

To monitor our safety performance we use employee lost time injury frequency rate as our key performance indicator.

The number of employee lost time injuries in Electricity Distribution & Generation decreased to 37 compared with 53 in 2007/08 (based on National Grid's definition that aligns the measure between the UK and the US). Our lost time injury frequency rate for 2008/09 was 0.22, representing a 37% decrease over the prior year's rate of 0.35. The data for 2007/08 has been restated as if the KeySpan acquisition had occurred at the beginning of the year. Improvement programmes implemented in 2008/09 were aimed at aligning our merged operations in key areas of safety and occupational health management and to promote one positive safety culture. The key safety initiatives during 2008/09 were as follows:
- integration of a safety observations programme focused on fostering open communications and promoting safe behaviours. A new online system was developed to support the programme;
- a new safety performance committee structure was established to drive safety initiatives and promote communication;
- implementation of the soft tissue injury prevention programme continued to improve our approach to preventing soft tissue or musculoskeletal injuries, which make up 60% of injuries;
- an attendance management programme was initiated to increase supervisors' focus on non occupational absence reduction; and
- as part of our trusted to work responsibly strategy, we continue to address the 'golden rules' of safety that involve the most critical areas of safety and set clear expectations of the workforce.

In 2009/10, our safety objectives include implementing a safe driving policy, incorporating techniques in the field to help address transitional risk and hazard identification, improving the quality of incident investigation and analysis to ensure we consistently identify underlying causes and help to prevent recurrence, and promote union involvement through increased participation in the safety advocate and other programmes.

### Customer service

In addition to meeting customer service objectives agreed with our regulators, our objective is to be within the upper quartile of customer satisfaction in the territories we operate in.

To monitor our customer service performance we use customer satisfaction surveys as our performance indicator.

Reliability and service issues are key factors contributing to customer satisfaction. Our investment in enhanced reliability will increasingly improve customer perceptions. We are taking steps to improve our customer satisfaction, manage cost and use, enhance billing quality, and increase responsiveness to customer queries, regulatory complaints and call handling. Recent performance against our peers shows we need to substantially improve customer satisfaction. A key customer satisfaction metric is the J.D. Power and Associates customer satisfaction study. A global marketing information company, J.D. Power conducts independent and unbiased surveys of customer satisfaction, product quality and buyer behaviour. In the most recent surveys, we rank in the lower quartile for large east coast utilities. Our objective is to achieve first quartile performance in all J.D. Power customer satisfaction surveys by 2013.

To drive immediate and sustained improvements, ownership of the major survey components has been assigned to senior management who will develop and implement action plans designed to improve our ranking each year for the next three years. The National Grid customer experience team identified the following priority areas:
- communications and price;
- corporate citizenship;
- billing, payment and collections;
- gas and electricity quality, reliability and safety;
- customer field services; and
- customer operations.

Electricity Distribution & Generation has established a customer steering committee that will work in partnership with National Grid's customer experience team to drive improvement in customer satisfaction in 2009/10. Detailed customer feedback identified targeted improvement opportunities, including:
- outage communications and estimated time of restoration accuracy;
- customer education, relevance, and frequency of communications associated with forestry related work; and
- customer facing skills to ensure customers feel valued.

# Electricity Distribution & Generation continued

Energy efficiency provides our customers with long-term cost saving opportunities. For more than 20 years National Grid has offered a comprehensive portfolio of energy efficiency programmes to customers. These nationally recognised programmes have saved billions of kilowatt hours of electricity, eliminated millions of dollars in energy costs and have reduced millions of tonnes of greenhouse gas emissions associated with electricity production. In 2008/09, energy efficiency programmes helped customers mitigate the rising costs of energy and educated them on conservation methods.

National Grid has received national recognition from the US Environmental Protection Agency and the US Department of Energy for our leadership and outstanding contribution to energy savings and mitigating the effects of climate change.

Using our proven performance in delivering energy efficiency programmes, we aim to significantly expand programme funding through initiatives under way in Rhode Island, New York, and Massachusetts. We are also continuing to develop new and creative ways to provide our customers with end-to-end energy solutions that help them manage their energy use and reduce their carbon footprint.

LIPA and National Grid are in discussions as to whether we have achieved the customer satisfaction metrics in the management services agreement for the years 2006 to 2008. Failure to meet these metrics for all three years could constitute an event of default under the agreement.

## Delivering strong, sustainable regulatory and long-term contracts with good returns

### Returns on investment

Our aim is to meet the base financial returns in our rate plans by delivering on long-term contracts that provide value.

The performance indicator we use to monitor our return on investment is the defined regulatory return on equity under the terms of each rate plan.

A summary of returns under our rate plans is provided below.

| Regulatory entity | Asset base* 2008 | Asset base* 2007 | Return on equity* 2008 | Return on equity* 2007 | Allowed return current |
|---|---|---|---|---|---|
| Niagara Mohawk (Electric) | **$4,609m** | $4,882m | **6.7%** | 9.1% | 10.6% |
| Massachusetts (Electric) | **$1,495m** | $1,373m | **7.0%** | 9.5% | 11.0% |
| Narragansett Electric (Dist Only) | **$564m** | $543m | **2.3%** | 6.8% | 10.5% |
| Long Island Generation | **$574m** | $621m | **7.1%** | 9.5% | 9.5% |

* Based on regulatory returns for the 12 months ended either 31 October or 31 December

Our US electricity businesses are operating under long-term rate plans which are reaching their conclusion. Current returns for our New York, Massachusetts, and Rhode Island (Narragansett) electricity operations are below allowed returns, primarily due to higher levels of investment and continued cost pressures, particularly bad debts and storm costs. In Massachusetts and Rhode Island, we anticipate filing for rate adjustments to be effective 1 January 2010, the earliest that rates are eligible for adjustment pursuant to the rate plans.

In New York, the regulatory return on equity includes electricity transmission, electricity distribution and stranded cost recoveries. For the rate year ended 31 December 2008, the reported return on equity was 5.2%. When adjusted for the Company's share of merger savings allocated to electricity and certain one-off costs, the return was 6.7%. The long-term electricity rate plan concludes on 31 December 2011 at which time electricity rate adjustments would become effective. In April 2009, we filed for recovery of incremental investment above the amount included in the electricity rate plan, and plan on filing for this relief in each of the remaining rate plan years.

Our Long Island generation business has filed with the FERC for a rate increase effective 1 February 2009, subject to refund, as described on page 68. Resolution of this case is expected in the latter part of 2009.

## Modernising and extending our networks

### Reliability

In addition to meeting reliability performance targets agreed with our regulators, our objective is to improve reliability.

To monitor our reliability performance we use industry average outage frequency and duration as our key performance indicator.

The system average interruption duration (SAIDI) for 2008/09, being the time the average customer is without power during the year, was 114 minutes, compared with a target of below 120 minutes and 110 minutes in 2007/08.

Our customers depend on a reliable electricity distribution service. In 2008, we achieved our regulatory targets for our Rhode Island, Massachusetts and upstate New York electricity operations, while Long Island operations continued to achieve first quartile reliability performance based on 2007 data. Although we did not meet the LIPA management service agreement metric for average customer interruption duration, no monetary penalties were incurred as strong performances against other operational metrics provided an offset.

In 2009, we intend to meet internal targets that move towards achieving first quartile reliability performance by 2013. A key element to delivering these targets and achieving sustainable improvements in reliability will be the continued investment in our distribution infrastructure.

| 7.0% | 6.7% | $750m | $7.2bn |
|---|---|---|---|
| 2008 regulatory return on equity for Massachusetts Electric | 2008 regulatory return on equity for Niagara Mohawk (Electric) | Planned capital spend on infrastructure in 2009/10 | Estimated rate base (based on latest filings) |



As we enter the fourth year of the five year reliability enhancement programme, we are now realising the benefits. We will continue to replace ageing underground cables, overhead lines, protection/control systems and substation infrastructure as part of our asset replacement programme, and continue our ongoing reliability enhancement programme. This programme also includes:

- feeder hardening – upgrading our worst performing overhead electricity circuits by replacing aged and deteriorated components and protecting against lightning strikes and animal contacts; and
- inspection and maintenance – increasing our preventative maintenance and repair activities to find potential faults before they occur to improve reliability and public safety.

We will also continue our vegetation management programme across all operating areas, increasing our focus on dealing with hazardous trees.

We plan to invest over $520 million in our networks across New England and New York during 2009/10, delivering on our commitment to invest $1.47 billion in upstate New York over four years. In addition, with the asset replacement programme agreed with LIPA, we will be investing an estimated $237 million in the LIPA distribution and transmission infrastructure.

Overall, we propose to invest over $750 million in the renewal of our infrastructure during 2009/10.

### Capital investment

Our objective is to deliver our capital investment plans over the next five years.

Capital investment in the replacement, reinforcement and extension of our US electricity distribution networks was £355 million in 2008/09, £257 million in 2007/08, and £218 million in 2006/07. After excluding the effect of exchange movements of £79 million in 2008/09 compared with 2007/08, capital investment increased by £19 million. This reflects a £10 million increase from a full year of generation capital expenditure compared with a partial year in 2007/08 following the KeySpan acquisition, higher investment at the Port Jefferson and Northport generating stations of £7 million, increased capital related storm costs of £6 million, and other investment including asset replacement of £23 million. This higher expenditure has been partially offset by decreased capital lease additions of £15 million relating to vehicles and lower investment in new business installations of £12 million as a result of the downturn in the US economy.

After excluding the effect of exchange movements of £11 million in 2007/08 compared with 2006/07, capital investment increased by £50 million. This reflected an increase of £17 million in spend related to our reliability enhancement programme, recognition of finance leases related to vehicles of £18 million, other increases in capital investment of £11 million and £13 million of capital investment in the operations acquired with KeySpan, partially offset by a non-recurring benefit capitalisation adjustment made in 2006/07 of £9 million.

## Becoming more efficient through transforming our operating model and increasingly aligning our processes

### Key areas of focus

Our focus includes building upon our high performance safety culture while executing on our reliability enhancement programme, creating a branded customer experience and delivering on our electricity distribution operations transformation programme.

We have a clear focus on an operating model that encourages collaboration with other business units and ensures continued efficiency gains through common practices and policies. Ensuring the reliability of our system, operating safely, and improving relationships with stakeholders, are our main objectives.

Our aim is to be recognised as an industry leader and help to transform the current traditional utility model into a business that is able to deliver sustained improvements in operating performance.

### Transform operations

We are undergoing a major transformation programme that will significantly improve the performance of the business. The impetus for this transformation includes ageing infrastructure, increased customer expectations, changing technology, challenging economic environment and the desire to improve service to our customers and the communities we serve. We are in the deployment and implementation phase of this multi-phase transformation programme that will extend to the year 2012. The focus of the current phase is on implementing our new operating model and organisation structure; designing, testing and implementing new capabilities, processes and systems; and realising targeted benefits. We will enhance our asset management expertise and discipline by utilising the benefits of a common operating model and greater standardisation across the business. Our implementation effort is structured around six core work streams:

- manage the assets – integrated planning and efficient capital allocation;
- customer management – single point of contact for the customer while ensuring end-to-end coordination for all processes that affect the customer;
- contracting strategies – effective management of all contracts and arrangements;
- deliver the work – optimise work coordination to maximise crew efficiency while increasing productive time;
- design – centralised to drive productivity and standards focused on core design and field support activities; and
- operate the network – consolidation of control centres while ensuring standardisation across all regions.

In addition, we have begun to execute an integrated change plan to engage employees and facilitate smooth transitions.

