2010/11

# Annual Report and Accounts

## Operating and Financial Review

nationalgrid

# Connecting our energy future

We are facing a number of challenging opportunities for the future of the energy industry in the UK and US. National Grid is at the heart of securing energy supplies for future generations.

## 2010 ONGOING

**Our huge investment programme will help our network meet future energy challenges.**


## 2012

**We will continue to work closely with schools and colleges to enthuse and inspire young students about the world of science and engineering.**

## 2050

**The Climate Change Act requires the UK to cut greenhouse gases by 2050. Meeting these targets requires us to dramatically change the way we produce gas and electricity.**

## 2020

**We will play a key role in connecting new generation to the grid.**

# Operating and Financial Review

## National Grid is an international electricity and gas company cross listed on the London and New York stock exchanges and is one of the largest investor owned energy companies in the world. We play a vital role in delivering gas and electricity to many millions of people across Great Britain and northeastern US.

| | | |
|---|---|---|
| Overview | 12 How the UK electricity industry works<br>14 How the US electricity industry works<br>16 How the UK gas industry works<br>18 How the US gas industry works<br>20 Where we operate<br>22 Management structure from 4 April 2011<br>23 Management structure until 3 April 2011<br>24 Principal operations<br>26 Review of the year | This overview section provides an accessible introduction to what we do and the environment in which we operate. We show in pictographic form the electricity and gas industries in the UK and US, and show how the various market participants interact. We discuss how we organise ourselves into lines of business, describe the principal activities of each line of business and highlight some significant developments during 2010/11. |
| Operating environment | 28 Operating environment<br>30 Regulatory environment – UK regulation<br>32 Regulatory environment – US regulation<br>35 Summary of US price controls and rate plans | This section provides an overview of the external factors affecting our operations. Since 97% of National Grid's operating profit arises from regulated activities, an understanding of the work of our economic regulators is key to understanding our business, so we provide a detailed explanation of the regulatory processes in the UK and US. |
| Delivering operational performance | 36 Business drivers, principal risks and opportunities<br>38 Vision, strategy and objectives<br>40 Key performance indicators<br>42 Performance against objectives | This section sets out the key factors that drive our business, and how our strategy and the Company objectives are designed to address those factors. The objectives form the basis for the execution of our strategy and our performance is measured against those objectives. Our key performance indicators are shown on pages 40 and 41 and the discussion which follows includes a number of further quantitative and qualitative measures. |
| Financial information | 54 Financial performance<br>70 Financial position and financial management<br>78 Accounting policies | This section discusses our financial performance. It also describes our approaches to capital management and risk management, including the policies and strategies which govern our use of financial and commodity derivatives. |

This Operating and Financial Review describes the main trends and factors underlying our development, performance and position during the year ended 31 March 2011 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 and the Practice Statement on Management Commentary issued by the International Accounting Standards Board.

# How the UK electricity industry works

## Physical

### Generation – Other companies

Electricity is generated from coal, gas, oil and nuclear power plants, and renewable resources including hydroelectric plants and wind farms. Generation voltage is typically 22 kV, and generators normally have their own transformers to increase the voltage to transmission voltages.

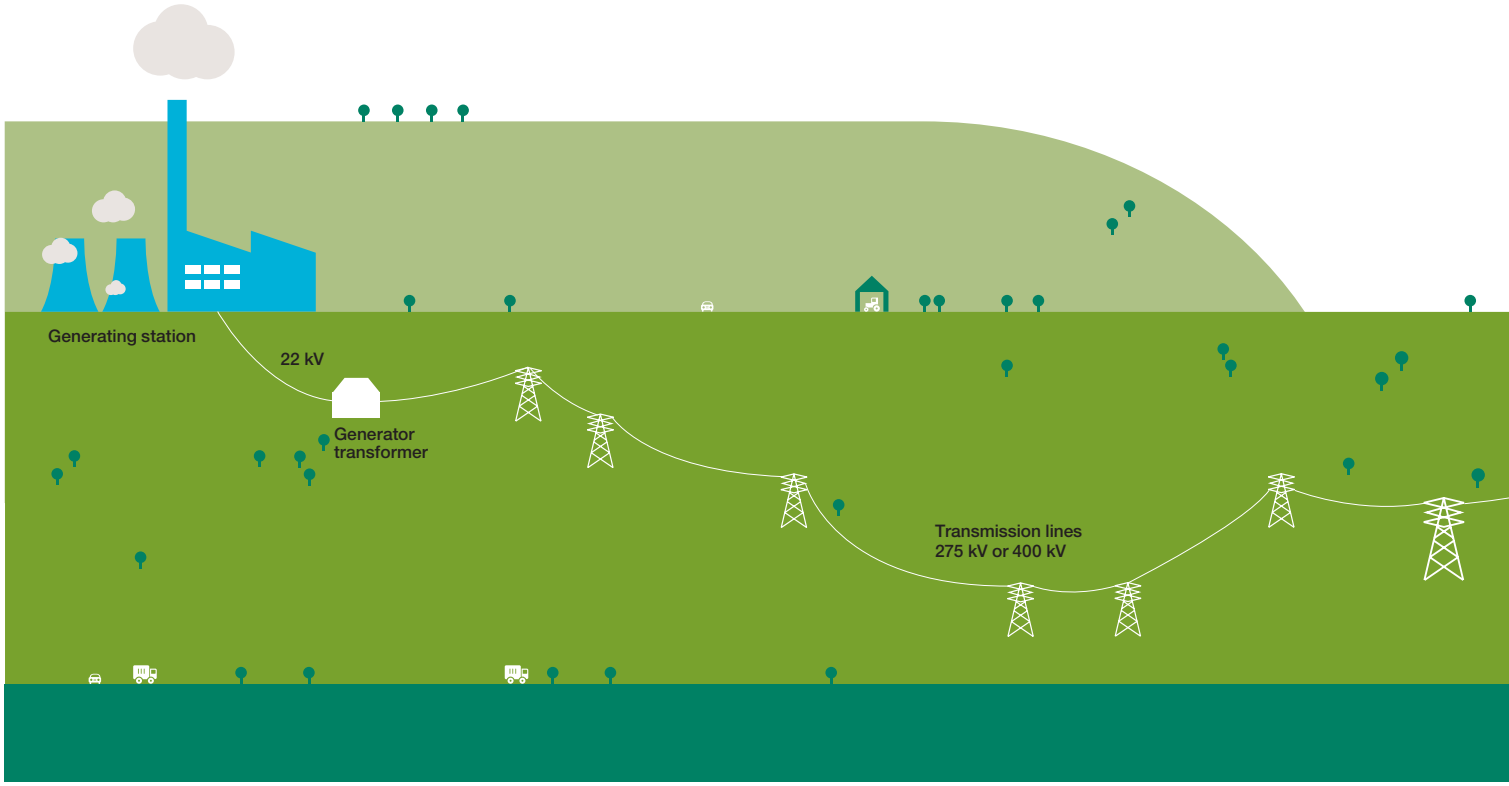
There are also interconnectors with France, Northern Ireland and the Netherlands, allowing electricity generated in those countries to meet demand in the UK and vice versa.

We do not own or operate electricity generation assets in the UK.

### Transmission – National Grid

National Grid transmits electricity in England and Wales at 400 kV and 275 kV. In Scotland, 132 kV is also considered to be transmission voltage. The national electricity transmission system (NETS) typically comprises the assets from the connection to the generator's transformer as far as the substation at which the voltage is stepped down to 132 kV or lower for distribution.

We are responsible for balancing the system, managing generation output to ensure that it matches demand second by second throughout the day, to ensure that voltage and frequency are kept within acceptable limits.




## Commercial

Electricity generators sell the electricity they produce in the wholesale market. The majority of the electricity sold in the wholesale market is to electricity suppliers in bilateral contracts. Electricity produced by the generators is transported by transmission and distribution networks to the end user.

National Grid is not an electricity supply company in the UK; we do not buy or sell the electricity we transport there.

Generators, distribution network operators and suppliers pay us for the right to connect their assets to the NETS and to use the system to transport electricity on their behalf. These connection and use of system charges reflect the costs of providing, maintaining and operating connection assets and are reviewed annually.

Generators, distribution network operators and suppliers also pay us for procuring balancing services to ensure the electricity system is kept in balance.

Finally, the transmission network use of system charge, paid by generators and suppliers, allows us to recover the costs of installing, operating and maintaining the NETS.

## Distribution – Other companies

Electricity is carried at 132 kV and lower voltages in 14 electricity distribution networks, owned and operated by seven distribution network operators.

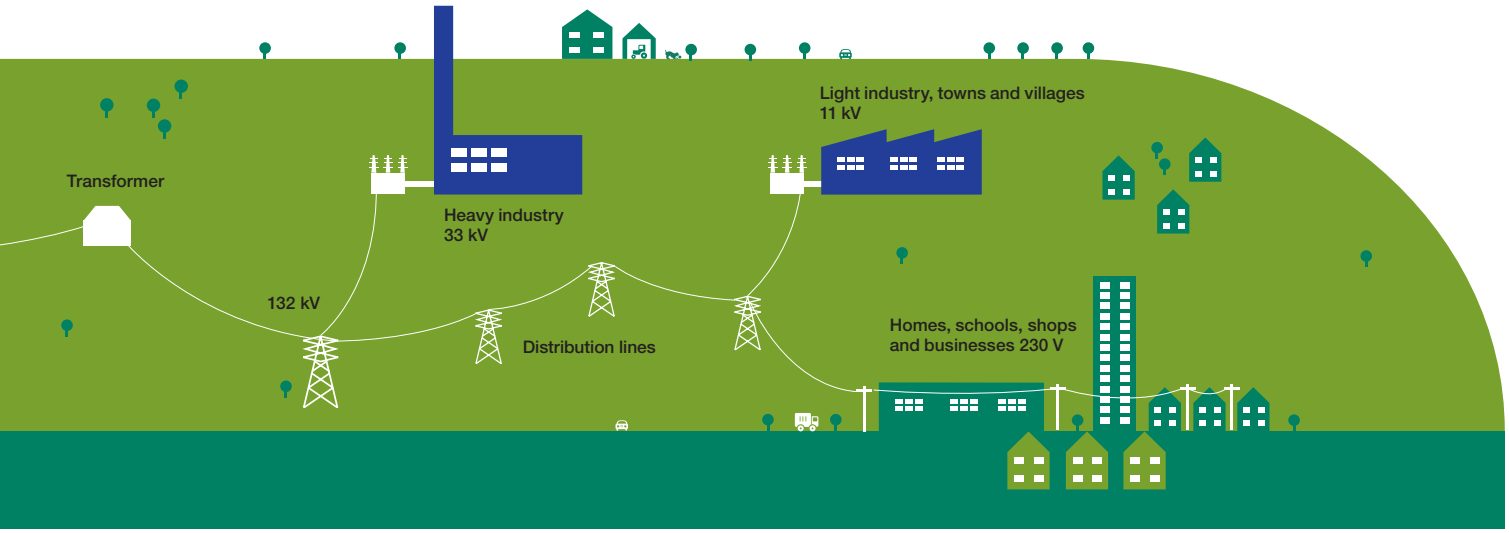
The distribution systems typically comprise the assets from the connection to the step down transformer on the NETS either to the meter in a consumer's premises or, for larger users, to their own step down transformer.

We do not own or operate electricity distribution networks in the UK.

## Supply – Other companies

Heavy and medium industrial consumers, towns and villages are typically supplied by a variety of voltages from 132 kV to 11 kV. For most consumers, the voltage is reduced through transformers and is ultimately provided to users at 230 V.

We do not sell electricity to end users in the UK.




Suppliers pay distribution network operators for the right to connect to and use their distribution networks. Those costs are passed on by the suppliers to their end user customers.

Each of the 14 distribution networks are regional monopolies and Ofgem regulates their revenues through price controls.

End users contract with electricity supply companies to provide electricity. The supply companies in turn purchase electricity from generators which is transported to the end user along the transmission and distribution systems.