### Customer experience

Our business is fundamentally about serving our customers and providing them with a positive customer experience while delivering safe, reliable and efficient energy services to homes, businesses, schools and other customer segments across our service areas.

# **Electricity Distribution & Generation** continued

Our customer transformation efforts are focused on delivering an unparalleled customer experience and providing customers with products and services that help them not only manage their energy use, but to also reduce their impact on the environment. We are collaborating across our business areas to instil a stronger customer focus and to align processes to deliver a National Grid branded customer experience. Our customer transformation initiatives are targeting the following areas:

- customer focused culture – building clear focus and a customer first culture through clear accountability and aligned goals and metrics across our business areas;
- customer experience initiatives – improving processes that directly impact customer satisfaction such as billing, collections, contact centre performance, self service options, outage communications and field service;
- sustainable products and services – delivery of targeted energy efficiency programmes and other energy management solutions that help customers manage their energy use; and
- building our brand – through marketing and integrated communications that reinforce our commitment to the environment and the communities we serve.

### Efficiency

Our objective is to develop consistent processes and implement actions that will deliver cost efficiencies across our business, including the development of a cost conscious culture.

Improving the efficiency of our business continues to be one of our key priorities.

Delivering on many of the initiatives developed under our transformation programme is one way we can continue to improve efficiency. Some of the areas where we continue to focus and expand our efficiency efforts include:

- additions – by prioritising and optimising our investment programmes in both distribution and generation;
- materials – by optimising both use and stock levels;
- procurement – through longer term visibility of equipment needs and optimal balance between workload and resources; and
- generation – optimising generation plant performance.

We also continue to make progress on location efficiency with the consolidation and reconfiguration of key locations. With the opening of our new Reservoir Woods office in Waltham, Massachusetts we will bring together people from across the business and from multiple locations. We will work as one integrated team in a new state of the art leadership in energy and environmental design (LEED) certified, environmentally friendly office, providing a vibrant work environment.

Efficiency is reflected in our financial performance.

## Financial performance

### Profit

Our objective is to increase profits each year.

Adjusted operating profit was £166 million lower in 2008/09 than 2007/08 on a constant currency basis, a decrease of 39%, largely driven by higher storm costs resulting primarily from the December 2008 ice storm, higher purchased electricity costs and higher capital related costs associated with the increasing capital programme, partially offset by a full year of KeySpan results. Further information is included below.

### Financial results

The results of the Electricity Distribution & Generation segment for the years ended 31 March 2009, 2008 and 2007 were as follows:

| | Years ended 31 March 2009 £m | 2008 £m | 2007 £m |
|---|---|---|---|
| Revenue excluding stranded cost recoveries | **4,537** | 3,126 | 3,004 |
| Operating costs excluding exceptional items and remeasurements | **(4,272)** | (2,796) | (2,640) |
| Adjusted operating profit | **265** | 330 | 364 |
| Exceptional items | **(51)** | (104) | (9) |
| Remeasurements | **(109)** | 91 | 81 |
| Stranded cost recoveries | **426** | 379 | 423 |
| Operating profit | **531** | 696 | 859 |

### 2008/09 compared with 2007/08

The principal movements between 2007/08 and 2008/09 can be summarised as follows:

| | Revenue and other operating income £m | Operating costs £m | Operating profit £m |
|---|---|---|---|
| 2007/08 results | 3,508 | (2,812) | 696 |
| Add back exceptional items | – | 104 | 104 |
| Add back remeasurements | – | (91) | (91) |
| Add back stranded cost recoveries | (382) | 3 | (379) |
| 2007/08 adjusted results | 3,126 | (2,796) | 330 |
| Exchange movements | 957 | (856) | 101 |
| 2007/08 adjusted results at constant currency | 4,083 | (3,652) | 431 |
| Purchased electricity | 176 | (187) | (11) |
| Volume, price and weather | 6 | – | 6 |
| LIPA capital recovery | 74 | (74) | – |
| Generation | 124 | (114) | 10 |
| LIPA contribution | 77 | (65) | 12 |
| Bad debt expense | – | (14) | (14) |
| Storms | – | (74) | (74) |
| Other direct costs | – | (53) | (53) |
| Depreciation and amortisation | – | (10) | (10) |
| Other | (3) | (29) | (32) |
| 2008/09 adjusted results | 4,537 | (4,272) | 265 |
| Exceptional items | – | (51) | (51) |
| Remeasurements | – | (109) | (109) |
| Stranded cost recoveries | 435 | (9) | 426 |
| 2008/09 results | 4,972 | (4,441) | 531 |

| Reservoir Woods | £265m | £4,537m |
|---|---|---|
| New England LEED certified office | Adjusted operating profit | Revenue |



Comparability of our financial results between 2008/09 and 2007/08 are affected by having a full year contribution from KeySpan operations in 2008/09 compared with a partial contribution in 2007/08 following the acquisition on 24 August 2007. In 2008/09, KeySpan operations contributed £662 million, £607 million and £55 million to revenue and other operating income (excluding stranded cost recoveries), adjusted operating costs and adjusted operating profit respectively, compared with £383 million, £350 million and £33 million in 2007/08 on a constant currency basis.

Excluding stranded cost recoveries, revenue increased by £454 million in 2008/09 on a constant currency basis as compared with 2007/08. This was primarily due to the recognition of higher LIPA capital recoveries, LIPA contribution and generation revenues reflecting the full year KeySpan contribution. LIPA capital recovery relates to assets which are owned by LIPA but are constructed on behalf of LIPA by National Grid. These costs are fully recoverable. LIPA also contributes under management contracts for the ongoing maintenance of these assets. The revenue and costs associated with this activity are included as part of the LIPA contribution movement. The generation business results also increased compared with 2007/08 reflecting a full year KeySpan contribution. Generation revenues further increased following the reset of generation capacity charges which were retrospectively applied to January 2008. There is a corresponding increase in costs to partly offset some of this benefit.

Revenues also increased compared with 2007/08 reflecting the pass-through of higher purchased electricity costs. These commodity costs are recovered in full from customers although the recovery of these costs can occur in more than one financial year resulting in a year-on-year operating profit impact.

Excluding stranded cost recoveries, operating costs increased by £620 million on a constant currency basis. This is primarily due to the higher costs associated with LIPA distribution and generation and purchased electricity as referred to above in addition to higher storm costs associated mainly with the December 2008 ice storm. A portion of storm costs incurred during 2008/09 will be recovered in future periods.

The £166 million decrease on a constant currency basis in adjusted operating profit from Electricity Distribution & Generation in 2008/09 compared with 2007/08 was primarily due to higher storm costs, higher capital related costs which impacted depreciation and other direct costs and higher purchased electricity partially offset by the benefits of a full year of KeySpan.

Exceptional costs for 2008/09 primarily relate to the electricity distribution operations transformation initiatives and merger related integration costs.

## 2007/08 compared with 2006/07

The principal movements between 2006/07 and 2007/08 can be summarised as follows:

| | Revenue and other operating income £m | Operating costs £m | Operating profit £m |
|---|---|---|---|
| 2006/07 results | 3,430 | (2,571) | 859 |
| Add back exceptional items | – | 9 | 9 |
| Add back remeasurements | – | (81) | (81) |
| Add back stranded cost recoveries | (426) | 3 | (423) |
| 2006/07 adjusted results | 3,004 | (2,640) | 364 |
| Exchange movements | (150) | 132 | (18) |
| 2006/07 adjusted results at constant currency | 2,854 | (2,508) | 346 |
| Purchased electricity | (47) | 20 | (27) |
| Volumes, including weather | 17 | – | 17 |
| Depreciation and amortisation | – | (7) | (7) |
| Reliability enhancement | – | (13) | (13) |
| Bad debts | – | (17) | (17) |
| Storms | – | 33 | 33 |
| KeySpan acquisition | 293 | (268) | 25 |
| Other | 9 | (36) | (27) |
| 2007/08 adjusted results | 3,126 | (2,796) | 330 |
| Exceptional items | – | (104) | (104) |
| Remeasurements | – | 91 | 91 |
| Stranded cost recoveries | 382 | (3) | 379 |
| 2007/08 results | 3,508 | (2,812) | 696 |

Excluding stranded cost recoveries, revenue increased by £272 million in 2007/08 on a constant currency basis as compared with 2006/07. This was primarily due to the acquisition of KeySpan partially offset by lower purchased electricity costs. Commodity costs are recovered in full from customers although the recovery of these costs can occur in more than one financial year.

Excluding stranded cost recoveries, exceptional items and remeasurements, operating costs increased by £288 million in 2007/08 on a constant currency basis. This was primarily due to the acquisition of KeySpan and higher bad debt costs of £17 million. Investment in our reliability enhancement programme also increased in 2007/08. These items were partially offset by lower purchased electricity and other pass-through costs of £20 million, which are recovered from customers as described above, and storm costs which were £33 million lower in 2007/08. A portion of storm costs incurred in 2007/08 will be recovered in future periods.

The £16 million decrease on a constant currency basis in adjusted operating profit from Electricity Distribution & Generation in 2007/08 compared with 2006/07 was primarily due to higher bad debts and other expenses including an expected increase in our reliability enhancement spend, the timing of commodity cost recovery and the non-recurrence of one-off items incurred in 2006/07. These were partially offset by lower storm costs of £33 million, increased deliveries, including the effect of weather, of £17 million, and the acquisition of KeySpan.

# Non-regulated businesses and other

**This year has seen further expansion activity at our liquefied natural gas (LNG) importation terminal on the Isle of Grain. Through the commissioning of phase II, the site now has annual import capacity of 9.9 million tonnes. We are continuing to invest in Grain LNG and by 2010, with the phase III expansion, it will have the capacity to import 14.8 million tonnes per annum, around 20% of the UK's forecast gas demand.**

**During the year, approximately 645,000 new meters were installed by OnStream, our competitive metering business, comprising approximately 375,000 gas and 270,000 electricity meters.**

**We are undergoing a programme of land remediation at many of our brownfield sites, including legacy gas sites.**

### Key Facts

- Metering and meter reading services for around 20 million meters in the UK
- Property portfolio of over 800 sites comprising buildings and land of around 1,600 hectares
- Phase III Grain LNG completion anticipated in 2010

| Adjusted operating profit | Capital investment |
|---|---|
| £65m | £427m |
| 2007/08: £129m | 2007/08: £383m |

| Employees | LNG imported to the UK through Isle of Grain (tonnes) |
|---|---|
| 3,597* | 1,229,000 |
| 2007/08: 3,155 | 2007/08: 590,000 |

* Excluding shared services employees

## About our non-regulated businesses

Our non-regulated businesses and other activities are located principally in the UK. For reporting purposes, they are not treated as a segment, but are instead reported within other activities.

This section should be read in conjunction with the rest of this Operating and Financial Review, in particular the external market and regulatory environment; current and future developments; business drivers; vision, strategy and objectives; and risks and opportunities set out on pages 20 to 27 and page 40.

### Principal operations

**Metering**
National Grid Metering and OnStream provide installation and maintenance services to energy suppliers in the regulated and unregulated markets respectively. OnStream also provides meter reading services. Our metering businesses provide services for an asset base of about 20 million domestic, industrial and commercial meters.

**Grain LNG**
National Grid Grain LNG is the first new LNG importation terminal constructed in the UK for some 30 years, with construction divided into phases I, II and III.

**UK Property**
National Grid Property is responsible for managing our occupied properties in the UK, and for the management, clean up and disposal of surplus sites, most of which are former gasworks.

**BritNed**
BritNed is a joint venture between National Grid and TenneT, the Dutch transmission system operator, to build and operate a 1,000 MW, 260 kilometre subsea electricity link between The Netherlands and the UK.

**US non-regulated businesses**
Includes LNG storage, LNG road transportation, unregulated transmission pipelines, West Virginia gas fields and home energy service activities.

In addition to our businesses above, other activities comprise the following other operations and corporate activities.

**xoserve**
xoserve delivers transportation transactional services on behalf of all the major gas network transportation companies in Great Britain, including National Grid.

**Fulcrum**
Fulcrum is a leading provider of gas connections and associated design services in the UK. As an independent gas transporter, Fulcrum owns and operates gas distribution networks. Fulcrum also installs electricity and water distribution infrastructure.

**Blue-NG**
Blue-NG is a joint venture between National Grid and 2OC Ltd to construct and operate a new type of highly efficient power station that reduces the gas pressure in the grid as required and simultaneously generates renewable power and heat.

| £300m | Grain LNG | Blue-NG | £427m |
|---|---|---|---|
| Planned investment in Grain LNG phase III | Largest ever delivery of LNG to the UK was imported at Grain in November 2008 | New technology: one of the most efficient renewable energy sources in the world | Total capital investment in non-regulated businesses and other activities |



**Corporate activities and shared services function**
Corporate activities comprise central overheads, insurance and expenditure incurred on business development.

**Millennium pipeline**
We own a 26% interest in the Millennium pipeline, a natural gas pipeline system in New York state.

## Business drivers

The principal business drivers for our non-regulated businesses and other activities include the following:

**Multi-year contractual arrangements**
The majority of National Grid Metering's domestic meters are covered by long-term contracts with gas suppliers.

OnStream has a long-term contract with British Gas for the provision of gas and electricity meters, and a range of contracts with other suppliers.

Phase I of Grain LNG is underpinned by a long-term contract with BP/Sonatrach. Phase II, completed in December 2008, is underpinned by long-term contracts signed with Centrica, Gaz de France Suez and Sonatrach. Phase III, anticipated for completion in 2010, also has long-term contracts for all the capacity with E.ON, Iberdrola and Centrica.

**Competition**
OnStream operates in the competitive market for the provision of new meters and its revenues are therefore determined by how successful it is in obtaining business from customers.

**Capital investment**
OnStream are investing in technology such as smart metering capabilities to grow our metering business. There is also significant investment in infrastructure projects such as Grain LNG and BritNed.

**Efficiency**
Efficiency in delivering capital programmes and in operating our businesses and corporate activities result in driving improved financial performance.

## External market and regulatory environment

The majority of our non-regulated businesses and other activities either operate in markets related to those of our principal businesses or provide support to our own businesses.

With the exception of National Grid Metering and Fulcrum's independent gas transporter (IGT) business, our non-regulated businesses and other activities are only indirectly affected by the relevant regulatory regimes. National Grid Metering, in its capacity as National Grid Gas's service provider, is regulated by Ofgem and retains a large share of the legacy installed base of gas meters in the UK and it is subject to a tariff cap price control. Fulcrum's IGT business is regulated under the terms of its gas transporter licence.

OnStream operates in the competitive market for the provision of new meters to gas and electricity suppliers who wish to install or replace meters as required. Grain LNG has been granted exemptions by Ofgem from the regulated third party access provisions for phases I, II and III of its development. These exemptions introduced certain obligations for effective measures to allow third parties to access unused capacity and are similar in nature to those in place at other new UK gas supply projects.

## Current and future developments

### Metering competition investigation

An update on the ongoing metering competition investigation that was reported in last year's Annual Report and Accounts is provided on page 85.

### British Gas metering insourcing programme

British Gas have reviewed their strategy with regard to their metering operations and have decided to take some of these activities in-house. British Gas is OnStream's most significant customer and this decision will adversely impact its metering operations in the future.

## Performance against our objectives

Our progress against all National Grid's objectives is set out on pages 30 to 39. We include below further specific information with respect to the objectives that are closely aligned to the non-regulated businesses and other activities.

## Driving improvements in our safety, customer and operational performance

### Safety, reliability and customer service

Our objectives include zero employee lost time injuries and to operate reliably. We also aim to improve the quality of service to our customers.

There was an increase in the total number of employee lost time injuries in non-regulated businesses and other activities to 17 in 2008/09 compared with 15 in 2007/08. Data for 2007/08 has been restated as if the KeySpan acquisition had occurred at the beginning of the year.

National Grid Metering has met 17 out of 18 standards of service in the year ended 31 March 2009.

## Modernising and extending our networks

### Capital investment

Our objective is to deliver on our capital investment programme for non-regulated businesses and other activities.

During the year ended 31 March 2009, we invested £427 million in our non-regulated businesses and other activities, £44 million higher than in 2007/08, which had been £125 million higher than capital expenditure in 2006/07.

# Non-regulated businesses and other continued

We invested £137 million (2007/08: £126 million, 2006/07: £149 million) in our metering businesses. OnStream continues to invest in new and replacement meters, and smart metering capabilities. National Grid Metering invested in new and replacement meters.

We continue to invest in our Grain LNG facility with capital expenditure of £213 million in 2008/09 compared with £221 million in 2007/08. The investment related to the completion of phase II of the facility during 2008/09 and the continued construction on phase III. Phase III involves construction of a second unloading jetty, an additional 190,000 cubic metre LNG storage tank and associated processing equipment. Phase III is expected to increase the capacity available at the terminal to 14.8 million tonnes per annum, equivalent to around 20% of anticipated UK gas demand for 2010/11. The total planned investment in phase III is approximately £300 million, excluding capitalised interest and gas blending expenditure.

During 2008/09, we invested £77 million in the remaining non-regulated and other activities compared with £36 million in 2007/08. The 2008/09 investment principally consists of: £19 million on new software (SAP) licences; £25 million on leasehold improvements on our new Reservoir Woods office and information systems in the US; £9 million on our UK property business; and £6 million on both the US non-regulated and Fulcrum businesses.

In addition to the capital expenditure discussed above, we have invested a further £73 million (2007/08: £21 million, 2006/07: £nil) in joint venture arrangements. The majority of this expenditure relates to BritNed in which we invested £47 million. During the year, work has progressed well on the construction of the link. Preparation of the sites in the UK and The Netherlands for the building of the two converter stations at the ends of the link commenced in mid 2008; this work is progressing well and is on course for completion in the second half of 2010. Over 60% of the cable which will join the two converter stations has been manufactured and activity during 2009 will see the land cable and the in-shore sections of the subsea cable laid. The remaining subsea cable will be laid during 2010 in anticipation of the link being fully operational in the first quarter of 2011.

During 2008/09, £2.5 million was invested in the Blue-NG joint venture to enable finalisation of the development phase. In 2009, Blue-NG plans to sign a construction contract for the first two sites which should commission in 2011, generating renewable local energy using National Grid's assets.

In addition, we invested £24 million in relation to the completion of the Millennium pipeline.

Under our existing agreement with Elia, we have now concluded the initial feasibility study into the viability of an electricity interconnector to Belgium. The project is still at a development stage and, while initial results are encouraging, further work and approvals are required before construction can begin.

## Becoming more efficient through transforming our operating model and increasingly aligning our processes

### Key areas of focus

Driving efficiencies and reducing controllable costs.

In line with National Grid's objective to reduce controllable costs, our non-regulated businesses and other activities are reviewing their systems and processes to improve efficiency and reduce costs.

During 2008/09, we have finalised the process of allocating overall responsibility for each of these businesses to an Executive Director. The allocation process of the non-regulated business and other activities is determined by the markets in which they operate and the regulated business to which they are most closely aligned.

Efficiency is reflected in our financial performance, which is discussed below.

## Financial performance

The results for non-regulated businesses and other activities for the years ended 31 March 2009, 2008 and 2007 were as follows:

| | Years ended 31 March 2009 £m | 2008 £m | 2007 £m |
|---|---|---|---|
| Revenue | **719** | 642 | 567 |
| Other operating income | **31** | 67 | 71 |
| Operating costs excluding exceptional items | **(685)** | (580) | (505) |
| Adjusted operating profit | **65** | 129 | 133 |
| Exceptional items | **(64)** | (57) | (1) |
| Operating profit | **1** | 72 | 132 |

### 2008/09 compared with 2007/08

The principal movements between 2008/09 and 2007/08 can be summarised as follows:

| | Revenue and other operating income £m | Operating costs £m | Operating profit £m |
|---|---|---|---|
| 2007/08 results | 709 | (637) | 72 |
| Add back exceptional items | – | 57 | 57 |
| 2007/08 adjusted results | 709 | (580) | 129 |
| Exchange movements | 26 | (26) | – |
| 2007/08 constant currency results | 735 | (606) | 129 |
| Metering | 7 | 22 | 29 |
| Property | (49) | (43) | (92) |
| Grain LNG | 33 | (24) | 9 |
| US non-regulated businesses | 42 | (44) | (2) |
| Other activities | (18) | 10 | (8) |
| 2008/09 adjusted results | 750 | (685) | 65 |
| Exceptional items | – | (64) | (64) |
| 2008/09 results | 750 | (749) | 1 |

| £133m | £92m | £21m | £65m |
|---|---|---|---|
| Metering adjusted operating profit | Decrease in UK Property adjusted operating profit | Grain LNG adjusted operating profit | Total adjusted operating profit for our non-regulated businesses and other activities |



Revenue primarily increased due to a full year of contribution from the US non-regulated businesses acquired with KeySpan, a £33 million increase in revenue from Grain LNG at £74 million in 2008/09 compared with a £26 million increase in 2007/08 due to movements in exchange rates. The increased revenue from Grain LNG is due to a full year contribution from phase I of the facility and three months contribution from phase II. These increased revenues were partially offset by a decrease of £49 million in revenue and other operating income in our property business. This resulted from a decrease in the level of property sales in 2008/09. The reduction in property sales reflects the significant decrease in property prices during 2008/09. Due to the current state of the property market, we do not anticipate continuing sales of our non operational sites that are surplus to our requirements in the near-term and believe that at present we can derive greater shareholder value by their retention.

Operating costs excluding exceptional items increased by £105 million in 2008/09 compared with 2007/08 primarily reflecting an increase resulting from a full year of contribution from the US non-regulated businesses acquired with KeySpan. In addition, Property and Grain LNG were £43 million and £24 million higher respectively. This was partially offset by a fall in metering costs.

Contributions to adjusted operating profit include: £133 million (2007/08: £104 million) from Metering; £1 million (2007/08: £93 million) from Property; £21 million (2007/08: £12 million) from Grain LNG; and a loss of £4 million (2007/08: loss £2 million) from US non-regulated businesses.

Exceptional items of £64 million in 2008/09 primarily relates to our property business that recognised a £24 million exceptional charge relating to significant changes to our environmental provision, and £40 million relating to restructuring charges incurred in the US non-regulated businesses and corporate activities. The environmental charge arose as a result of an increase in estimated site remediation costs following changes in landfill tax legislation in the UK and the significant reduction in the discount rate driven by a fall in the risk free rates in light of the current instability in the financial markets. The real discount rate used in the UK decreased from 2.5% in 2007/08 to 2.0% in 2008/09.