Suppliers also contract with metering companies, including National Grid Metering and OnStream, which we own, for the provision of meters and metering services.

Of the average residential electricity bill, transmission charges represent approximately 4% and distribution charges approximately 17%. The majority of the bill is the cost of the electricity itself.

# How the US electricity industry works

## Physical

### Generation – National Grid and others

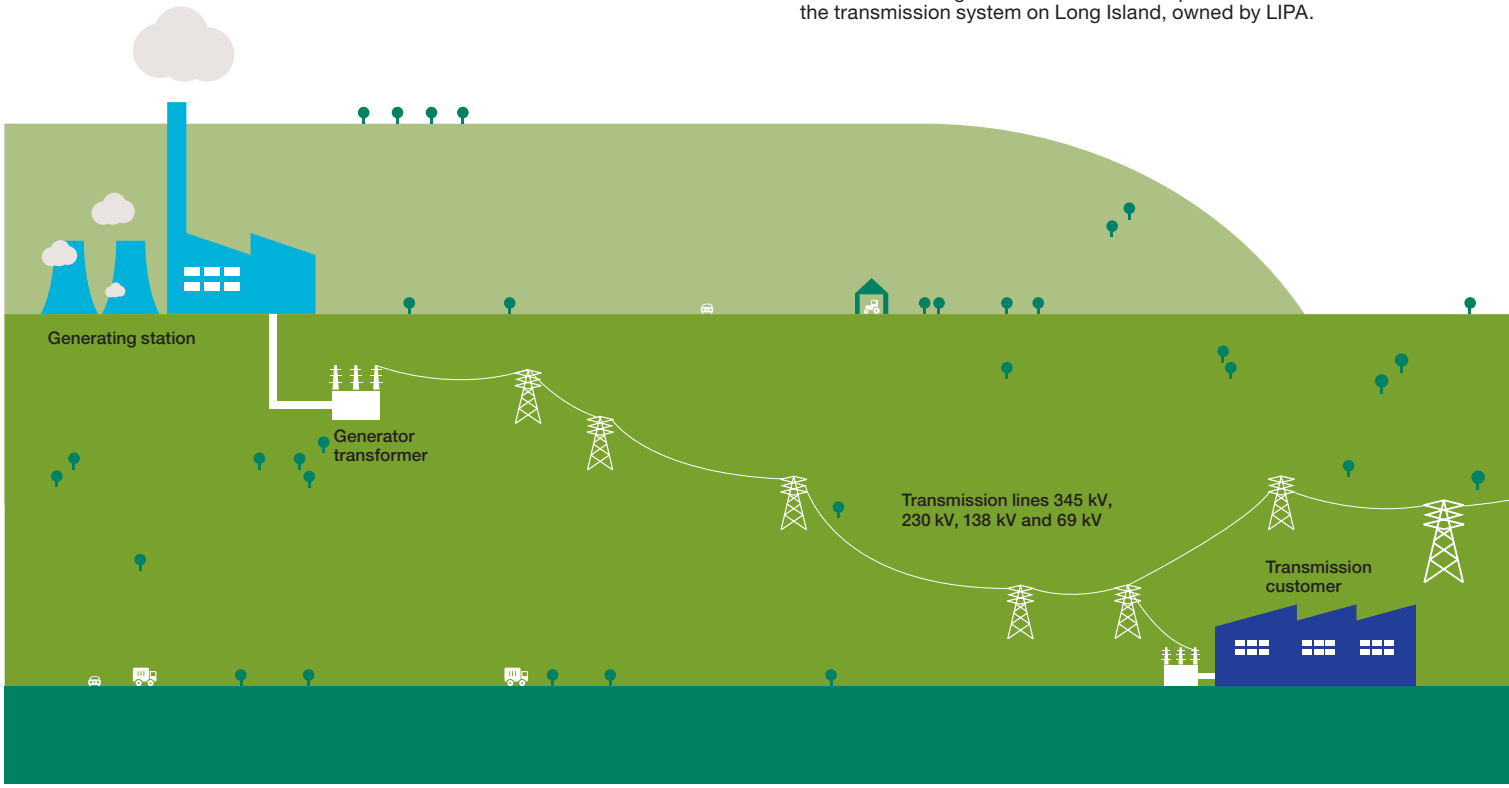
Electricity generating stations produce electricity from another form of energy such as fossil fuel (coal, oil or natural gas), nuclear, hydroelectric, geothermal, solar or wind.

We own 57 generation units on Long Island that together provide 4.1 GW of power under contract to the Long Island Power Authority (LIPA). We also own 3.4 MW of solar generation in Massachusetts, making us the largest owner of solar generation in the state.

### Transmission – National Grid and others

The transmission system supplies electricity to substations in individual service areas. Transmission lines transmit electricity from the generation source or substation to distribution substations. Transmission voltages at National Grid vary from 69 kV to 345 kV. Transmission voltages can also be converted to lower subtransmission voltages, typically 15 kV to 69 kV, to supply distribution substations and/or provide electricity to large industrial customers.

We own and operate transmission facilities in upstate New York, Massachusetts, Rhode Island, New Hampshire and Vermont. We also own and operate a 224 km transmission interconnector between New England and Canada. We operate and maintain the transmission system on Long Island, owned by LIPA.




## Commercial

Utilities may generate all the electricity they sell or may purchase electricity on the wholesale market from other utilities, independent power producers, power marketers or from a market based on membership in a regional transmission reliability organisation such as an independent system operator (ISO).

We purchase electricity through the New York ISO and ISO New England for transmission and distribution to our customers. We also contract directly with generators to purchase electricity.

All available power from our Long Island generation facilities is made available to the New York ISO market to meet the Long Island Power Authority's requirements and for sale to others.

The independent system operators operate as independent administrators for the oversight of electricity transmission while providing fair and open access to the electricity grid. Each independent system operator is the clearing house for load serving entities' bids to purchase electricity and generating stations' offers to sell electricity. New York ISO and ISO New England markets determine the wholesale energy price for New York and New England respectively.

We are permitted to recover the cost of electricity transmission across the regional grid from our customers as a transmission service charge.

## Distribution – National Grid and others

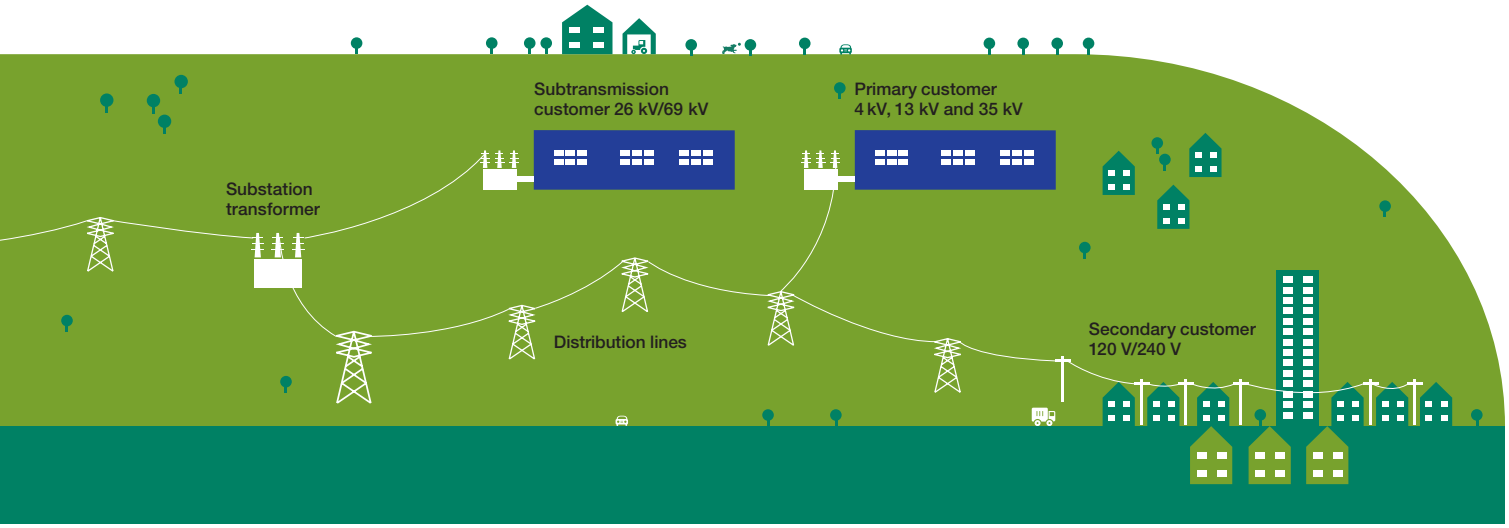
The distribution system receives electricity from the substation and supplies it to customers at a voltage that they can use. The distribution system can be considered to begin at a substation. The substation transformer converts the transmission voltage to a distribution voltage. Electricity at the distribution voltage, also called primary voltage, is typically 4 kV to 35 kV and is supplied to the service area by distribution lines.

Distribution lines may be located overhead on utility poles or buried underground. Distribution transformers convert distribution voltage to a secondary voltage, which is the voltage used by customers. We own distribution facilities and provide service to 3.4 million customers in upstate New York, Massachusetts, Rhode Island and New Hampshire. We maintain and operate the distribution system on Long Island, providing service to 1.1 million LIPA customers.

## Supply – National Grid and others

Utilities such as National Grid and qualified retail marketers purchase electricity for customers connected to the distribution system. Qualified retail marketers buy and sell electricity only in deregulated states, but usually do not own or operate generation, transmission or distribution facilities.

Unlike in the UK, supply and distribution are not necessarily separate in the US; electricity distribution companies often sell electricity to their own customers connected to their distribution system.




Distribution rates are regulated by the state public utility commissions. Utility distribution facilities provide electricity services to end users. This contrasts with the UK, where distribution companies do not sell electricity to end users.

Customer bills typically comprise a commodity rate, covering the cost of electricity delivered, without a profit margin, and a delivery rate, covering our delivery service.

In deregulated states, which includes all the states in which we operate, consumers have the option to select their energy supply from the incumbent utility or retail marketers/energy supply companies.

Where customers choose National Grid, those customers pay us for distribution and commodity cost. Where they choose to purchase from third parties, they pay us for distribution only and pay the third party supplier for the commodity.

# How the UK gas industry works

## Physical

### Production and importation – Other companies

Gas producers, liquefied natural gas (LNG) importers and interconnector operators bring gas onshore. In the UK, there are seven gas reception terminals, three LNG importation terminals and three interconnectors, connecting Great Britain with Ireland, Belgium and the Netherlands.

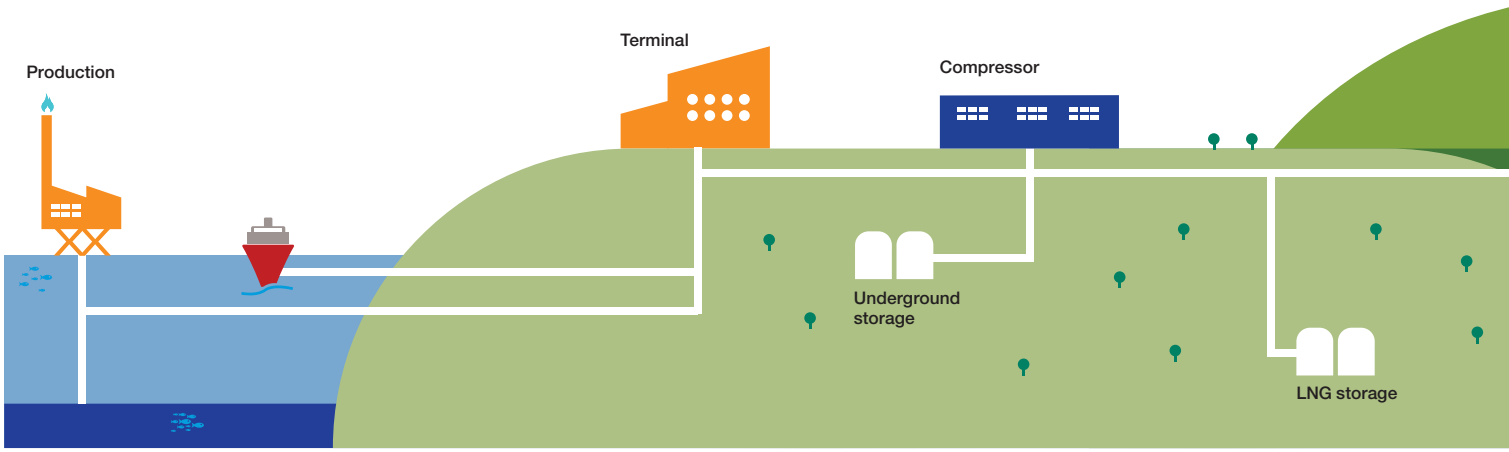
National Grid gas does not participate in either the production of gas for the UK market, or the transportation of LNG by sea. However, we own and operate an LNG importation terminal at the Isle of Grain in Kent.