## 2007/08 compared with 2006/07

The principal movements between 2007/08 and 2006/07 can be summarised as follows:

| | Revenue and other operating income £m | Operating costs £m | Operating profit £m |
|---|---|---|---|
| 2006/07 results | 638 | (506) | 132 |
| Add back exceptional items | – | 1 | 1 |
| 2006/07 adjusted results | 638 | (505) | 133 |
| Metering | 14 | (13) | 1 |
| Property | – | 7 | 7 |
| Grain LNG | 3 | – | 3 |
| Advantica | (37) | 34 | (3) |
| US non-regulated businesses | 49 | (51) | (2) |
| Fulcrum and other activities | 42 | (52) | (10) |
| 2007/08 adjusted results | 709 | (580) | 129 |
| Exceptional items | – | (57) | (57) |
| 2007/08 results | 709 | (637) | 72 |

Revenue and other operating income from non-regulated businesses and other activities increased by £71 million from £638 million in 2006/07 to £709 million in 2007/08. The principal reasons for this increase were the inclusion of £49 million with respect to seven months of non-regulated businesses acquired with KeySpan and an increase of £14 million in our metering businesses, reflecting portfolio growth at OnStream. Increased revenue for our other operations principally relates to Fulcrum. This was partially offset by a £37 million reduction in revenue following the disposal of Advantica in August 2007.

Operating costs excluding exceptional items were £75 million higher in 2007/08 compared with 2006/07, comprising an increase of £51 million from non-regulated businesses acquired with KeySpan and an increase of £13 million in our metering businesses as a result of increased volumes, together with £52 million from Fulcrum and other activities, partially offset by a reduction in costs following the disposal of Advantica of £34 million.

Contributions from non-regulated businesses to adjusted operating profit comprised £104 million (2006/07: £103 million) from Metering; £93 million (2006/07: £86 million) from Property; £12 million (2006/07: £9 million) from Grain LNG; a £1 million loss (2006/07: profit £2 million) from Advantica and a loss of £2 million (2006/07: n/a) from US non-regulated businesses acquired with KeySpan.

Exceptional items of £57 million in 2007/08 includes £44 million arising from an increase in the provision for environmental remediation of historically contaminated sites in the UK following a review conducted during the year, £15 million relating to costs incurred with respect to the potential disposal of the UK property business and £4 million of restructuring costs, partially offset by a £6 million gain on the disposal of Advantica. This compared with £1 million in exceptional items in 2006/07. As a consequence, adjusted operating profit excluding exceptional items, for other activities decreased by £4 million and operating profit decreased by £60 million.

# Discontinued operations

| Ravenswood | $2.9bn | Non-core businesses sold |
|---|---|---|
| Sold | Ravenswood sale proceeds | Programme of planned disposals of our material non-core businesses is complete |

## About discontinued operations

### Principal operations

During 2008/09, our discontinued operations comprised the Ravenswood generation station that was sold on 26 August 2008, KeySpan Communications that was sold on 25 July 2008 and the KeySpan engineering companies, one of which was sold on 11 July 2008 with another two sold subsequent to the year end. The Ravenswood generation station was sold to TransCanada for $2.9 billion (£1.6 billion).

During 2007/08, in addition to the above activities, discontinued operations also included our UK and US wireless infrastructure operations, and our Basslink electricity interconnector in Australia that we sold on 3 April, 15 August and 31 August 2007 respectively.

### Ravenswood

The Ravenswood generation station, a 2,480 MW facility in Queens in New York, is primarily fuelled by natural gas, and provides more than 20% of New York City's electricity supply. The sale of Ravenswood was a condition of the New York Public Service Commission order approving the acquisition of KeySpan by National Grid.

### KeySpan Communications and KeySpan engineering companies

KeySpan Communications operated a fibre optic telecommunications network that extended through parts of New York City, Long Island and New Jersey with over 1,600 route kilometres of network and over 120,000 kilometres of fibre. It also had access to transatlantic cable systems linking Long Island with Paris and London.

The KeySpan engineering companies provided engineering, design and consulting services for commercial, institutional and industrial customers and operated within the northeastern US.

## Performance against our objectives

### Becoming more efficient through transforming our operating model and increasingly aligning processes

Our programme of disposals of material non-core businesses enables us to focus our operations on electricity and gas infrastructure and related businesses in the UK and the US.

### Financial performance

The operating results for discontinued operations for the years ended 31 March 2009, 2008 and 2007 were as follows:

| | Years ended 31 March | | |
|---|---|---|---|
| **Discontinued operations** | **2009 £m** | 2008 £m | 2007 £m |
| Revenue | **97** | 201 | 383 |
| Operating costs excluding exceptional items and remeasurements | **(84)** | (166) | (266) |
| Adjusted operating profit | **13** | 35 | 117 |
| Exceptional items and remeasurements | **–** | – | (55) |
| Operating profit | **13** | 35 | 62 |
| Net finance income before remeasurements | **–** | – | (2) |
| Remeasurement finance income | **–** | 8 | 37 |
| Profit before tax | **13** | 43 | 97 |
| Taxation | **(4)** | (7) | (11) |
| Profit after tax | **9** | 36 | 86 |
| Gains on disposal of operations | **27** | 1,586 | – |
| Taxation on gains | **(11)** | (4) | – |
| Total profit for the year | **25** | 1,618 | 86 |

In 2008/09, revenue, operating costs and operating profit decreased compared with 2007/08 primarily due to a five month contribution of Basslink in 2007/08 prior to its disposal on 31 August 2008. The £27 million pre-tax gain on disposal of operations primarily related to our sale of the Ravenswood generation station.

In 2007/08, revenue, operating costs and operating profit decreased compared with 2006/07 primarily as a consequence of the sales of the UK wireless operations on 3 April 2007 and the US wireless operations and Basslink in August 2007, partially offset by contributions from the Ravenswood generation station, KeySpan Communications and the KeySpan engineering companies from 24 August 2007 onwards. The pre-tax exceptional gain on disposal of operations includes £1,506 million from our UK and US wireless disposals and an £80 million gain on disposal of Basslink.

# Financial position and financial management



## Going concern

Having made enquiries, the Directors consider that the Company and its subsidiary undertakings have adequate resources to continue in business for the foreseeable future and that it is therefore appropriate to adopt the going concern basis in preparing the consolidated and individual financial statements of the Company. More details of our liquidity position are provided under the heading Liquidity and treasury management on page 80 and in note 33(c) to the consolidated financial statements.

## Financial position

### Balance sheet

Our balance sheet at 31 March 2009 can be summarised as follows:

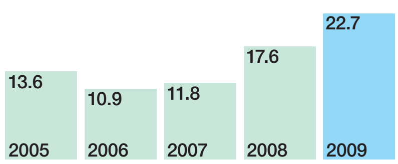
| | Assets £m | Liabilities £m | Net assets £m |
|---|---|---|---|
| Property, plant and equipment and non-current intangible assets | 29,915 | – | 29,915 |
| Goodwill and non-current investments | 5,752 | – | 5,752 |
| Current assets and liabilities | 3,228 | (3,466) | (238) |
| Other non-current assets and liabilities | 106 | (3,543) | (3,437) |
| Post-retirement obligations | 269 | (3,080) | (2,811) |
| Deferred tax | 137 | (2,661) | (2,524) |
| Total before net debt | 39,407 | (12,750) | 26,657 |
| Net debt | 5,060 | (27,733) | (22,673) |
| Total as at 31 March 2009 | 44,467 | (40,483) | 3,984 |
| Total as at 31 March 2008 | 37,771 | (32,397) | 5,374 |

The decrease in net assets from £5,374 million at 31 March 2008 to £3,984 million at 31 March 2009 resulted from the profit for the year of £947 million, losses recognised directly in equity of £913 million, dividends payable of £838 million, movements in treasury shares of £597 million, and other items totalling £11 million.

### Net debt

Net debt increased by £5,032 million from £17,641 million at 31 March 2008 to £22,673 million at 31 March 2009. Cash flow from operations (net of tax) of £3.4 billion and disposal proceeds (net of tax) from the sale of Ravenswood and KeySpan Communications of £1.0 billion provided £4.4 billion of funds, offset by capital expenditure of £3.3 billion, payment of dividends of £0.8 billion, share repurchases of £0.6 billion and interest paid of £1.1 billion, resulting in a net cash outflow of £1.4 billion. In addition, the impact of the movement in the US dollar exchange rate on our dollar denominated debt and other fair value movements, increased net debt by a further £3.6 billion.

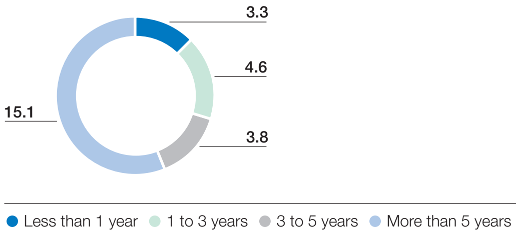
**Net debt at 31 March**
£bn




At 31 March 2009, net debt comprised borrowings of £26,793 million (2008: £21,003 million) including bank overdrafts of £17 million (2008: £10 million), less cash and cash equivalents of £737 million (2008: £174 million), financial investments of £2,197 million (2008: £2,095 million) and derivative financial instruments with a net carrying value of £1,186 million (2008: £1,093 million).

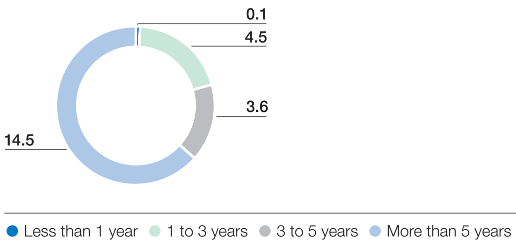
The maturity of borrowings is provided in note 21 to the consolidated financial statements. At 31 March 2009 it can be summarised as follows:

**Maturity of borrowings at 31 March 2009**
£bn




The maturity of net debt (defined as borrowings plus derivative financial liabilities, less cash and cash equivalents, financial investments and derivative financial assets) can be summarised as follows:

**Maturity of net debt at 31 March 2009**
£bn




### Capital structure

The principal measure of our balance sheet efficiency is our interest cover ratio as described under Financial discipline on page 41. Our long-term target range for interest cover is between 3.0 and 3.5, which we believe is consistent with single A range long-term senior unsecured debt credit ratings within our main UK operating companies (National Grid Electricity Transmission plc and National Grid Gas plc), based on guidance from the rating agencies.

Interest cover for the year ended 31 March 2009 decreased to 3.1 from 3.2 for the year ended 31 March 2008. The decrease occurred primarily as a result of a full year's interest charge relating to the KeySpan acquisition debt partially offset by higher cash flows generated from continuing operations.

In addition, we monitor the regulatory asset value (RAV) gearing within each of National Grid Electricity Transmission plc (NGET plc) and the regulated transmission and distribution businesses within National Grid Gas plc (NGG plc). This is calculated as net debt expressed as a percentage of RAV, and indicates the level of debt employed to fund our UK regulated businesses. It is compared with the level of RAV gearing indicated by Ofgem as being

# **Financial position and financial management** continued

appropriate for these businesses, at around 60%. The table below shows the RAV gearing for NGET plc and for the regulated transmission and distribution businesses within NGG plc as at 31 March 2009 (estimated) and 31 March 2008 (actual). To calculate RAV gearing for the regulated transmission and distribution businesses within NGG plc, we exclude an element of debt that is associated with funding the metering business within NGG plc.

| RAV gearing | 2009 % | 2008 % |
|---|---|---|
| Regulated transmission and distribution businesses within National Grid Gas plc | 60 | 55 |
| National Grid Electricity Transmission plc | 58 | 52 |

Some of our regulatory agreements impose lower limits for either the long-term credit ratings that certain companies within the group must hold or the amount of equity within their capital structures. These requirements are monitored on a regular basis in order to ensure compliance.

Gearing at 31 March 2009 and 31 March 2008, calculated as net debt expressed as a percentage of net debt plus net assets shown in the balance sheet, amounted to 85% and 77% respectively. We do not consider that this gearing ratio is an appropriate measure of our balance sheet efficiency as it does not reflect the economic value of the assets of our UK and US regulated businesses.