### Transmission – National Grid only

Gas from importation terminals is injected into the national transmission system (NTS) after the gas has been checked for quality. Gas previously extracted from the NTS and held in storage may be reintroduced into the system.

The NTS operates at pressures of up to 91 bar, transporting gas in high grade welded steel pipes of up to 1.2m diameter.

National Grid is the sole owner and operator of gas transmission infrastructure in Great Britain.




## Commercial

Gas producers and importers sell the gas to licensed shippers, who then own the gas as it travels through the transmission and distribution networks. National Grid is not a gas shipper; we do not buy or sell the gas we transport.

LNG importers pay us for the right to land LNG at our terminal.

Shippers pay us for the use of the NTS via entry and exit capacity charges.

Entry capacity allows shippers to put gas into the NTS at system entry points. Entry capacity is sold in a variety of auctions, ranging from daily to quarterly.

Exit capacity allows shippers to take gas off the NTS at NTS exit points into distribution networks and to other users who are supplied directly from the NTS.

For shippers who use the system, there is also a commodity charge based on the actual flows of gas into the NTS.

## Distribution – National Grid and others

Gas exits the NTS at 53 offtake points where it is odourised. Gas is transported in the distribution networks at various pressures ranging from 75 bar down to 21 mbar for final delivery to end users.

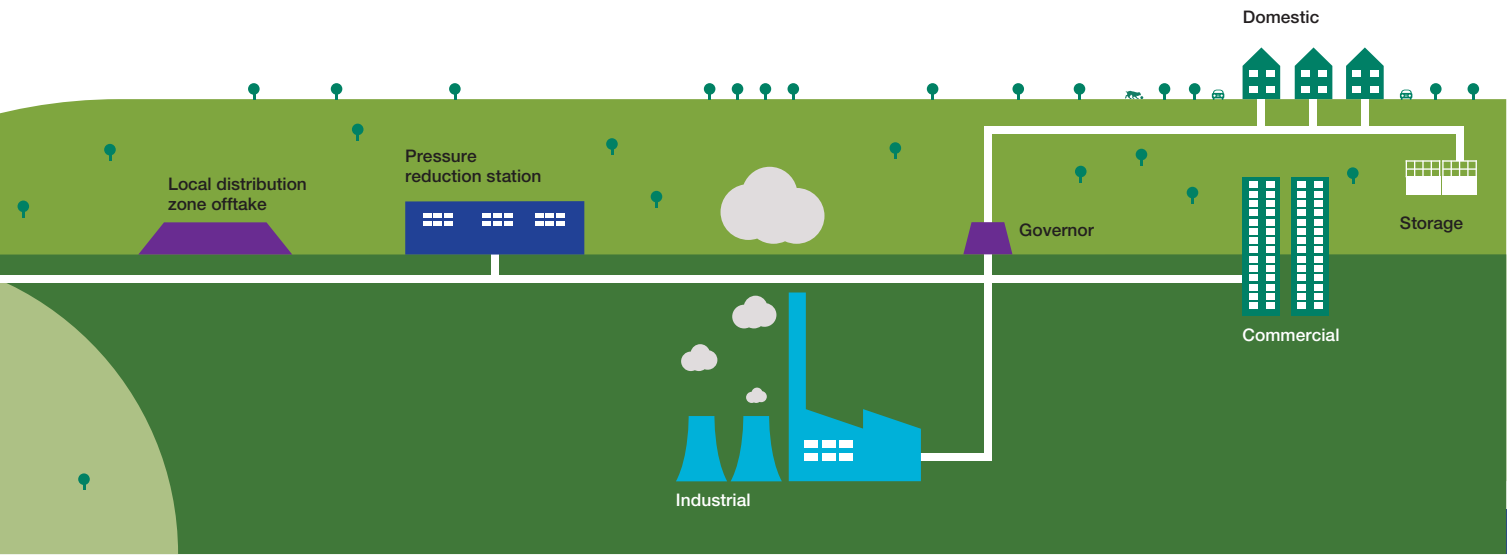
Within the distribution networks, gas storage assets such as gas holders are used to help manage daily variation in demand.

In the UK, there are 13 local distribution zones grouped into eight regional distribution networks. We own four of the eight distribution networks and three other companies own the other four. As with the transmission system, the owners of the distribution networks do not buy or sell gas; the commodity is transported on behalf of shippers.

## Supply – Other companies

Although consumers in the UK have a choice of gas supply company, the gas is physically delivered to most consumers' premises through a pipe belonging to the local distribution network. National Grid's distribution networks deliver gas to approximately 10.8 million consumers.

Although we do not sell gas, and are not involved in billing consumers, we consider the consumers connected to our distribution network to be our customers because our activities directly affect them.




Shippers pay us transportation charges for the use of our gas distribution networks. These charges are ultimately passed on to consumers.

The transportation charges reflect the costs of building and operating the networks, and also the costs of operating a 24 hour emergency telephone helpline.

Consumers contract with gas supply companies for the supply of gas. The supply companies in turn contract with gas shippers who purchase the gas and arrange for it to be transported.

Suppliers also contract with metering companies, including National Grid Metering and OnStream, which we own, for the provision of meters and metering services.

Of the average residential gas bill, transmission charges represent approximately 3% and distribution charges approximately 21%. The majority of the bill is the cost of the gas itself.

# How the US gas industry works

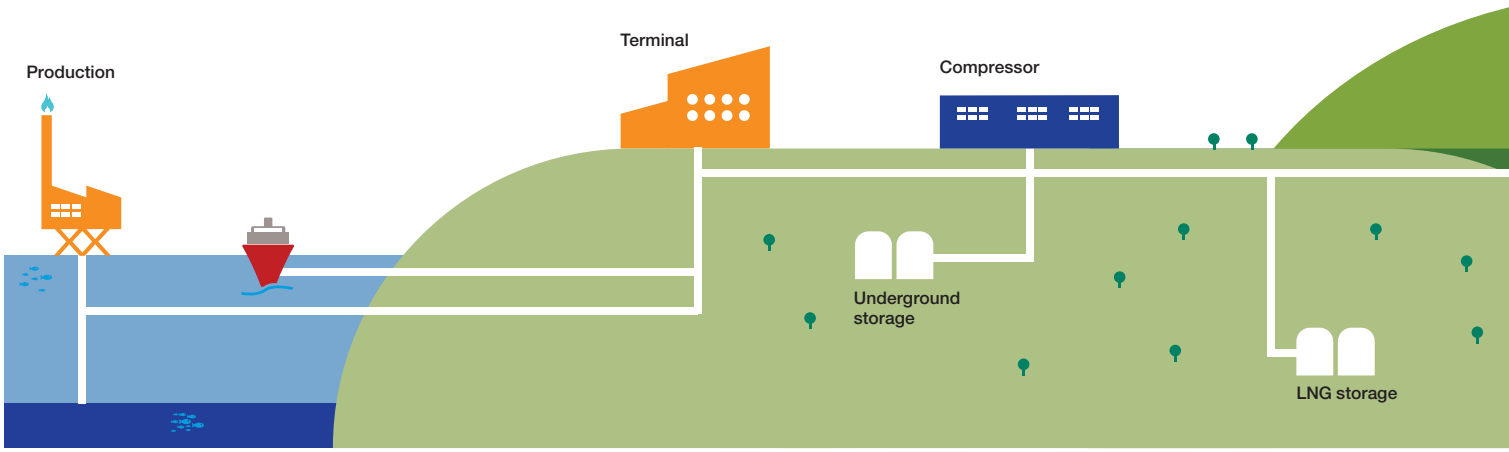
## Physical

### Production and importation – Mainly other companies

Gas is produced in the gulf coast, mid-continent, Rockies, western Canada, shale formations and other unconventional sources in North America. Liquefied natural gas (LNG) importers bring LNG from the mideast, South America and other places.

### Transmission – Canadian and US interstate pipeline companies

Gas is delivered into the US interstate and Canadian pipeline network by producers and LNG importers. National Grid holds only a minority interest in two interstate pipelines: Millennium Pipeline Company and Iroquois Gas Transmission System. Interstate pipelines are regulated by the Federal Energy Regulatory Commission (FERC).




## Commercial

We own and operate LNG storage and vaporisation facilities to support our gas distribution businesses as well as an LNG storage facility in Providence, Rhode Island, where we store gas for third parties for a fee. We also own a small gas production company, Seneca Upshur Petroleum, which operates in the Appalachian Basin in West Virginia. National Grid purchases gas supply directly from producers and LNG importers for resale to our customers.

We pay to reserve firm transportation and storage capacity on the US interstate and Canadian pipeline network to transport natural gas from the various supply sources to its distribution facilities. The initial term under these agreements is typically from 10 to 20 years.

We are permitted to recover the cost of transportation and storage capacity as well as the gas commodity cost from our customers.

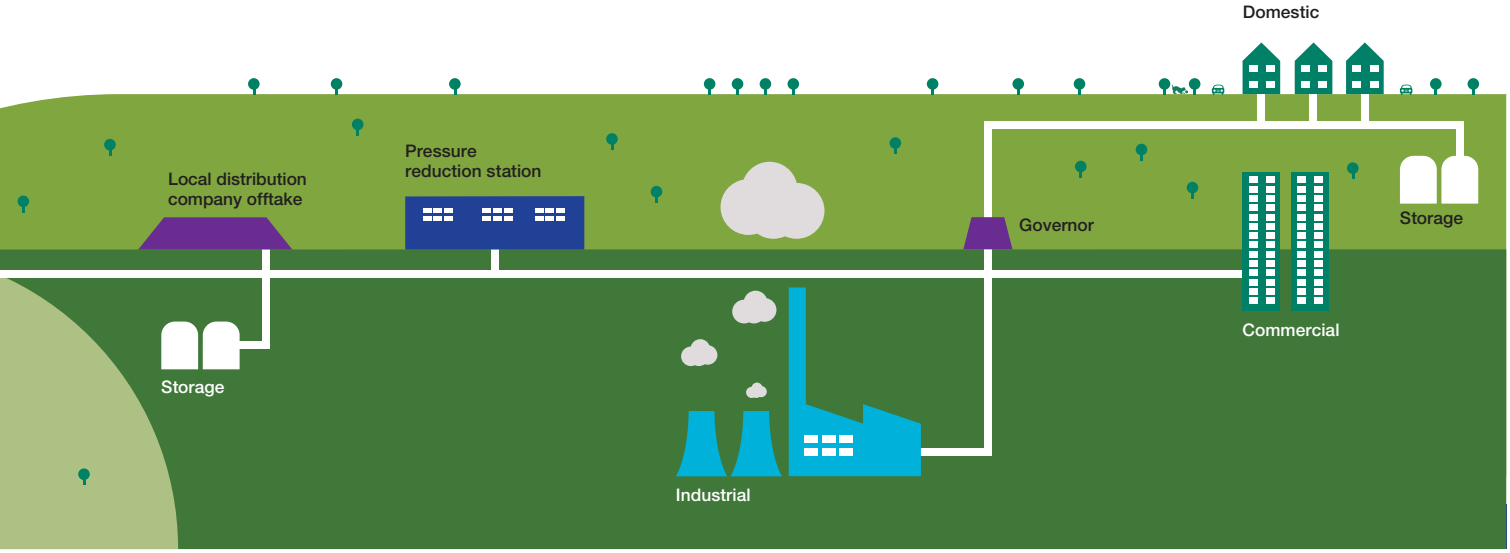
## Distribution – National Grid and others

Gas is delivered by the interstate pipeline companies to National Grid's and other companies' local distribution companies for distribution to their customers. As is the case with the distribution networks in the UK, each local distribution company has a geographically defined service territory and is the only local distribution company within that territory. Local distribution companies are regulated by the state utility commission of the state in which their service territory is located.

## Supply – National Grid and others

National Grid and other qualified gas marketers purchase gas for customers connected to our distribution systems.

Unlike the situation in the UK, supply and distribution are not necessarily separate: gas distribution companies often sell gas to consumers connected to their distribution systems.



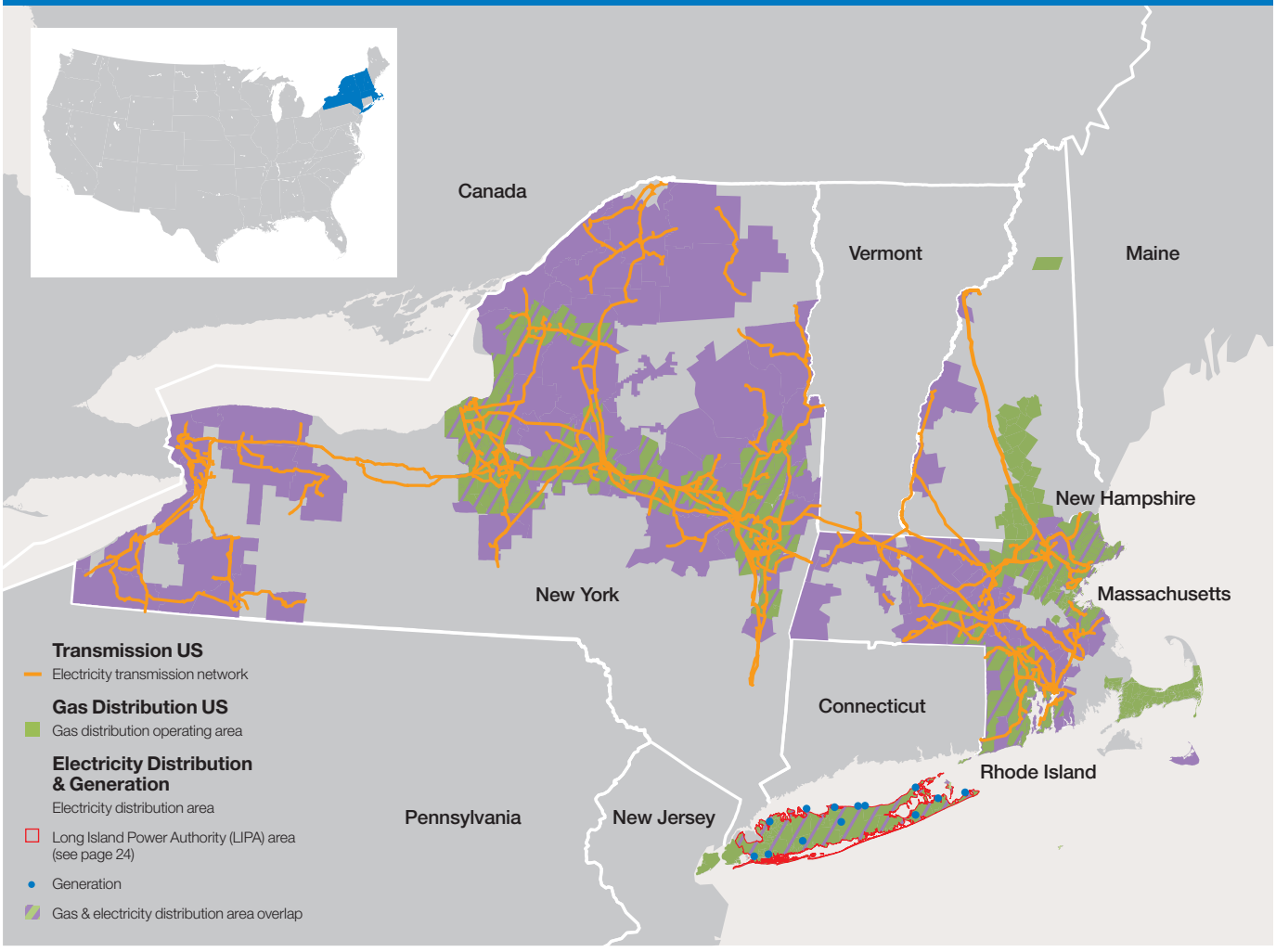

The gas transported by our local distribution companies includes gas purchased by National Grid for our own end user customers as well as third party gas that we deliver to our transportation customers. This contrasts with the UK, where we do not purchase or sell the gas we transport.

In most cases, customers can choose whether to purchase gas from National Grid or other companies. Where they choose National Grid, those customers pay us for distribution and they reimburse us for the cost of the gas and upstream transportation capacity. When customers choose to purchase gas from third parties, they pay us for distribution only and pay the third party supplier for the cost of gas and upstream transportation capacity.

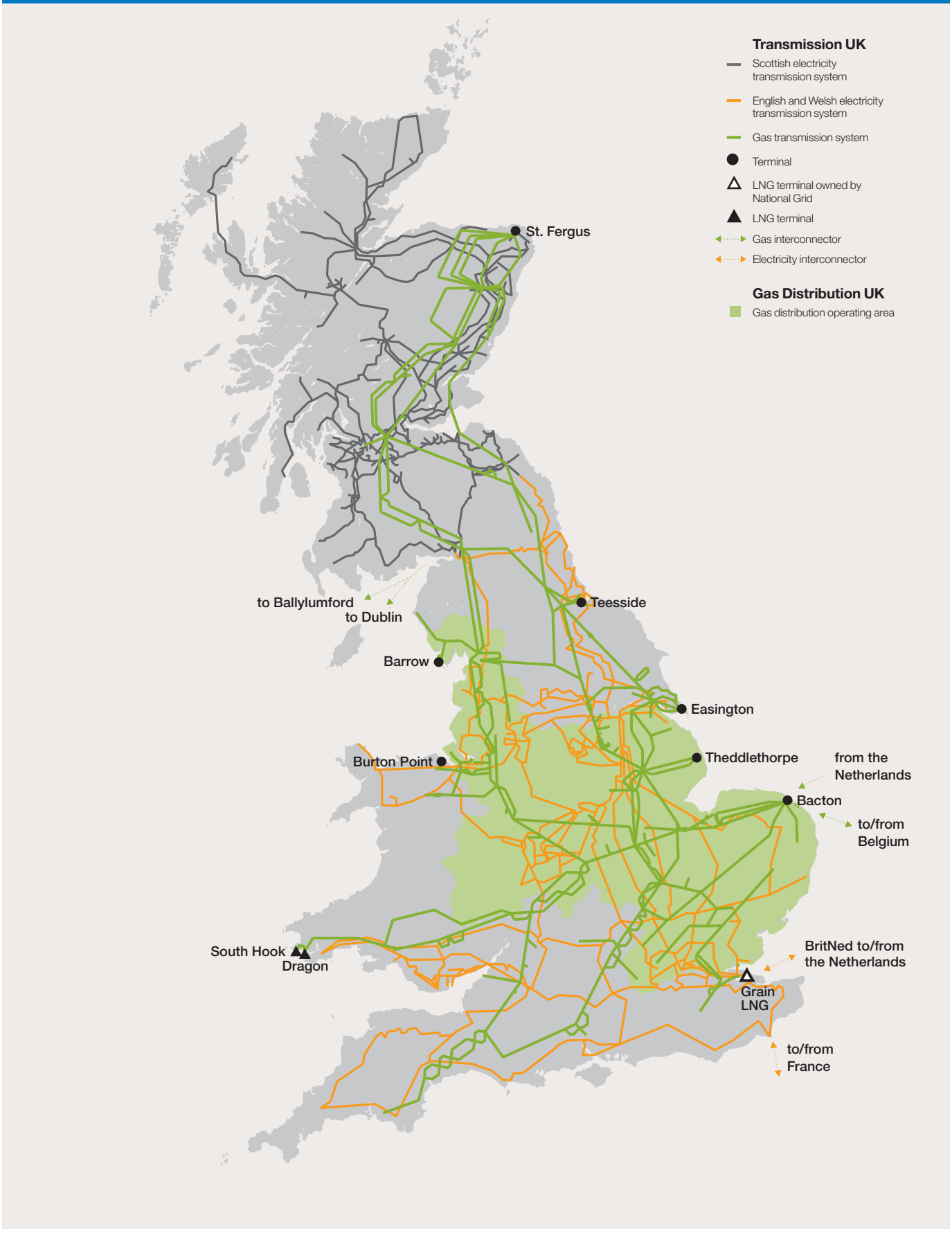
# Where we operate

National Grid owns and operates regulated electricity and gas infrastructure networks in the UK and northeastern US, serving around 19 million customers directly and many more indirectly.

## Our US network



## Our UK network



# Management structure – from 4 April 2011

## Management structure

The performance of our principal businesses is reported by segment, reflecting the management responsibilities and economic characteristics of each activity.

Throughout the year ended 31 March 2011, the management structure was as described on the following page. Throughout this report, the following colours are used to indicate references to a particular segment:

- Transmission
- Gas Distribution
- Electricity Distribution & Generation

Activities which do not fall within these segments are reported separately and are identified thus:

- Non-regulated businesses and other activities

Discussion relating to the Company as a whole is identified thus:

- Company activities

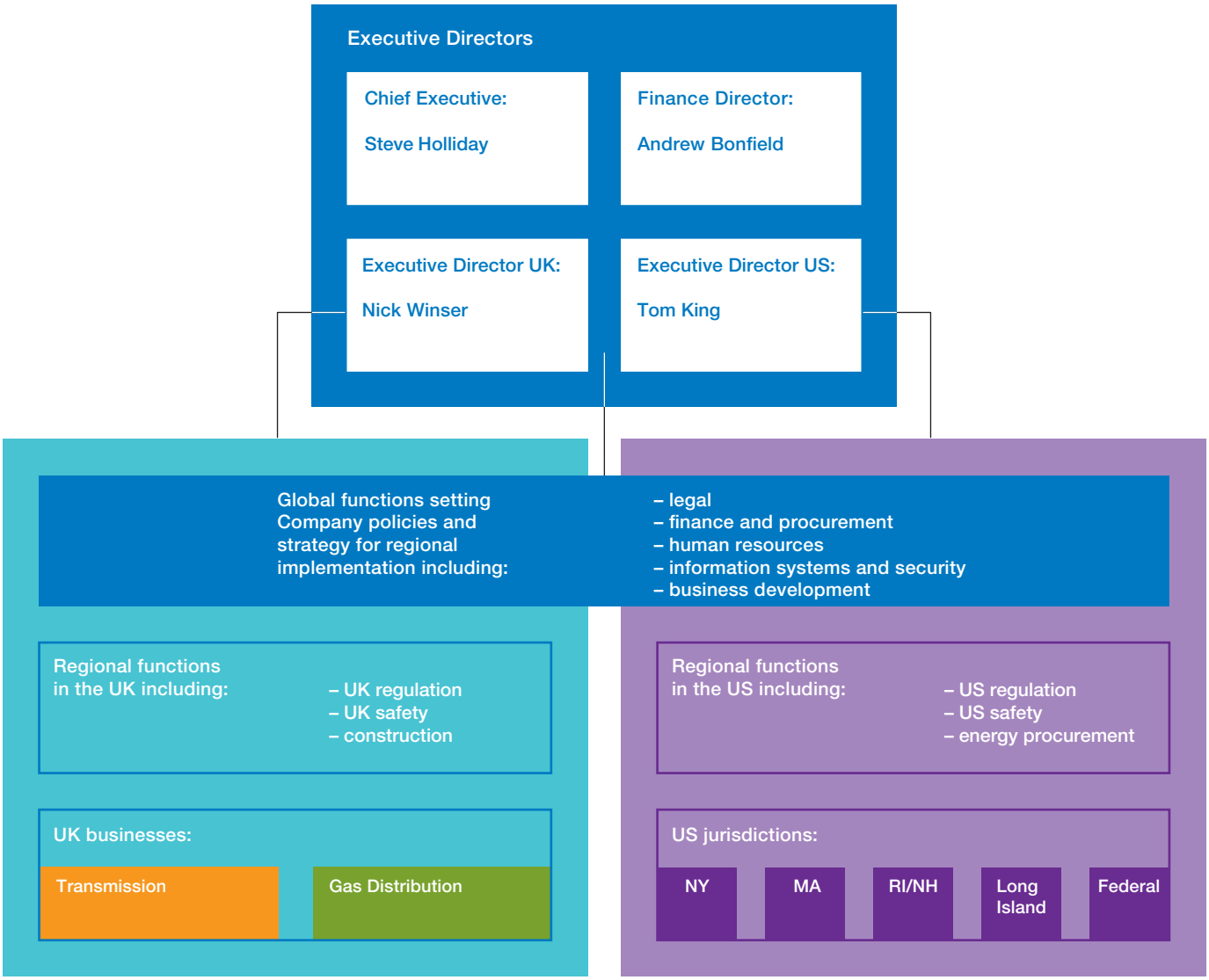
In next year's Annual Report and Accounts, and in subsequent years, we will report by new segments reflecting the revised management structure.