## Liquidity and treasury management

### Treasury policy

Funding and treasury risk management for National Grid is carried out by the Treasury function under policies and guidelines approved by the Finance Committee of the Board. The Finance Committee (for further details see page 94) has authority delegated from the Board, and is responsible for the regular review and monitoring of treasury activity and for the approval of specific transactions, the authority for which may be further delegated.

The primary objective of the Treasury function is to manage the funding and liquidity requirements of National Grid. A secondary objective is to manage the associated financial risks (in the form of interest rate risk and foreign exchange risk) to within acceptable boundaries. Further details of the management of funding and liquidity and the main risks arising from our financing activities are set out below, as are the policies for managing these risks including the use of financial derivatives, which are agreed and reviewed by the Board and the Finance Committee.

The Treasury function is not operated as a profit centre. Debt and treasury positions are managed in a non speculative manner, such that all transactions in financial instruments or products are matched to an underlying current or anticipated business requirement.

Contracts and derivatives entered into in respect of gas and electricity commodities are used in support of the businesses' operational requirements and the policy regarding their use is explained on page 84.

### Current condition of the financial markets

During 2008/09 there has been a deterioration in the world economic situation. In particular, we have seen a crisis in the banking system, the failure or near failure of individual banks and increased restrictions on lending across the capital and money markets. This has been accompanied by a significant widening in credit spreads. However, with our low risk business model and cash flows that are largely stable over a period of years, we have been able to continue to access the markets and during 2008/09 have issued £4.9 billion of long-term debt. In addition, we have issued £2.9 billion of commercial paper and drawn down £943 million of uncommitted bank lines for short-term liquidity purposes, with £871 million of this still outstanding as at 31 March 2009, and remain confident of our ability to access the public debt markets going forward. Our effective interest rate has decreased from around 6.3% in 2007/08 to around 5.7% in 2008/09.

### Cash flow and cash flow forecasting

Cash flows from our operations are largely stable over a period of years. Our electricity and gas transmission and distribution operations in the UK and US are subject to multi-year rate agreements with regulators. In the UK we have largely stable annual operating cash flows. However, in the US our operating cash flows are dependent on the price of gas and electricity and the timing of customer payments, and the regulatory mechanisms for recovering costs from customers can result in very significant cash flow swings from year to year. Significant changes in volumes in the US, for example as a consequence of weather conditions, can affect cash inflows in particular, with abnormally mild or extreme weather driving volumes down or up respectively.

Our capital investment programme is financed through a combination of internal cash flows and borrowings. During the year we incurred £3.2 billion of expenditure on capital investment, with a similar level of investment planned each year until 2012.

Our reported cash flows arising in the US are exposed to movements in the US dollar exchange rate, although our foreign exchange risk management policy aims to limit this exposure. Further detail is provided under the foreign exchange risk management section on page 82.

Both short- and long-term cash flow forecasts are produced regularly to assist the Treasury function in identifying short-term liquidity and long-term funding requirements, and we are undertaking a project to enhance our cash flow forecasting processes. Cash flow forecasts, supplemented by a financial headroom analysis, are supplied to the Finance Committee of the Board regularly to assess funding adequacy for at least a 12 month period.

As part of our regulatory arrangements, our operations are subject to a number of restrictions on the way we can operate. These include regulatory 'ring-fences' that require us to maintain adequate financial resources within certain parts of our operating businesses and restrict our ability to make dividend payments, lend cash or levy charges between certain subsidiary companies. Our assessment of National Grid's liquidity takes into account these restrictions.

### Funding and liquidity management

We maintain a number of medium-term note and commercial paper programmes in both the UK and the US companies to facilitate long- and short-term debt issuance into the capital and money markets. National Grid plc also has an SEC-registered debt shelf in place to facilitate long-term debt issuance specifically into the US capital markets. The table below shows the programmes that we had as at 31 March 2009, together with the level of utilisation of each:

| £44.5bn | £4.0bn | £22.7bn | 3.1x |
|---|---|---|---|
| Total assets | Net assets | Net debt | Interest cover |

| Programme | Amount | Status |
|---|---|---|
| **National Grid plc** | | |
| US commercial paper programme | $3.0 billion | Unutilised |
| US SEC-registered debt shelf | Unlimited | $1.0 billion issued |
| Euro commercial paper programme | $1.5 billion | £743 million (equivalent) issued |
| **National Grid Electricity Transmission plc** | | |
| US commercial paper programme | $1.0 billion | Unutilised |
| Euro commercial paper programme | $1.0 billion | €30 million issued |
| **National Grid plc and National Grid Electricity Transmission plc** | | |
| Euro medium-term note programme | €15.0 billion | €9.3 billion issued |
| **National Grid Gas plc** | | |
| US commercial paper programme | $2.5 billion | Unutilised |
| Euro commercial paper programme | $1.25 billion | Unutilised |
| Euro medium-term note programme | €10.0 billion | €6.1 billion issued |
| **National Grid USA** | | |
| US commercial paper programme | $2.0 billion | Unutilised |
| Euro medium-term note programme | €4.0 billion | €0.1 billion issued |
| **KeySpan Corporation** | | |
| US commercial paper programme | $1.5 billion | Unutilised |

In addition, we have both committed and uncommitted bank borrowing facilities that are available for general corporate purposes to support our liquidity requirements. The vast majority of our committed borrowing facilities are used to provide back up to our commercial paper programmes. To date these have never been drawn and there is currently no intention to draw them in the future.

During the year, the $1.5 billion short-term committed facility within National Grid plc expired and was renewed at a reduced level and now stands at $850 million. This was due to a number of reasons, including the economic situation affecting the banking industry, the merger of some banks within our relationship group, and the desire of certain banks to rebalance their commitments to us away from undrawn committed lines of credit in favour of drawn loans.

At 31 March 2009, we had the following undrawn committed and uncommitted facilities, providing liquidity support to the group.

| Facility | Amount |
|---|---|
| **National Grid plc** | |
| Short-term committed facilities | $850 million |
| **National Grid Gas plc** | |
| Long-term committed facilities | £755 million |
| **National Grid Electricity Transmission plc** | |
| Long-term committed facilities | £425 million |
| **National Grid's US subsidiaries** | |
| Committed facilities | $1,730 million |
| **National Grid plc and certain subsidiaries** | |
| Uncommitted borrowing facilities | £528 million |

The short-term committed facilities within National Grid plc include an option to extend these facilities for a further 364 days.

Note 35 to the consolidated financial statements shows the maturity profile of undrawn committed borrowing facilities in sterling at 31 March 2009.

To facilitate debt issuance into the capital and money markets, many of the companies within National Grid maintain credit ratings. At 31 March 2009, the long-term senior unsecured debt and short-term debt credit ratings respectively provided by Moody's, Standard & Poor's and Fitch were as follows:

| Facility | Moody's | S&P | Fitch |
|---|---|---|---|
| National Grid plc | Baa1/P2 | BBB+/A2 | BBB+/F2 |
| National Grid Holdings One plc | – | BBB+/A2 | – |
| National Grid Electricity Transmission plc | A3/P2 | A-/A2 | A/F2 |
| National Grid Gas plc | A3/P2 | A-/A2 | A/F2 |
| National Grid Gas Holdings Ltd | A3 | A-* | A |
| National Grid USA | A3/P2 | BBB+/A2 | – |
| Niagara Mohawk Power Corp. | A3 | A-/A2 | – |
| Massachusetts Electric Co. | A3^/P2 | A-/A2 | – |
| New England Power Co. | A3/P2 | A-/A2 | – |
| The Narragansett Electric Co. | A3^ | A-*/A2 | – |
| KeySpan Corporation | Baa1/P2 | A-/A2 | A- |
| The Brooklyn Union Gas Company | – | A | A+ |
| KeySpan Gas East Corporation | A3 | A | A |
| Boston Gas Company | Baa1 | A- | – |
| Colonial Gas Company | A3 | A-* | – |
| National Grid Generation LLC | Baa1^ | A-* | – |

* Corporate credit rating
^Issuer rating

Standard & Poor's and Fitch have current outlooks of stable on all National Grid companies. Moody's have a current outlook of negative on all National Grid companies which we expect to be resolved during the summer of 2009.

We invest surplus funds on the money markets, usually in the form of short-term fixed deposits and placements with money market funds that are invested in highly liquid instruments of high credit quality. Investment of surplus funds is subject to our counterparty risk management policy, and we continue to believe that our cash management and counterparty risk management policies provide appropriate liquidity and credit risk management in light of the current crisis in the financial markets. Details relating to cash, short-term investments and other financial assets at 31 March 2009 are shown in notes 15 and 20 to the consolidated financial statements.

We believe that maturing amounts in respect of contractual obligations as shown in Commitments and contingencies in note 29 to the consolidated financial statements can be met from existing cash and investments, operating cash flows and other financings that we reasonably expect to be able to secure in the future, together with the use of committed facilities if required.

## Use of derivative financial instruments

As part of our business operations, including our treasury activities, we are exposed to risks arising from fluctuations in interest rates and exchange rates. We use financial instruments, including derivative financial instruments, to manage exposures of this type. Our policy is not to use derivative financial instruments for trading purposes. Derivative positions are managed in a non speculative manner, such that all transactions in derivative financial instruments are matched to an underlying current or anticipated business requirement.

More details on derivative financial instruments are provided in note 17 to the consolidated financial statements.

# **Financial position and financial management** continued

## Refinancing risk management

The Board controls refinancing risk mainly by limiting the amount of debt maturities (both principal and interest) arising on borrowings in any financial year.

Note 21 to the consolidated financial statements sets out the contractual maturities of our borrowings over the next 5 years together with the total contracted borrowings, which mature over a period of 50 years. This shows that, at 31 March 2009, we have £3.3 billion of debt (including £1.8 billion of bonds, pre-derivatives) maturing in 2009/10, and no more than £2.6 billion of debt maturing in each of the next four financial years. We expect to be able to refinance this debt through the capital and money markets, as we have done during the year to 31 March 2009.

## Interest rate risk management

Our interest rate exposure arising from borrowings and deposits is managed by the use of fixed-rate and floating-rate debt and derivative financial instruments, including interest rate swaps, swaptions and forward rate agreements. Our interest rate risk management policy is to seek to minimise total financing costs (being interest costs and changes in the market value of debt) subject to constraints so that, even with an extreme movement in interest rates, neither the interest cost nor the total financing cost is expected to exceed pre-set limits with a high degree of certainty.

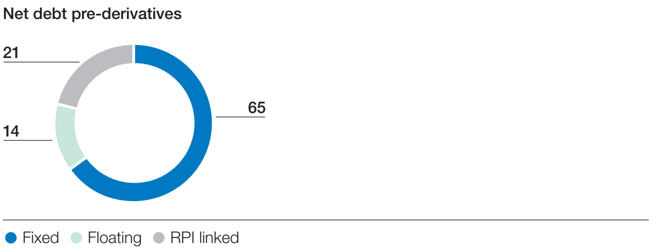
Within these constraints, we actively manage our interest rate risk, with over 50% of our debt exposed to floating or index-linked interest rates in the longer term. In 2009/10 we expect our financing costs to benefit from lower inflation and interest rates, some of which have already been locked in using short-term interest rate derivatives.

Some of the bonds in issue from NGET plc and NGG plc are index-linked, that is their cost is linked to changes in the UK retail price index (RPI). We believe that these bonds provide a good hedge for revenues and our regulatory asset values that are also RPI linked under our price control formulae in the UK.