## New management structure

Four years ago we introduced the common operating model, consisting of global lines of business, in order to promote common standards and ways of working. Following a strategic review this year, and in response to feedback received from customers, regulators and other stakeholders, we announced on 31 January 2011 substantial changes to the way in which we organise National Grid. With effect from 4 April 2011, we have moved to a management structure more closely aligned with local responsibilities.

Certain functions will continue to have global responsibilities; these include finance, human resources, information systems and security, and procurement. There will also be regional functions, with responsibility for our operations in each country. In the US, there will be five local teams, each headed by a jurisdictional president: one each for New York and Massachusetts; one for Rhode Island and New Hampshire; one for Long Island where we work with the Long Island Power Authority and one with responsibility for federal regulatory affairs dealing with the Federal Energy Regulatory Commission.

The diagram below represents the new management structure.

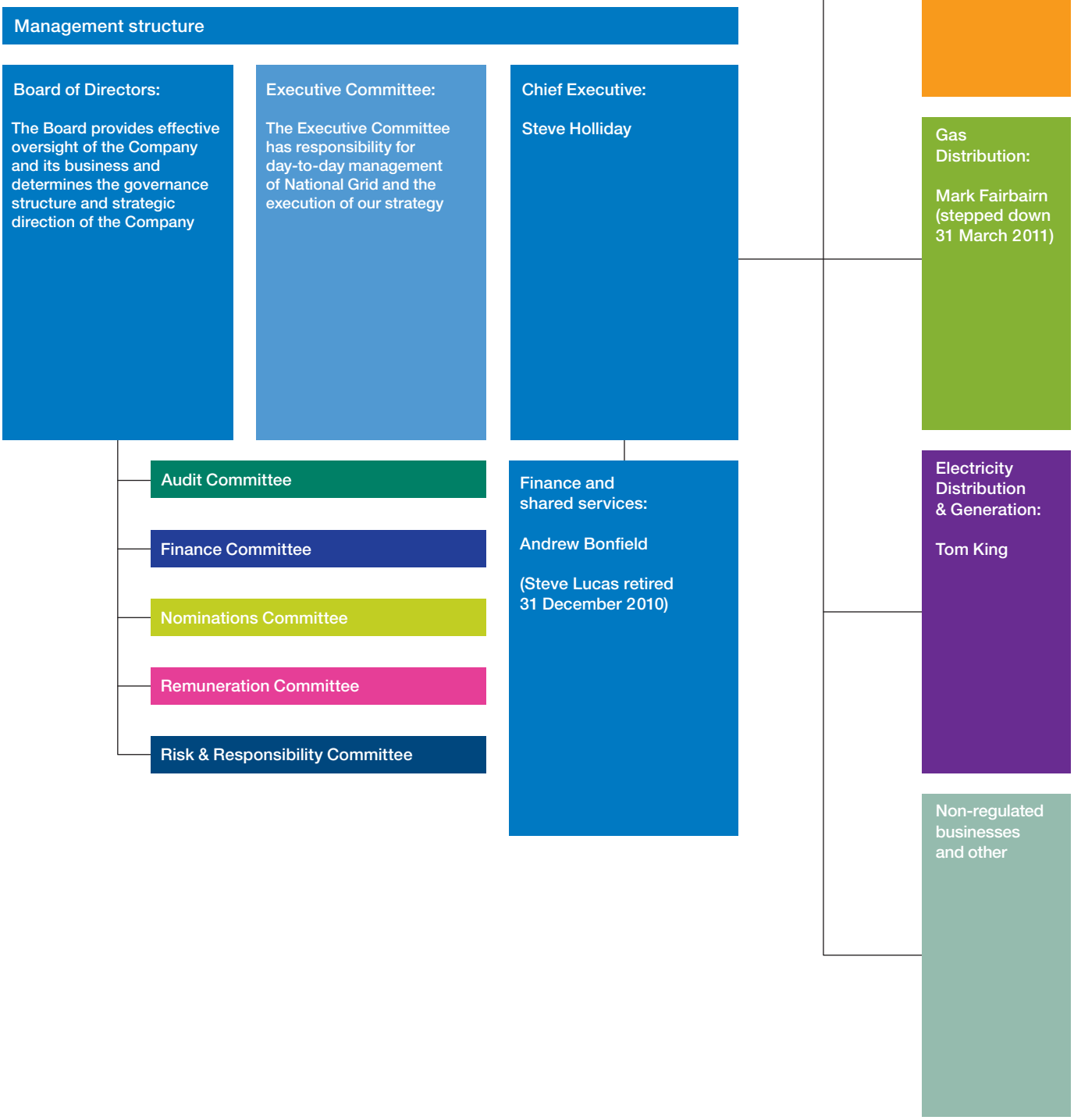


# Management structure – until 3 April 2011

As noted opposite, this page and those following represent the management structure and lines of business as they were throughout 2010/11.

Our principal businesses and segments, together with other activities, are described on pages 24 and 25. Significant developments during the year for each business can be found on pages 26 and 27.

Each line of business was headed by an Executive Director who had primary responsibility for that line of business. Responsibility for our non-regulated businesses was allocated to Executive Directors according to the nature of each business.



# Principal operations

## Transmission

### Transmission UK

**Electricity transmission owner**
We own the electricity transmission system in England and Wales.

**Electricity system operator**
We are the national electricity transmission system operator, responsible for managing the operation of both the England and Wales transmission system, which we own, and the two high voltage transmission networks in Scotland, which we do not own. Day-to-day operation of the 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 transmission owner**
We own the gas national transmission system (NTS) in Great Britain, connecting to eight distribution networks and to third party independent systems for onward transportation of gas to end consumers.

**Gas system operator**
We operate the NTS. Day-to-day operation involves balancing supply and demand.

## Gas Distribution

### Gas Distribution UK

**Gas distribution operator**
We own and operate four of the eight regional gas distribution networks in Great Britain. Our networks comprise approximately 132,000 km (82,000 miles) of gas distribution pipeline and we transport gas from the gas NTS to around 10.8 million consumers on behalf of 26 active gas shippers. Gas consumption in our UK networks was 304 TWh in 2010/11 compared with 299 TWh in 2009/10.

**National gas emergency number operator**
We manage the national gas emergency number (0800 111 999) for all the gas distribution networks and for other gas transporters in Great Britain. This service, along with the enquiries line, appliance repair helpline and meter number enquiry service, handled 2,816,403 calls during 2010/11.

## Electricity Distribution & Generation

**Electricity distribution**
We own and operate electricity distribution networks in upstate New York, Massachusetts, Rhode Island and New Hampshire.

Through our electricity distribution networks, we serve approximately 3.4 million electricity consumers in New England and upstate New York.

We also maintain and operate the electricity transmission and distribution system on Long Island owned by the Long Island Power Authority (LIPA), providing energy to homes, small businesses, and large commercial and industrial enterprises.

The LIPA service territory covers approximately 3,185 square km (1,230 square miles), encompassing nearly 90% of Long Island's total land area. LIPA owns approximately 2,170 km (1,350 miles) of transmission line facilities that deliver power to approximately 177 substations. From these substations, approximately 24,300 circuit km (15,100 miles) of transmission and distribution facilities distribute electricity to 1.1 million consumers.

## Non-regulated businesses and other

**Grain LNG**
Grain LNG is one of three LNG importation facilities in the UK. It was constructed in three phases, phases I and II becoming operational in 2005 and 2008 respectively and phase III being commissioned in December 2010.

**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 km (162 mile) subsea electricity link between the UK and the Netherlands. BritNed was fully commissioned and went live on 1 April 2011.

## Transmission US

### 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 three liquefied natural gas (LNG) storage facilities in Great Britain.

### Electricity transmission owner
We own and operate an electricity transmission network 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. 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 km (139 mile) direct current transmission line rated at 450 kV that is a key section of an interconnector between New England and Canada.

## Gas Distribution US

### Gas distribution owner
Our US gas distribution networks provide 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 km (36,000 miles) of gas pipeline serves an area of approximately 26,400 square km (10,200 square miles). We are actively seeking to increase our customer base in these areas and in 2010/11 added more than 42,000 new gas heating customers.

### Gas storage
We maintain a diversified and flexible portfolio of gas supply and storage assets, and are able to deliver additional benefits to customers and shareholders by optimising the use of these assets. During cold weather, we supplement gas from the interstate pipeline system with LNG and propane facilities in 19 locations.

### Electricity generation
We own 57 electricity generation units on Long Island that together provide 4.1 GW of power under contract to LIPA. Our plants consist of oil and gas fired steam turbine, gas turbine and diesel driven generating units ranging from 2 MW to 385 MW. Any available power not needed to meet LIPA's requirements is made available for sale on the open market.

## Shared activities

### Customer operations
In addition to the operation of our gas and electricity distribution networks, we are also responsible for billing, customer service and supply services.

### Energy procurement
We are responsible for the planning, procurement and administration of gas and electricity commodity supply for our customers. We forecast, plan for and procure approximately 15 billion standard cubic metres of gas and 34 TWh of electricity annually across four states. We also manage gas assets such as transportation and storage capacity to ensure supply adequacy for delivery to customers. Through our fuel management services, we procure gas and fuel oil to supply the power generation units on Long Island, most of which we own.

### Metering
National Grid Metering and OnStream provide installation and maintenance services to energy suppliers in the regulated and unregulated markets respectively in Great Britain. OnStream also provides meter reading services. Our metering businesses provide services for an asset base of about 20 million domestic, industrial and commercial meters.

### 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.

### Xoserve
Xoserve delivers transactional services on behalf of all the major gas network transportation companies in Great Britain, including National Grid. Xoserve is jointly owned by National Grid, as majority shareholder, and the other gas distribution network companies.

### US non-regulated businesses
Includes LNG storage, LNG road transportation, transmission pipelines and West Virginia gas fields.

### Corporate activities and shared services function
Corporate activities comprise central overheads, insurance and expenditure incurred on business development.

# Review of the year

## Transmission

- In October 2010, we finished commissioning the Wormington to Sapperton gas pipeline. This pipeline, of approximately 44 km (27 miles), is required to provide additional exit capacity in the southwest of England to meet increases in distribution network and forecast power station demand
- On 16 November 2010, we signed our largest ever connection contract, with East Anglia Offshore Wind Ltd, for the full 7.2 GW of its capacity. The project will commission wind turbines in 10 stages between 2015 and 2021, delivering 6.6 GW before 2020, and connects to existing substations at Bramford and Norwich along with a new site to be developed in the area

## Gas Distribution

- In the UK, the first release of the new Gas Distribution front office system, a significant investment in the replacement of legacy IT applications, went live in October 2010 to over 1,000 employees. The full rollout of the programme is due to be completed by spring 2012
- Gas Distribution contractor safety in the UK and US improved substantially with the lost time injury frequency rate reducing to 0.08
- A new campaign to reduce the number of electric cable strikes was introduced in the UK and has contributed to a 10% reduction during 2010/11

## Electricity Distribution & Generation

- We met all New York regulatory reliability targets for the third year in a row
- By March 2011, we had delivered $1.41 billion of the $1.47 billion investment in New York in line with the KeySpan merger agreement and ahead of schedule
- The outcome of our Niagara Mohawk rate case in upstate New York was disappointing
- Capital recovery mechanisms were agreed in Massachusetts, Rhode Island and New York

## Non-regulated businesses and other

- On 1 December 2010, Grain LNG phase III started full commercial operation, the first operating day for all three phases at Grain. The terminal now has 1 million cubic metres of storage capacity and has a capacity of approximately 650 GWh per day
- On 1 April 2011, BritNed successfully achieved ‘go live’, with a capacity of 1,000 MW along the 260 km (162 mile) high voltage direct current interconnector between Maasvlakte in the Netherlands and the Isle of Grain in the UK

- By November 2010, the number of contracted generation agreements had met a significant milestone. Enough transmission-connected renewable generation had been contracted to meet our plans for achieving the government's 2020 renewable energy targets (32 GW contracted against a target of approximately 29 GW)
- On 13 December 2010, the Secretary of State gave consent for a pressure reduction installation at Tirley in Gloucestershire. Construction started on this installation in March 2011. Accordingly, we envisage that the full contracted capacity of 950 GWh in the Milford Haven gas pipeline will be available for winter 2012/13
- We have funded an independent report on the costs of undergrounding electric cables compared with the use of overhead lines. The work is being conducted by Kema, and will be endorsed and published by the Institution of Engineering and Technology. We have also launched a public consultation on our approach to undergrounding new electricity transmission lines

- Severe winter weather in the UK led to us failing several of our emergency standards of service. We met all but one of our other regulatory standards
- In the US, we connected 42,416 new gas heating customers
- In the UK, Ofgem imposed a fine of £8 million for inaccurate reporting of gas mains replacement data during 2005/06 to 2007/08
- Our first biomethane injection plant has been constructed to connect Adnams Bio Energy Ltd, the first production facility built for injecting biomethane into the UK gas network
- In our UK networks, actual gas consumption was 304 TWh in 2010/11 compared with 299 TWh in 2009/10
- During the winter of 2010/11, the US gas network supported consumption of more than 218 TWh compared with 201 TWh in 2009/10

- The central and eastern regional control centres both achieved the significant milestone of one year without a switching error
- We reduced lost time injuries by 7%
- The Edison Electric Institute (EEI) recognises companies that make an outstanding effort to restore service to their customers through the EEI Emergency Response Awards. In March 2011 EEI presented an award to National Grid for our response to a storm on 13 and 14 March 2010, which affected nearly 270,000 LIPA customers
- The Port Jefferson power station and the generation materials management division both recently passed the threshold of 1,000 days without a lost time incident. The Northport, E. F. Barrett, Glenwood, and Far Rockaway power stations have all gone more than a year without a lost time incident

- Our competitive metering business, OnStream, won Innovation of the Year and Meter Manufacturer and Technology of the Year at the European Smart Metering Awards 2011
- Our application to appeal against the £15 million fine imposed last year on our metering business for a breach of the Competition Act was unsuccessful

# Operating environment

National Grid, in common with all international companies, operates in a complex environment with a number of external factors affecting our operations.

## UK and European energy policy

This is a crucial time for energy policy decisions, with the focus of debate being on the electricity market and the network regulatory reviews. The government is determined to drive the low carbon agenda. In December 2010, the Department of Energy and Climate Change launched its consultation on electricity market reform, which is designed to enable the UK to meet its climate goals by encouraging low carbon generation, and also to ensure the UK has a secure, affordable supply of electricity in the long term. It is vital that the electricity market frameworks provide the right incentives for investors.

In the UK, there is now a strong political focus on delivering a low carbon economy. The Climate Change Act requires the UK to cut greenhouse gas emissions by 80% from the 1990 levels by 2050 and by 34% by 2020. Dramatic changes in the way we produce and use our energy will be required. We must become less dependent on fossil fuels, use our energy more efficiently and integrate greater use of electric vehicles and electric heating in homes. If we are to meet our 2020 renewable energy target, 15% of our energy for electricity, heat and transport will need to come from renewable sources by 2020. It is estimated that 30% of electricity would need to be from renewables to meet this target. If developed, a North Sea grid could deliver significant benefits by connecting wind generation to the grid and providing greater interconnection with the rest of Europe. Our forecasts for gas supply continue to be built on UK continental shelf decline and higher levels of importation. The changing sources of supply necessitate greater gas transmission network flexibility.

Creating the appropriate, joined up policies to deliver an affordable and secure, low carbon energy system presents an enormous challenge for the UK government. However, the move to a low carbon economy also represents a great opportunity for the UK in terms of new jobs and economic growth. At National Grid, we have a privileged perspective. We operate the grid to which the different energy sources are connected. So we sit at the heart of the energy transformation and we are working closely with government and other stakeholders to ensure the UK can seize the opportunities it presents.

## US energy policy

US energy policy continues to be shaped by the economy, budget deficits and growing political unrest in the Middle East and North Africa. The low probability, high impact oil spill in the Gulf of Mexico, the nuclear crisis in Japan caused by the earthquake and tsunami, and the steep rise in oil prices have added significant volatility to the nation's energy debate. The President and Congressional leaders have called for strong energy legislation this year that might include a clean, renewable energy standard, energy efficiency incentives for electric and natural gas vehicles, infrastructure development and domestic energy supplies. With the partisan divide in Washington, the outlook for successful energy legislation remains unclear.

Even so, the Federal Energy Regulatory Commission continues to work on electricity transmission policy, the Department of Energy on appliance and energy efficiency standards and the Department of Homeland Security on cyber security issues. The largest energy agenda rests with the Environmental Protection Agency (EPA), which is working on power plant regulations, addressing mercury and hazardous air pollutant emissions and interregional transport and water discharge impacts on bays, rivers and estuaries, while also addressing the environmental impact of coal ash waste. In addition, while climate change is currently off the legislative calendar, EPA is expected to promulgate regulations on greenhouse gas emissions, although there is considerable pressure from some members of Congress to either delay action or strip EPA of its authority altogether.

At the state level, an overarching concern continues to be the cost of energy and its impact on citizens, business and industry. Anticipating action on climate change is another focus. New York and Massachusetts have published formal climate action plans with carbon reduction goals and recommended steps to achieve them. In this context, they have adopted goals and policies to promote aggressive utility pursuit of cost effective energy efficiency, revenue decoupling to encourage focus on energy efficiency and consideration of the best business models for delivering expanded efficiency programmes.

The states in which we operate have set renewable portfolio standards to achieve ambitious targets for renewable energy's contribution to the resource mix, addressing climate and security concerns. Massachusetts and Rhode Island have gone further, requiring utilities to enter into long-term contracts to support renewable energy development. Transmission investment continues to receive attention at the state level, largely in the context of renewable energy policy.

State policy with respect to smart technology varies, with legislation in Massachusetts requiring utilities to file smart grid pilot programmes and a generic proceeding in New York to define the appropriate role and benefits for customers of smart technology investment. Smart technology and innovation can support energy efficiency, demand response, and renewable and clean distributed generation.

## Economic environment

Since the financial crisis in 2008/09, there has been a significant recovery. The UK, Europe and the US have emerged from recession and stock markets have risen during 2010/11.

In the UK, inflation has returned after a period of deflation, the retail price index having risen by 5.3% during 2010/11. Our UK regulated revenues are linked to inflation (see page 30 for an explanation of the UK regulatory regime), so higher inflation leads to higher revenue. We also have a significant quantity of index-linked debt, so our financing costs increase as inflation rises, providing an economic offset. However, revenues and financing costs are both based on lagged measures of inflation, and the time lags are not the same, so the economic offset is not perfect.

In the US, although GDP grew by 2.3% in 2010/11, unemployment remains high and in March 2011 still stood at 8.8%. Unlike the position in the UK, we sell gas and electricity directly to consumers in the US and so we are exposed to bad debt risk, which is affected by unemployment rates. Some of our rate plans include protection against such risk (see page 35 for an explanation), but in most cases these do not cover the full cost.

In March 2011, global oil prices reached their highest level since 2008. Our direct exposure to oil prices is very limited. However, the price of oil affects the willingness of consumers to switch from oil to gas for domestic heating purposes, which is a significant driver of the increase in our Gas Distribution customer numbers in the US.

## Corporate responsibility

Our reputation depends on our stakeholders being able to trust us and be confident in us. We can only retain our right to operate by working to the highest standards, by trusting our employees to do the right thing and by running our Company responsibly and sustainably.

Our Framework for Responsible Business, revised and relaunched in June 2010, provides a clear line of sight from our vision to how we manage our business and our day-to-day dealings with our stakeholders. Our Company wide policies and position statements, available on our website, underpin the Framework.

This Operating and Financial Review includes summary information and performance metrics for our key non-financial impacts, including process and employee safety (page 43), customer service (page 44), an inclusive, diverse and talented workforce (page 52) and climate change (page 53). Further information on these, together with other non-financial impacts, such as employee wellbeing, electric and magnetic fields and contaminated land, can be found in the responsibility section of our website www.nationalgrid.com. This also includes an overview of our approach to assuring the corporate responsibility information and data in this report and in our other public corporate responsibility reporting.

## Business conduct

This year, we amended and reissued 'Doing the Right Thing – Our Standards of Ethical Business Conduct'. Doing the Right Thing provides a common set of practical guidelines to help ensure our behaviours are lawful, comply with our policies and licences, and follow the values set out in the Framework and our core values. We undertake face to face training of new starters and are making available online training for employees annually to ensure they understand the Standards.

We have taken steps to prepare for the implementation of the Bribery Act 2010 which comes into force in the UK in July 2011. This has included undertaking a risk assessment, review of Company policies (including Doing the Right Thing mentioned above) and an extensive training and awareness programme that will include eLearning for all employees.

In 2010/11, there were 13.9 substantiated breaches of the Standards per 1,000 employees compared with 13.6 in 2009/10. 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.

More information on our approach to business ethics is included in the Corporate Governance section starting on page 80.

## DECEMBER 2010

**Essential work planned for spring 2011 to replace the existing Victorian metallic gas mains at Westminster Abbey was brought forward to December 2010 to avoid any disruption to the royal wedding. National Grid liaises closely with local stakeholders before starting any projects and this process includes taking into account major events. The City of Westminster is the site of the world's first gas supply and the newly fitted hard wearing plastic pipe will ensure people in the area continue to enjoy a safe, secure and reliable gas supply in future years.**

# Regulatory environment – UK regulation

## Regulatory framework

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 (GEMA) and has established price control mechanisms that restrict the amount of revenue that can be earned by regulated businesses.

Ofgem's main priority is to protect the interests of consumers. It does this by regulating monopoly activities such as the companies that run the gas and electricity networks and by promoting competitive gas and electricity markets.

The Gas Act 1986 and Electricity Act 1989, as amended (the Acts), provide the fundamental legal framework for gas and electricity companies. The Acts establish the licences for electricity generation, transmission, distribution and supply, and for gas transmission, distribution, shipping and supply.