The performance of the Treasury function in interest rate risk management is measured by comparing the actual total financing costs of its debt portfolio with those of a passively-managed benchmark portfolio with a constant ratio of fixed-rate to floating-rate debt, to identify the impact of actively managing National Grid's interest rate risk. This is monitored regularly by the Finance Committee.

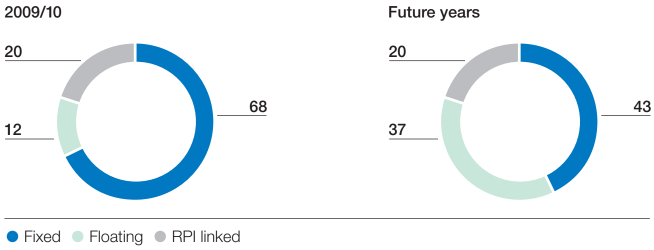
The chart below shows the interest rate profile of our net debt before derivatives.

**Interest rate profile pre-derivatives at 31 March 2009**
%




The following charts show the impact, as at 31 March 2009, of derivatives on our net debt for 2009/10 and for future years. The 2009/10 position reflects the use of derivatives, including forward rate agreements, to lock in interest rates in the short term. The future years' position excludes derivatives that mature within the next year.

**Interest rate profile post-derivatives at 31 March 2009**
%




More information on the interest rate profile of our debt is included in note 33 to the consolidated financial statements.

## Foreign exchange risk management

The principal foreign exchange risk to which we are exposed is translation risk arising from assets and liabilities denominated in US dollars. In relation to these risks, our objective is to maintain the ratio of US dollar denominated financial liabilities to US dollar denominated gross assets between 85% and 95%, by using debt and foreign exchange derivatives, so as to provide an economic offset of our cash flows that arise in US dollars against the servicing of those liabilities. In addition, we maintain a small amount of euro denominated debt to provide a hedge against the translation risk arising from assets and liabilities denominated in euros relating to our BritNed investment.

We have a policy of managing our foreign exchange transaction risk by hedging contractually committed foreign exchange transactions occurring in currencies other than the US dollar over a prescribed minimum size. This covers a minimum of 75% of such transactions occurring in the next 6 months and a minimum of 50% of such transactions occurring between 6 and 12 months in the future. In addition, where foreign currency cash flow forecasts are uncertain and a judgement has to be made, our policy is to hedge a proportion of such cash flows based on the likelihood of them occurring, with the aim of hedging substantially all the cash flows without overhedging. Cover generally takes the form of forward sale or purchase of foreign currencies and must always relate to forecast underlying operational cash flows.

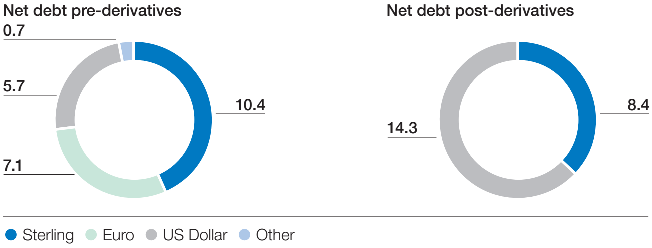
The result of this hedging activity is that National Grid's cash flow has limited exposure to foreign currencies.

In addition, we are exposed to currency movements on borrowings in currencies other than sterling and the US dollar, principally the euro. This currency exposure is managed through the use of cross-currency swaps so that, post-derivatives, the currency profile of our debt is almost entirely sterling/US dollar.

| 50 years | 58% | 60% | £4.9bn |
|---|---|---|---|
| Longest maturity of our borrowings | RAV gearing of NGET plc | RAV gearing of the regulated transmission and distribution businesses within NGG plc | New debt issuances |

The currency compositions of net debt before and after derivatives is shown in the chart below. More details can be found in note 33 to the consolidated financial statements.

**Currency profile at 31 March 2009**
£bn




## Counterparty risk management

Counterparty risk arises within Treasury from the investment of surplus funds and from the use of derivative instruments, and outside Treasury from commercial contracts entered into by the businesses, including commodity contracts. The Finance Committee has agreed a policy for managing such risk. This policy sets limits as to the exposure that National Grid can have with any one counterparty, based on that counterparty's credit rating from independent rating agencies. National Grid's exposure to individual counterparties is monitored on a frequent basis and counterparty limits are regularly updated for changes in credit ratings. Treasury is responsible for managing the policy. Where contracts are entered into outside Treasury, part of the relevant counterparty limit can be allocated to the business area involved. This ensures that National Grid's overall exposure is managed within the appropriate limit.

Where multiple transactions are entered into with a single counterparty, a master netting arrangement is usually put in place to reduce our exposure to credit risk of that counterparty. We use standard International Swap Dealers Association (ISDA) documentation, which provides for netting in respect of all transactions governed by a specific ISDA agreement with a counterparty, when transacting interest rate and exchange rate derivatives.

Further information on the management of counterparty risk is provided in note 33 to the consolidated financial statements.

## Valuation and sensitivity analysis

We calculate the fair value of debt and derivative financial instruments by discounting all future cash flows by the market yield curve at the balance sheet date, and in the case of derivative financial instruments taking into account the credit quality of both parties. The market yield curve for each currency is obtained from external sources for interest and foreign exchange rates.

In the case of derivative instruments that include options (swaptions), the Black's variation of the Black-Scholes model is used to calculate fair value.

For debt and derivative instruments held, we utilise a sensitivity analysis technique to evaluate the effect that changes in relevant rates or prices would have on the market value of such instruments.

As described in note 33 to the consolidated financial statements, movements in financial indices would have the following estimated impact on the financial statements as a consequence of changes in the value of financial instruments. This analysis does not take account of the change in value in our income stream or in the value of our US operations that certain of these financial instruments are being used to hedge.

| | **2008/09** | | 2007/08 | |
|---|---|---|---|---|
| | **Income statement £m** | **Other equity reserves £m** | Income statement £m | Other equity reserves £m |
| UK retail price index ±0.50% | **17** | **–** | 16 | – |
| UK interest rates ±0.50% | **67** | **77** | 46 | 57 |
| US interest rates ±0.50% | **63** | **13** | 31 | 7 |
| US dollar exchange rate ±10% | **55** | **880** | 38 | 590 |

## Commodity contracts

We purchase electricity and gas in order to supply our customers in the US and also to meet our own energy requirements, primarily in the UK. We also enter into physical and financial derivative transactions to manage electricity and gas cost volatility on behalf of customers in the US. Substantially all our costs of purchasing electricity and gas for supply to customers are recoverable at an amount equal to cost. The timing of recovery of these costs can vary between financial periods leading to an under- or over-recovery within any particular financial period.

Our US operating companies participate in the physical and financial markets related only to those commodities for which we or our customers have a physical market requirement, and transact only within predefined risk parameters. These parameters are approved by the energy procurement risk management committee, which operates in accordance with authority delegated to it by the Finance Committee and Executive Committee of the Board.

The most significant gas purchases for our own use relate to the operation of our gas transmission and gas distribution networks, mainly in the UK. We also purchase fuel for our vehicle fleets in the UK and the US.

In the US, we also had a management contract with Merrill Lynch Trading, under which we and Merrill Lynch Trading shared the responsibilities for managing upstream gas distribution assets associated with our Massachusetts gas distribution operations, as well as providing city-gate delivered supply. This contract allowed for both parties to employ derivative instruments to maximise the profitability of the portfolio of gas distribution assets. During the final year of the management contract, Bank of America announced a transaction to acquire Merrill Lynch. Upon that announcement, we decided to reduce our financial exposure significantly by recalling all the gas storage assets that were being managed by Merrill Lynch. Profits associated with these activities were shared between us, Merrill Lynch Trading and our customers in Massachusetts. This contract expired on 31 March 2009 and will be replaced by a similar contract with Conoco Phillips pending approval by the Massachusetts regulatory bodies.

In the US, we have a fuel management agreement with the Long Island Power Authority (LIPA), under which we are responsible for the procurement of gas and petroleum-based fuels for use at the Long Island power plants which we operate under contract with LIPA. We also sell gas produced by our West Virginia gas fields.

# **Financial position and financial management** continued

In our UK gas transmission operation, we are obliged to offer for sale, through a series of auctions (both short- and long-term), a predetermined quantity of entry capacity for every day in the year at predefined locations. Where, on the day, the gas transmission system's capability is constrained, such that gas is prevented from entering the system for which entry capacity rights have been sold, then UK gas transmission is required to buy back those entry capacity rights sold in excess of system capability. Forward and option contracts are used to reduce the risk and exposure to on-the-day entry capacity prices.

Our UK electricity transmission operations have also entered into electricity contracts, pursuant to the requirement to balance the electricity market in Great Britain through the operation of the British Electricity Trading and Transmission Arrangements (BETTA). The contracts are for varying terms and have been entered into so that we have the ability to deliver electricity as required to meet our obligations under our UK electricity transmission licence. We have not and do not expect to enter into any significant derivatives in connection with our Great Britain System Operator role.

Additionally, we buy back capacity rights already sold in accordance with our UK gas transporter licences and Uniform Network Code obligations as part of our management of the gas transmission and distribution networks in the UK.

### Energy purchase contracts

The majority of our electricity contracts and certain of our gas contracts are entered into to meet our expected purchase, sale or usage requirements and so are accounted for as ordinary sales or purchase contracts. These included contractual commitments to purchase energy under long-term contracts amounting to £3,645 million as at 31 March 2009 (2008: £2,061 million) of which £990 million is due within one year (2008: £794 million). Further information is included in note 29 to the consolidated financial statements.

### Commodity purchase contracts accounted for as derivative contracts

Certain of our forward purchases of electricity, gas and electricity capacity do not meet the own use exemption for accounting purposes and hence are accounted for as derivatives. Mark-to-market changes in the value of these contracts are reflected through earnings under the heading of commodity remeasurements. The fair value of these contracts includes contracts with a positive value of £35 million (2008: £43 million), recorded as assets in our balance sheet and contracts with a negative value of £155 million (2008: £89 million) recorded as liabilities.

Commodity purchase contracts accounted for as derivatives include contracts for the forward purchase of electricity that reverted back to us as part of the settlement arising from USGen's bankruptcy in 2005, which were originally entered into prior to the restructuring of the electricity industry in New England. The electricity purchased under these contracts is not required for our normal activities and is sold in the energy markets at prices which are currently significantly below the amount we are required to pay. The fair value of these contracts amounted to a £121 million liability at 31 March 2009 (2008: £47 million liability).

### Derivative financial instruments linked to commodity prices

We also enter into derivative financial instruments linked to commodity prices, including index-linked swaps and futures contracts. These derivative financial instruments are used to reduce market price volatility and are principally used to manage commodity prices associated with our gas and electricity delivery operations in the US on behalf of our customers.

Derivative financial instruments are carried at fair value in the balance sheet and mark-to-market changes in the value of these contracts are reflected through earnings with the exception of those related to our West Virginia gas fields that are designated as cash flow hedges.

In addition, we use NYMEX electricity and gas futures to reduce the cash flow variability associated with the purchase price for a portion of future electricity and gas purchases associated with certain of our electricity and gas distribution operations in the US. These had a negative fair value at 31 March 2009 of £59 million (2008: £19 million), but the liability on the balance sheet has been reduced by the amount of collateral paid to counterparties in respect of these contracts due to accounting netting requirements for such instruments.

We also utilise over-the-counter swaps and options to reduce the cash flow variability associated with the purchase price for a portion of future electricity and gas purchases associated with certain of our electricity and gas distribution operations in the US. These had a net negative fair value at 31 March 2009 of £190 million (2008: positive fair value of £39 million).