## Regulatory licences

Our main licensed businesses in the UK are:

- the gas transportation businesses of National Grid Gas plc, consisting of the national transmission system and the retained distribution network businesses. There are also four independent distribution networks, which we previously owned and which we sold in 2005;
- National Grid Metering, which is a subsidiary of National Grid Gas and manages the latter's domestic and non domestic metering assets;
- the electricity transmission business of National Grid Electricity Transmission plc; and
- the interconnector business of National Grid Interconnectors Ltd.

The licences established under the Acts require each of these business activities to develop, maintain and operate an economic and efficient network and to facilitate competition in the supply of gas and electricity in Great Britain. The Acts also provide the licensed businesses statutory powers such as the right to bury our pipes or cables under public highways and the ability to purchase land compulsorily in order to facilitate the conduct of our businesses.

To ensure that our licensed businesses are operating efficiently, and that consumers are protected, we operate under eight price controls in the UK, comprising: two for our UK electricity transmission operations, one covering our role as transmission owner (TO) and the other for our role as system operator (SO); two for our gas transmission operations, again one as TO and one as SO; and one for each of our four regional gas distribution networks. In addition to the eight price controls, our LNG storage business has a price control covering some aspects of its operations. There is also a tariff cap price control applied to certain elements of domestic metering and daily meter reading activities undertaken by National Grid Metering.

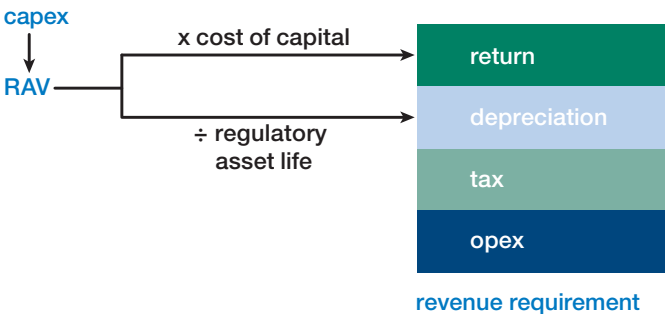
## Price control mechanism

Because price control mechanisms restrict revenues, not profits, they encourage efficiencies within our regulated businesses. Savings that are made can be retained for the remainder of the price control period, but the higher level of efficiency that led to these savings is then used to inform a new baseline level for the next price control period.

Price control regulation is designed to ensure that, as a monopoly, we charge reasonable prices, and to provide us with a future level of revenue sufficient to enable us to meet our statutory duties and licence obligations. It also provides financial incentives to manage and operate our networks in an economic, efficient and coordinated manner in accordance with our legal and licence obligations, offer good quality of service to network users and invest in our networks in a timely and efficient manner to help ensure long-term security of supply is maintained.

During each price control review period, the amount of money that can be earned by our regulated businesses is restricted by what is referred to as an RPI-X price control, which is normally reviewed every five years by Ofgem. The RPI-X allowance is based upon Ofgem's estimates of efficient operating expenditure (opex), capital expenditure (capex) and asset replacement, together with an allowance for depreciation and an allowed rate of return on capital invested in our businesses. This is summarised in the diagram below, representing a building block model of the price control.

### Building blocks




The inputs of the building block model are used, together with the regulatory asset base value (RAV) to calculate the allowed revenue. The RAV, which represents the value ascribed by Ofgem to the capital employed in our regulated businesses, is adjusted to reflect asset additions, removals, depreciation and the rate of inflation.

The RPI-X price control takes the retail price index as its benchmark and subtracts X, an efficiency factor, from it. For example, at a time when annual inflation was 3%, a value for X of 2% would allow our regulatory businesses to raise prices by no more than 1%. Price controls also include incentive mechanisms to encourage us to improve our performance in particular areas.

The price control provides our regulated businesses with a level of revenue that is sufficient to finance the businesses if they are efficiently run. The revenue allowance is based on an estimate of the costs an efficient company would face in running its regulated businesses and includes operating expenditure, capital expenditure, financing costs including both debt and equity, and taxation.

## Current price controls

The key elements of the current price controls for both gas and electricity transmission are that we are allowed to earn a 4.4% post-tax real return on our RAV, equivalent to a 5.05% vanilla return, with a £4.4 billion baseline five year capex allowance and a £1.2 billion five year controllable opex allowance.

In addition, we are subject to a number of incentives that can adjust our transmission network revenue. For electricity transmission, these include incentives for network reliability, sulphur hexafluoride losses, efficiency and balancing services. For gas transmission, our incentive schemes cover areas such as the cost of investment for additional capacity to facilitate new connections to the system.

The key elements of the current price controls for gas distribution are that we are allowed to earn a 4.3% post-tax real rate of return on our RAV, equivalent to a 4.94% vanilla return, with a £2.5 billion baseline five year capex allowance and a £1.6 billion five year controllable opex allowance.

| | RAV | Allowed vanilla return | Actual vanilla return | Return on equity |
|---|---|---|---|---|
| Electricity transmission | £8,388m | 5.05% | 6.40% | 13.6% |
| Gas transmission | £4,889m | 5.05% | 7.20% | 15.8% |
| Gas distribution | £7,520m | 4.94% | 5.54% | 12.1% |
| Total | £20,797m | | | 13.6% |

## Ofgem's review of price controls: RPI-X@20

Since privatisation, the RPI-X mechanism has provided the industry with strong incentives to be more efficient. The level of opex costs has decreased over the years, transforming previously inefficient nationalised industries. However, over the past few years new challenges, such as Great Britain's transition to lower carbon emissions and the requirement to renew ageing networks, have caused Ofgem to review the continuing appropriateness of the RPI-X approach.

In March 2008, Ofgem announced the RPI-X@20 review, which was a two year project to review the workings of the current approach to regulating Great Britain's energy networks and develop future policy recommendations.

Ofgem's RPI-X@20 review aims were to: drive improvements in quality of service and efficiency; ensure that the regulatory framework is flexible to adapt to structural changes in the energy industry; and enable efficient network companies to finance themselves efficiently.

To allow the lessons of the review to be accommodated in full, Ofgem extended the current transmission price control from its scheduled end in March 2012 by one year to March 2013.

Following the RPI-X@20 review, Ofgem has identified a modified price control approach, designated as RIIO, to deliver and meet the changing future needs of the energy market. The fundamental building block approach shown in the diagram opposite will still be at the heart of the model.

## The RIIO model

Ofgem's revised RIIO regulatory framework will be implemented in the next round of gas distribution and gas and electricity transmission price controls, which will start in April 2013.

RIIO refers to the formula:

Revenue = Incentives + Innovation + Outputs

To attract the efficient investment needed for the industry, Ofgem's RIIO model is intended to incentivise network companies to deliver the outputs demanded by consumers and network users in an efficient and innovative way.

The key features of the RIIO model are:

- a longer price control, lasting eight years, to provide stronger incentives for networks to manage costs;
- encouraging network companies to work more closely with stakeholders to identify what they want from energy network companies. This should help networks to identify, and so better meet, the developing needs of the energy market;
- rewarding network companies with higher returns where they meet the needs of the network users and consumers in innovative and efficient ways. However, network companies that perform poorly can expect to receive lower returns;
- encouraging network companies to become actively involved in delivering a sustainable energy sector;
- supporting the development and delivery of a network service that provides long-term value for money to existing and future consumers; and
- providing clarity to future investors to ensure that network companies can raise the finance needed in a timely manner and at a reasonable cost to consumers.

## Impact on National Grid

The RIIO model will not only reward us for increased efficiency but also encourage us to engage more openly and effectively with our stakeholders. This will allow us to develop more robust commercial relationships with current and future network users to help us fulfil our vital role in the delivery of a sustainable future energy sector. It will also help us to respond and adapt our delivery plans to provide long-term value for money to network users.

Output measures in future price controls will give stakeholders a clear understanding of what we will deliver in return for the revenue that we receive from our customers. The proposed output categories are: customer satisfaction; reliability and availability; safe network services; connection terms; environmental impact; and social obligations. These outputs will cover both primary and secondary deliverables. We will be required to demonstrate in price controls that the primary outputs are material, controllable, measurable, comparable and legally compliant. The secondary deliverables will be evidenced through our business plans to demonstrate the costs required to deliver the primary outputs. Four years into the eight year price control, there will be an interim review of the outputs that we were required to deliver, to ensure that they remain relevant.

As the energy landscape evolves, Ofgem's RIIO model should encourage us in our gas distribution and electricity and gas transmission roles to play a full part in the delivery of a sustainable energy sector and to deliver network services offering long-term value for money to existing and future consumers.

# Regulatory environment – US regulation

## Regulators

In the US, public utilities' retail transactions are regulated by state utility commissions, 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. Utility commissions serve as economic regulators in approving cost recovery and authorised rates of return. The state commissions establish the retail rates to recover the cost of transmission and distribution services, and focus on services and costs within their jurisdictions. The Federal Energy Regulatory Commission (FERC) regulates the wholesale transactions of public utilities, such as interstate transmission and electricity generation, and provides for the cost recovery of these services.

Utility commissions are also charged with serving the public interest by ensuring utilities provide safe and reliable service at just and reasonable prices. They establish service standards and approve mergers and acquisitions of public utilities. FERC also regulates public utility holding companies and centralised service companies, including those of the US businesses of National Grid.

In the US, many states have deregulated the commodity or supply component of electricity and gas utility service. Customers in deregulated states have been given the opportunity to purchase electricity or gas service from competitive suppliers. All the states in which we operate have deregulated electricity and gas supply.

## Regulatory process

Utilities in the US submit a formal rate filing requesting a revenue adjustment in a proceeding known as a rate case. The rate case process is conducted in a litigated setting and, in the states in which we operate, it can take six to 13 months for the commission to render a final decision. In all states, the utility is required to prove that its requested rate change is prudent and reasonable. The utility may request a rate plan that can span multiple years.

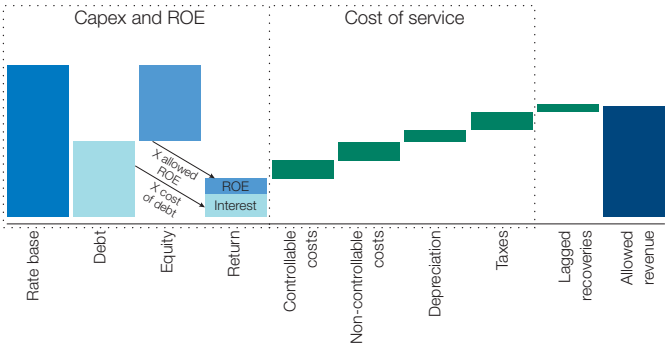
During the rate case process, consumer advocates and other intervening parties scrutinise and often file opposing positions to the utility's rate request. The rate case decision reflects a weighing of the facts in light of the regulator's policy objectives. During a rate case, the utility, consumer advocates and intervening parties may agree on the resolution of aspects of a case and file a negotiated settlement with a commission for approval.

Gas and electricity rates are established from a revenue requirement, or cost of service, representing the utility's total cost of providing distribution or delivery service to its customers. It includes operating expenses, depreciation, taxes and a fair and reasonable return on the utility's regulated asset base, typically referred to as its rate base. The rate of return applied to the rate base is the utility's weighted average cost of capital, representing its cost of debt and an adjudicated return on equity (ROE) intended to provide the utility with an opportunity to attract capital from investors and maintain its financial integrity. The total cost of service is apportioned among different customer classes and categories of service to establish the rates, through a process called rate design, for these classes of customers. The final cost of service and rate design are ultimately approved in the rate case decision.

The revenue requirement is derived from a comprehensive study of the utility's total costs during a recent 12 month period of operations, referred to as a test year. Each commission has its own rules and standards for adjustments to the test year which are intended to arrive at the total costs expected in the first year new rates will be in effect, or the rate year, and may include forecasted capital investments in determining rate year rate base. Often, known and measurable adjustments are made to test year data to reflect normal operating conditions. In Massachusetts and New Hampshire, only limited adjustments to this test year are allowed, which are required to be both known and measurable. New York and Rhode Island allow more comprehensive adjustments to the test year.