We also utilise over-the-counter gas swaps in the US to hedge the cash flow variability associated with forecasted sales of a portion of gas production from our West Virginia gas fields. At 31 March 2009, we had hedge positions in place for approximately 66% of our estimated 2009 gas production (2008: 70% of our estimated 2008 and 2009 gas production), net of gathering costs. We use forward prices from a third party vendor to value these swap positions and they are designated as cash flow hedges.

### Sensitivity analysis

As described in note 34 to the consolidated financial statements, movements in commodity prices would have the following estimated impact on the financial statements as a consequence of changes in the value of commodities. This analysis does not take account of any change in our commodity portfolio.

| | **2008/09** | | 2007/08 | |
|---|---|---|---|---|
| | **Income statement £m** | **Other equity reserves £m** | Income statement £m | Other equity reserves £m |
| 10% increase in commodity prices | **56** | **(1)** | 25 | (1) |
| 10% decrease in commodity prices | **(72)** | **1** | (22) | 1 |

| Baa1/BBB+ | A3/A-/A | A3/BBB+ | Baa1/A-/A- |
|---|---|---|---|
| Moody's/S&P and Fitch senior unsecured credit ratings for National Grid plc | Moody's/S&P/Fitch senior unsecured credit ratings for NGG plc and NGET plc | Moody's/S&P senior unsecured credit ratings for National Grid USA | Moody's/S&P/Fitch senior unsecured credit ratings for KeySpan Corporation |

## Commitments and contingencies

Commitments and contingencies outstanding at 31 March 2009 and 2008 are summarised in the table below:

| | 2009 £m | 2008 £m |
|---|---|---|
| Future capital expenditure contracted but not provided for | **1,493** | 1,097 |
| Total operating lease commitments | **946** | 737 |
| Power commitments | **3,645** | 2,061 |
| Other commitments, contingencies and guarantees | **1,666** | 1,387 |

Information regarding obligations under pension and other post-retirement benefits is given on page 86 under the heading Retirement arrangements.

The energy commitments shown in the commitments and contingencies table above reflect obligations to purchase energy under long-term contracts. These contracts are used in respect of our normal sale and purchase requirements and do not include commodity contracts carried at fair value as described above.

We propose to meet all of our commitments from existing cash and investments, operating cash flows, existing credit facilities, future facilities and other financing that we reasonably expect to be able to secure in the future.

### Contractual obligations at 31 March 2009

The table of contractual obligations shown below analyses our long-term contractual obligations according to payment period.

Purchase obligations reflect commitments under power contracts and future capital expenditure contracted for but not provided. The other long-term liabilities reflected in the balance sheet at 31 March 2009 comprise commodity contracts carried at fair value and other creditors that represent contractual obligations falling due after more than one year.

Interest on borrowings is calculated based on borrowings at 31 March 2009 and does not reflect future debt issues. Floating-rate interest has been estimated using future interest rate curves at 31 March 2009.

| | Less than 1 year £m | 1-3 years £m | 3-5 years £m | More than 5 years £m | Total £m |
|---|---|---|---|---|---|
| **Financial liabilities** | | | | | |
| Borrowings | 2,839 | 4,406 | 3,777 | 15,279 | **26,301** |
| Interest payments on borrowings | 1,031 | 1,885 | 1,578 | 7,878 | **12,372** |
| Finance lease liabilities | 46 | 110 | 38 | 124 | **318** |
| Other non-interest bearing liabilities | 2,303 | 396 | – | – | **2,699** |
| Derivatives payments | 598 | 2,477 | 975 | 1,179 | **5,229** |
| Derivatives receipts | (1,057) | (2,795) | (490) | (1,184) | **(5,526)** |
| Commodity contracts | 601 | 486 | 87 | 127 | **1,301** |
| **Other contractual obligations** | | | | | |
| Capital commitments | 1,167 | 287 | 33 | 6 | **1,493** |
| Operating leases | 82 | 152 | 163 | 549 | **946** |
| Energy commitments | 990 | 1,436 | 791 | 428 | **3,645** |
| **Total at 31 March 2009** | **8,600** | **8,840** | **6,952** | **24,386** | **48,778** |

### Off balance sheet arrangements

There were no significant off balance sheet arrangements other than the contractual obligations and commitments and contingencies described above.

### Details of material litigation as at 31 March 2009

We were not party to litigation that we considered to be material as at 31 March 2009.

#### Metering competition investigation

In February 2008 the Gas and Electricity Markets Authority (GEMA) issued a decision to fine us £41.6 million for a breach of the UK Competition Act 1998 in respect of term contracts with gas suppliers entered into by our UK metering services business in 2004. We subsequently appealed this decision to the Competition Appeal Tribunal (the Tribunal). On 29 April 2009, the Tribunal overturned the decision in part and reduced the fine to £30 million but also upheld the original decision in part. We continue to review the Tribunal's ruling and are considering our legal position, including potential grounds for appeal.

#### Gas Distribution mains replacement investigation

In October 2008, we informed Ofgem that our mains replacement activity carried out within the UK's West Midlands Alliance partnership may have been misreported. National Grid and Ofgem have jointly appointed Ernst & Young to carry out a full investigation to determine the extent of the issue. At present it is too early to determine the likely outcome of the investigation and any potential consequences.

#### KeySpan Department of Justice investigation

As previously reported, in May 2007 KeySpan received a civil investigative demand from the Antitrust Division of the United States Department of Justice, requesting the production of documents and information relating to its investigation of competitive issues in the New York City electricity capacity market prior to our acquisition of KeySpan. The civil investigative demand is a request for information in the course of an investigation and does not constitute the commencement of legal proceedings, and no specific allegations have been made against KeySpan. In April 2008, we received a second civil investigative demand in connection with this matter. We believe that KeySpan's activity in the capacity market has been consistent with all applicable laws and regulations. The investigation is ongoing and we continue to cooperate fully.

## Related party transactions

We provide services to and receive services from related parties, principally joint ventures. In the year ended 31 March 2009, we charged £4 million and received charges of £44 million from related parties (other than Directors) compared with £3 million and £33 million in 2007/08 and £4 million and £26 million in 2006/07 respectively.

Further information relating to related party transactions is contained within note 30 to the consolidated financial statements. Details on amounts paid to Directors are included within the Directors' Remuneration Report on pages 102 to 112.

# **Financial position and financial management** continued

## Retirement arrangements

We operate pension arrangements on behalf of our employees in both the UK and the US and also provide post-retirement healthcare and life insurance benefits to qualifying retirees in the US.

In the UK, the defined benefit section of the National Grid UK Pension Scheme and the National Grid section of the Electricity Supply Pension Scheme (National Grid Electricity Supply Pension Scheme) are closed to new entrants. Membership of the defined contribution section of the National Grid UK Pension Scheme is offered to all new employees in the UK.

In the US, we operate a number of pension plans, which provide both defined benefits and defined contribution benefits.

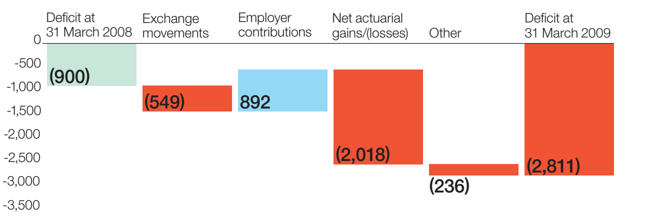
We also provide post-retirement benefits other than pensions to the majority of employees in the US. Benefits include healthcare and life insurance coverage to eligible retired employees. Eligibility is based on certain age and length of service requirements and in most cases retirees must contribute to the cost of their coverage.

### Net pension and other post-retirement obligations

The following table summarises the pension and other post-retirement obligations recorded in the consolidated financial statements:

| **Net plan asset/(liability)** | UK £m | US £m | Total £m |
|---|---|---|---|
| As at 1 April 2008 | 415 | (1,315) | (900) |
| Exchange movements | – | (549) | (549) |
| Pension service cost | (64) | (104) | (168) |
| Expected return less interest | 25 | (39) | (14) |
| Curtailments, settlements and other | (13) | (41) | (54) |
| Actuarial gains/(losses) | | | |
| – on plan assets | (2,477) | (1,475) | (3,952) |
| – on plan liabilities | 1,472 | 462 | 1,934 |
| Employer contributions | 488 | 404 | 892 |
| **As at 31 March 2009** | **(154)** | **(2,657)** | **(2,811)** |
| | | | |
| Plan assets | 12,185 | 3,334 | 15,519 |
| Plan liabilities | (12,339) | (5,991) | (18,330) |
| Net plan liability | (154) | (2,657) | (2,811) |

**Movement in net pension and other post-retirement obligations**
£m




The amounts recorded in the balance sheet are based on accounting standards which require pension obligations to be calculated on a different basis from that used by the actuaries to determine the funding we need to make into each arrangement.

The principal movements in net pension obligations during the year arose as a consequence of actuarial losses on plan assets, partly offset by actuarial gains on plan liabilities principally as a consequence of using higher real discount rates to calculate the present value of these obligations.

### Actuarial position

The last completed full actuarial valuation of the National Grid UK Pension Scheme was as at 31 March 2007. This concluded that the pre-tax funding deficit was £442 million in the defined benefit section on the basis of the funding assumptions. Employer cash contributions for the ongoing cost of this plan are currently being made at a rate of 32.6% of pensionable payroll.

The last completed full actuarial valuation of the National Grid Electricity Supply Pension Scheme was as at 31 March 2007. This concluded that the pre-tax funding deficit was £405 million on the basis of the funding assumptions. Employer cash contributions for the ongoing cost of this plan are currently being made at a rate of 20.5% of pensionable payroll, with administration fees paid in addition.

### Contributions

In addition to ongoing employer contributions we have agreed to make additional deficit contributions to certain of the above plans as follows:

- National Grid UK Pension Scheme: the Company made deficit contributions of £295 million during 2008/09 and £59 million in April 2009 along with payments made in the previous year to ensure that the deficit reported at the 2007 valuation is paid in full; and
- National Grid Electricity Supply Pension Scheme: the Company made deficit contributions of £90 million during 2008/09 and £90 million in April 2009. The remaining deficit contributions will be payable monthly from April 2012 to March 2017.

The next valuations of these schemes are due as at 31 March 2010.

In accordance with our funding policy for US pension and other post-retirement benefit plans we expect to contribute approximately £445 million to these plans during 2009/10.

### Plan assets

Our plans in both the UK and the US are trustee administered and the trustees are responsible for setting the investment strategy and monitoring investment performance, consulting with us where appropriate.

At 31 March 2009, plan assets totalled £15,519 million (2008: £17,273 million).

# Accounting policies



## Basis of accounting

The consolidated financial statements present our results for the years ended 31 March 2009, 2008 and 2007 and our financial position as at 31 March 2009 and 2008. They have been prepared using the accounting policies shown, in accordance with International Financial Reporting Standards (IFRS).

In complying with IFRS, we are also complying with the version of IFRS that has been endorsed by the European Union for use by listed companies.

### Choices permitted under IFRS

Since 1 April 2005 we have presented our consolidated financial statements in accordance with IFRS. We were required to make a number of choices on the adoption of IFRS and in addition, we continue to choose from certain options that are available within accounting standards.

The principal choices made on the adoption of IFRS, which cannot be changed, were as follows:

**Transition date**
Our opening IFRS balance sheet was established as at 1 April 2004. As a consequence, goodwill amortisation ceased on this date and we used certain balances in our previous UK GAAP financial statements as the basis for our opening IFRS balance sheet.

**Business combinations**
Business combinations prior to 1 April 2004 were not changed retrospectively. In particular, we retained the use of merger accounting for the business combination with Lattice Group.

**Financial instruments**
We adopted IAS 39 on 1 April 2005. We chose to apply IAS 39 prospectively from that date and accordingly did not restate prior periods. As a consequence, the accounting for financial instruments differs from that which would have been presented had we always applied IAS 39.

**Carrying value of assets at transition**
In most cases, we used brought forward depreciated cost, as adjusted for changes in accounting policies to conform with IFRS, to be the opening carrying value under IFRS.

**Share-based payments**
We recognised all active share option grants retrospectively.

**Cumulative translation differences**
We chose to measure and present cumulative translation differences arising since 1 April 2004 only.

Significant choices that we continue to make on an ongoing basis include the following:

**Presentation formats**
We use the nature of expense method for our income statement and total our balance sheet to net assets and total equity.

In the income statement, we present subtotals of total operating profit, profit before tax and profit from continuing operations, together with additional subtotals excluding exceptional items, remeasurements and stranded cost recoveries. Exceptional items, remeasurements and stranded cost recoveries are presented separately on the face of the income statement.

**Pensions**
We recognise actuarial gains and losses each year in the statement of recognised income and expense.

**Joint ventures**
We use equity accounting for jointly controlled entities instead of the alternative proportional consolidation method.

**Capitalised interest**
We capitalise interest into the cost of assets that we construct, where conditions of IAS 23 are met.

**Capital contributions**
Contributions received towards capital expenditure are recorded as deferred income and amortised in line with the depreciation on the associated asset.

**Timing of goodwill impairment reviews**
Goodwill impairment reviews are carried out annually in the final quarter of the financial year.

**Financial instruments**
We normally opt to apply hedge accounting in most circumstances where this is permitted. For net investment hedges, we have chosen to use the spot rate method, rather than the alternative forward rate method.

**Individual accounts**
We have chosen to continue to use UK GAAP, rather than IFRS, in the individual financial statements of National Grid plc and of UK subsidiary companies.

## Segmental reporting

In addition to presenting the consolidated financial results and financial position in the financial statements, we provide a breakdown of those results and balances into our business segments. The presentation of segment information is based on management responsibilities that existed at 31 March 2009 and the external and regulatory environments in which we operate. Our business segments are Transmission UK, Transmission US, Gas Distribution UK, Gas Distribution US and Electricity Distribution & Generation US, with our non-regulated businesses, other operations and corporate activities, including business development, being aggregated within other activities. Our geographical segments reflect our principal activities in the UK and the US.

Discontinued operations comprise the Ravenswood generation station in New York City, sold on 26 August 2008, KeySpan Communications, sold on 25 July 2008 and our KeySpan engineering companies, one of which was sold on 11 July 2008. Subsequent to the year end two further engineering companies were sold.

Discontinued results in prior years also include the results of our wireless infrastructure operations in the UK and the US, and the Basslink electricity interconnector in Australia which were sold on 3 April, 15 August and 31 August 2007 respectively.

## Critical accounting policies

The application of accounting principles requires us to make estimates, judgements and assumptions that may affect the reported amounts of assets, liabilities, revenue and expenses and the disclosure of contingent assets and liabilities in the accounts. On an ongoing basis, we evaluate our estimates using historical experience, consultation with experts and other methods that we consider reasonable in the particular circumstances to ensure compliance with IFRS. Actual results may differ significantly from our estimates, the effect of which will be recognised in the period in which the facts that give rise to the revision become known.

# **Accounting policies** continued

Certain accounting policies have been identified as critical accounting policies, as these policies involve particularly complex or subjective decisions or assessments. The discussion of critical accounting policies below should be read in conjunction with the description of our accounting policies set out in our consolidated financial statements on pages 116 to 123.

Our critical accounting policies and accounting treatments are considered to be:

### Estimated economic lives of property, plant and equipment

The reported amounts for depreciation of property, plant and equipment and amortisation of non-current intangible assets can be materially affected by the judgements exercised in determining their estimated economic lives.

Depreciation and amortisation in 2008/09 for continuing operations amounted to £1,058 million and £69 million respectively (2007/08: £940 million and £54 million, 2006/07: £830 million and £41 million).

### Carrying value of assets and potential for impairments

The carrying value of assets recorded in the consolidated balance sheet could be materially reduced if an impairment were to be assessed as being required. Our total assets at 31 March 2009 were £44,467 million, including £29,545 million of property, plant and equipment, £5,391 million of goodwill and £370 million of other intangible assets (31 March 2008: £37,771 million including £24,331 million, £3,904 million and £271 million respectively).

Impairment reviews are carried out either when a change in circumstance is identified that indicates an asset might be impaired or, in the case of goodwill, annually. An impairment review involves calculating either or both of the fair value or the value in use of an asset or group of assets and comparing with the carrying value in the balance sheet.

These calculations involve the use of assumptions as to the price that could be obtained for, or the future cash flows that will be generated by, an asset or group of assets, together with an appropriate discount rate to apply to those cash flows.

### Revenue

Revenue includes an assessment of energy and accruals for transportation services, supplied to customers between the date of the last meter reading and the year end. Changes to the estimate of the energy or transportation services supplied during this period would have an impact on our reported results.

Unbilled revenues at 31 March 2009 are estimated at £522 million in the US and £315 million in the UK compared with £511 million and £243 million respectively at 31 March 2008.

### Assets and liabilities carried at fair value

Certain assets and liabilities, principally financial investments, derivative financial instruments and certain commodity contracts are carried in the balance sheet at their fair value rather than historical cost.

The fair value of financial investments is based on market prices, as are those of derivative financial instruments where market prices exist. Other derivative financial instruments and those commodity contracts carried at fair value are valued using financial models, which include judgements on, in particular, future movements in exchange and interest rates as well as equity and commodity prices.

### Hedge accounting

We use derivative financial instruments to hedge certain economic exposures arising from movements in exchange and interest rates or other factors that could affect either the value of our assets or liabilities or our future cash flows. Movements in the fair values of derivative financial instruments may be accounted for using hedge accounting where we meet the relevant eligibility, documentation and effectiveness testing requirements. If a hedge does not meet the strict criteria for hedge accounting, or where there is ineffectiveness or partial ineffectiveness, then the movements will be recorded in the income statement immediately instead of being recognised in the statement of recognised income and expense or by being offset by adjustments to the carrying value of debt.

### Pensions and other post-retirement obligations

Pensions and other post-retirement benefits recorded in the balance sheet benefit plans are calculated actuarially using a number of assumptions about the future, including inflation, salary increases, length of service and pension and investment returns, together with the use of a discount rate based on corporate bond yields to calculate the present value of the obligation.

The selection of these assumptions can have a significant impact on both the pension obligation recorded in the balance sheet and on the net charge recorded in the income statement.

### Businesses held for sale

At 31 March 2008, the planned disposal of the Ravenswood generation station, KeySpan Communications and the KeySpan engineering companies in the US were considered operations that met the criteria to be classified as assets held for sale.

At 31 March 2007, our wireless infrastructure operations in the UK and the US and our interconnector in Australia were classified as assets held for sale.

The results of these operations have been classified as discontinued operations for all years presented.

The date that the planned sales met the criteria to be classified as businesses held for sale is a matter of judgement by management, with consequential impact on balance sheet presentation, the amount of depreciation and the classification of results as discontinued operations.

### Exceptional items, remeasurements and stranded cost recoveries

Exceptional items, remeasurements, stranded cost recoveries and amortisation of acquisition-related intangibles are items of income and expenditure that, in the judgement of management, should be disclosed separately on the basis that they are material, either by their nature or their size, to an understanding of our financial performance and distort the comparability of our financial performance between periods.

Items of income or expense that are considered by management for designation as exceptional items include such items as significant restructurings, write-downs or impairments of non-current assets, material changes in environmental or decommissioning provisions, integration of acquired businesses and gains or losses on disposals of businesses or investments.

Remeasurements comprise gains or losses recorded in the income statement arising from changes in the fair value of commodity contracts and of derivative financial instruments. These fair values increase or decrease as a consequence of changes in commodity and financial indices and prices over which we have no control.

Stranded cost recoveries relate to the recovery, through charges to electricity customers in upstate New York and in New England of costs mainly incurred prior to divestiture of electricity generation. These are expected to expire in 2011.

### Provisions

Provisions are made for liabilities that are uncertain in estimate. These include provisions for the cost of environmental restoration and remediation, the decommissioning of nuclear facilities that we no longer own but still have a responsibility to contribute towards, restructuring and employer and public liability claims.

Calculations of these provisions are based on estimated cash flows relating to these costs, discounted at an appropriate rate where significant. The costs and timing of cash flows relating to these liabilities are based on management estimates supported by external consultants.

At 31 March 2009, provisions totalled £1,699 million (2008: £1,397 million), including £1,104 million and £108 million (2008: £837 million and £87 million) in respect of environmental liabilities and decommissioning respectively.

### Tax estimates

Our tax charge is based on the profit for the year and tax rates in effect. The determination of appropriate provisions for taxation requires us to take into account anticipated decisions of tax authorities and estimate our ability to utilise tax benefits through future earnings and tax planning.

### Energy commitments

Our energy commitments relate to contractual commitments to purchase electricity or gas to satisfy physical delivery requirements to our customers or for energy that we use ourselves. In management's judgement these commitments meet the normal purchase, sale or usage exemption in IAS 39 and are not recognised in the financial statements.

If these commitments were deemed not to meet the exemption under IAS 39 they would have to be carried in the balance sheet at fair value as derivative instruments, with movements in their fair value shown in the income statement under remeasurements.

In order to illustrate the impact that changes in assumptions could have on our results and financial position, the following sensitivities are presented:

### Asset useful lives

An increase in the useful economic lives of assets of one year on average would reduce our annual depreciation charge on property, plant and equipment by £35 million (pre-tax) and our annual amortisation charge on intangible assets by £7 million (pre-tax).

### Revenue accruals

A 10% change in our estimate of unbilled revenues at 31 March 2009 would result in an increase or decrease in our recorded net assets and profit for the year by approximately £54 million net of tax.

### Assets carried at fair value

A 10% change in assets and liabilities carried at fair value would result in an increase or decrease in the carrying value of derivative financial instruments and commodity contract liabilities of £119 million and £(31) million respectively.

### Hedge accounting

If using our derivative financial instruments, hedge accounting had not been achieved during the year ended 31 March 2009 then the profit for the year would have been £1,481 million lower than that reported net of tax, and net assets would have been £300 million lower.

### Pensions and other post-retirement obligations

Our pension and post-retirement obligations are sensitive to the actuarial assumptions used. A 0.1% increase in the discount rate, a 0.5% increase in the rate of salary increases or an increase of one year in life expectancy would result in a change in the net obligation of £233 million, £116 million and £541 million and a change in the annual pension cost of £4 million, £5 million and £5 million respectively.

### Provisions

A 10% change in the estimates of future cash flows estimated in respect of provisions for liabilities would result in an increase or decrease in our provisions of approximately £170 million.

## Accounting developments

### Accounting standards and interpretations adopted in 2008/09

In preparing our consolidated financial statements, we have complied with International Financial Reporting Standards, International Accounting Standards and interpretations applicable for 2008/09. The following amendments to standards and interpretations were adopted during 2008/09, none of which resulted in a material change to our consolidated results, assets or liabilities in 2008/09 or in those of previous periods:

### Amendments to standards

An amendment to IAS 39 that permits reclassification of financial assets in certain circumstances.

New interpretations

IFRIC 12 and IFRIC 14 contain guidance on accounting for service concession arrangements and pension assets and minimum funding.

## Accounting developments

New accounting standards and interpretations which have been issued but not yet adopted by National Grid are discussed in the financial statements on pages 124 and 125.