In summary, the US regulatory regime is based on a building block approach intended to allow the utility to recover its cost of service and earn a return on past investments.

**US regulation building blocks**




## Regulatory lag

Once approved, base rates are typically either fixed until the next request is filed and litigated, or may be adjusted pursuant to a multi-year rate plan. Consequently, if costs change substantially between rate cases and base rates remain unchanged during the same period, the result can be large discrepancies between revenue generated from rates and actual costs incurred, commonly referred to as regulatory lag.

One of the ways to reduce the effects of regulatory lag has been to propose and gain approval for rate adjustment mechanisms in respect of certain costs which are generally outside the control of the utility management, such as pension and other post-employment benefit (OPEB) costs. Such mechanisms may be known as true ups or reconciling mechanisms. Base rates generally provide an allowance for such costs, but the actual costs incurred by the utility may turn out to be higher or lower than the allowance. A reconciling mechanism allows the utility to charge or refund to customers an amount in addition to or in place of base rates, so that the overall revenue providing for the recovery of the specified costs matches the actual costs incurred. A summary of these arrangements can be found on page 35.

Another way to reduce regulatory lag is by gaining approval of a formula rate from the regulator. FERC allows transmission cost recovery from wholesale transmission customers based upon a formula. The charges to wholesale customers are updated at least annually, based upon actual costs incurred and investments made. A calculation is performed each year to compare the actual with the projected revenue requirement. Any refund or surcharge in rates is an adjustment to the revenue requirement for the subsequent period. For our New England wholesale transmission business, the formula operates on a monthly basis, which virtually eliminates regulatory lag.

## Our rate plans

We have five sets of electricity rates and seven sets of gas rates, 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, Rhode Island and New Hampshire. Distribution and transmission electricity services in upstate

New York continue to be subject to a combined rate that is billed to end use customers. In New England, retail transmission rates reflect the recovery from our end use customers of wholesale transmission charges assessed to our electricity distribution companies. Wholesale rates for our electricity transmission network in New England and New York are subject to FERC approval.

We have regulatory arrangements that provide for the recovery of our historical investments and commitments related to our former electricity generation business that were stranded when some of our US subsidiaries divested their generation assets as part of industry restructuring and wholesale power deregulation in New England and New York. These arrangements include the recovery of certain above market costs of electricity power purchase contracts that were in place at that time. We recover most of these costs through the rates charged to our electricity customers. We will have fully recovered our sunk investments in generation assets by the end of 2011 at which time revenue associated with stranded cost recovery will decline significantly.

Our rate plans are designed to produce a specific allowed ROE, by reference to an allowed operating expense level and rate base. 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.

In addition, our performance under certain rate plans is subject to service performance targets. We may be subject to monetary penalties in cases where we do not meet those targets.

### Features of our rate plans

Unlike the position in the UK, we are responsible for billing our customers for their use of electricity and gas services. Customer bills typically comprise a commodity charge, covering the cost of the electricity or gas delivered, and delivery charges, covering our delivery service. Depending on the state, delivery rates are either based upon actual sales volumes and costs incurred in an historical test year, or on estimates of sales volumes and costs, and in both cases may differ from actual amounts. A substantial proportion of our costs, in particular electricity and gas purchases for supply to customers, are pass-through costs, meaning they are fully recoverable from our customers. Our charges to customers are designed to recover these costs with no profit. Rates are adjusted from time to time to ensure any over- or under-recovery of these costs is returned to, or recovered from, our customers. There can be timing differences between costs being incurred and rates being adjusted.

Our electricity and gas distribution businesses operate under franchise agreements that provide us with certain rights and obligations regarding facilities and the provision of service within each state in which we operate. In addition, there are federal and state laws and regulations covering both general business practices and electricity and gas operations in particular, especially with respect to safety, energy transactions, customer sales and service, levels of performance, rates, finances and environmental concerns.

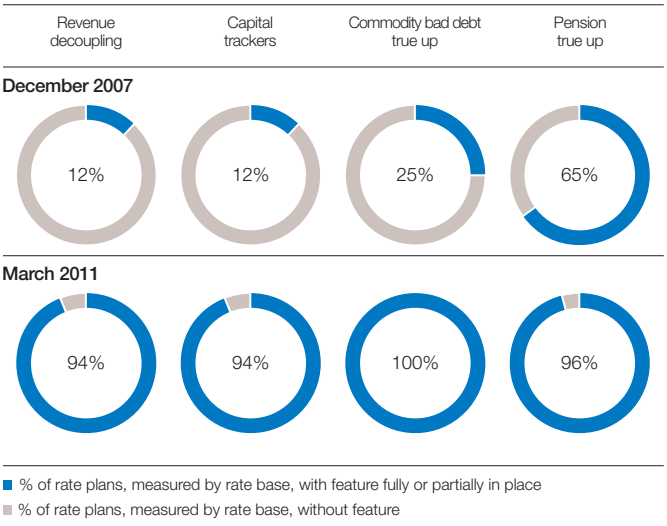
Our Long Island generation plants sell capacity to the Long Island Power Authority under a contract, approved by FERC, which provides a similar economic effect to cost of service rate regulation.

Revenue for our wholesale transmission business in New England and New York is collected from wholesale transmission customers, who are typically other utilities and include our own New England electricity distribution businesses. With the exception of upstate New York, which continues to combine retail transmission and distribution rates to end use customers, these wholesale transmission costs are incurred by distribution utilities on behalf of their customers and are fully recovered as a pass-through from end use customers as approved by each state commission.

### Regulatory filings

The objectives of our rate case filings are to ensure that we have the right cost of service with the ability to earn a fair and reasonable rate of return, while providing safe and reliable service to our customers. In order to achieve these objectives and to reduce regulatory lag, we have been requesting structural changes, such as revenue decoupling mechanisms, capital trackers, commodity related bad debt true ups, and pension and OPEB true ups, separately from base rates. These terms are explained below the table on page 35.

The chart below shows the progress we have made on these regulatory principles (excluding New Hampshire). We continue to work towards implementing these regulatory principles across our US business.




Although many of our rate plans feature revenue decoupling, in some cases decoupling applies only to some classes of customer. As a result, the proportion of revenues which is decoupled is 81% for our electricity businesses and 57% for our gas businesses for 2010/11. Transmission revenue is effectively decoupled.

### Massachusetts gas rate case

On 16 April 2010, we filed a rate case for the Boston, Essex and Colonial Gas companies. The filing included requests for approval of: an increase in revenue to fund distribution operations and prior capital additions; a revenue decoupling mechanism; an infrastructure investment tracker; true up mechanisms for commodity bad debt and pension costs; and an annual inflation adjustment tracker.

On 2 November 2010, the Massachusetts regulator ruled on our request. We were granted an increase in revenue of $58 million, based upon an allowed return on equity of 9.75% and a 50% equity ratio. We also received approval for the implementation of a revenue decoupling mechanism, true up mechanisms for commodity bad debt and pension costs, and an infrastructure investment tracker with a cap on annual base rate increases of 1% of revenues for the prior calendar year. The regulator denied our proposed inflation adjustment tracking mechanism. Rates went into effect on 2 November 2010. The regulator also approved consolidated base rates for the merged Boston Gas and Essex Gas operations, as well as for the two operating divisions of Colonial Gas, so that we have two sets of base rates instead

# Regulatory environment – US regulation continued

of four. On 22 November 2010, we filed a motion for recalculation on certain rate case items, worth approximately $10 million in additional annual revenue. We expect a regulatory decision during the first half of 2011/12.

### Massachusetts electricity revenue decoupling and pension expense filing

On 25 February 2011, the Massachusetts regulator approved, subject to further review, rate adjustments resulting from our revenue decoupling mechanism and pension and OPEB expenses. The revenue decoupling mechanism allows for annual adjustments to our distribution rates to support incremental capital investment of up to $170 million, less the annual base rate allowance for depreciation expense of $96 million, and the reconciliation between allowed annual revenue targets and billed revenue. The approved revenue decoupling mechanism rate adjustments provide for the recovery of $2.6 million in revenue beginning on 1 March 2011. The regulator also approved recovery of forecast pension and OPEB expenses for calendar year 2011, one third of the balance of the expenses in excess of revenue for calendar year 2010 and carrying charges associated with pension and OPEB assets and liabilities. The approval permits the recovery of $50.3 million in costs beginning on 1 March 2011, representing an annual increase of $17.4 million.

### Upstate New York electricity rate case

In January 2010, we filed a three year rate proposal for our upstate New York electricity business, to take effect from 1 January 2011. The filing included a request for an increase in revenue to fund electricity operations, a revenue decoupling mechanism proposal as requested by the regulator and annual reconciliation mechanisms for certain non controllable costs. During the proceeding, the rate case proposal was limited to one year.

In January 2011, the regulator ruled on our request, increasing base delivery rates by $119.3 million with effect from 1 February 2011, and allowing for a full calendar year of cost recovery as if new rates had come into effect on 1 January 2011. We were granted a 9.3% ROE with a capital structure of 48% common equity. An amount equivalent to 0.2% ROE, approximately $7 million, is refundable to customers if we file for new rates before 1 January 2012. Of the $119.3 million increase, approximately $40 million represents a one-off recovery of stranded costs. The increase in 2011 is entirely offset by extending the recovery period of certain deferred costs to prevent an increase in customer bills for 2011. The increase in delivery rates is therefore to be deferred until 2012 and will be subject to a filing by July 2011 for the recovery of deferral balances. In addition, $50 million of the annual revenue increase was approved on a temporary basis pending the outcome of a review of affiliate service company costs. The regulator approved the decoupling of revenues from energy delivered for all customer classes eligible for energy efficiency programmes and continues to allow for the full recovery of pension, OPEB and energy supply costs.

### Downstate New York deferrals filing

The downstate New York rate plans allow us to request recovery or refund of certain costs and forecast expenses which vary from rate plan allowances. Such costs include: site investigation and environmental remediation; property tax; and pension and OPEB expenses. On 29 January 2010, our downstate New York companies made a filing with the New York regulator to request up to $65 million in cost recovery per year over five years. The proceeding is ongoing.

### Rhode Island filings

In May 2010, Rhode Island enacted legislation requiring us to decouple revenue from energy delivered and providing revenue support for prospective infrastructure investment and certain electricity operation and maintenance expenses. In October 2010, we submitted our electricity and gas revenue decoupling mechanism petitions, and expect a regulatory decision in June 2011 that will include an effective start date of 1 April 2011. Incremental funding of our expanded electricity energy efficiency programmes was approved, beginning in January 2011. Due to conflicting statutes, the expanded gas efficiency programmes were not approved, but we anticipate that this will be resolved in 2011/12.

In December 2010, we filed petitions seeking approval of our 2011/12 infrastructure, safety and reliability plans for the electricity and gas businesses. In the filings, we requested revenue for the costs of capital investment programmes, along with vegetation management and inspection and maintenance expenses for the electricity distribution business. Both petitions were approved in March 2011, providing additional annual electricity and gas distribution revenues of approximately $3.3 million and $1.8 million, respectively.

### New Hampshire gas rate case

On 26 February 2010, we filed a rate case for the EnergyNorth gas distribution business. The filing included a request for an overall increase in revenue of $11.4 million and a return on equity of 11.2%. We also proposed a revenue decoupling mechanism, an expanded capital tracker, reconciling mechanisms for pension and OPEB and for commodity related bad debt and an inflation tracker on operations and maintenance costs. On 14 May 2010, the regulator approved $5 million in temporary rates which will become effective on 1 June 2010, reconcilable to the final decision with new rates effective from 1 April 2011.

We entered into a settlement agreement for permanent rates in January 2011. The final decision, approving the settlement of the case, was issued on 10 March 2011. We received a revenue increase of $6.8 million, based upon an imputed return on equity of 9.67% and a capital structure of 50% equity. In addition, we received approval for a reconciling mechanism for commodity related bad debt, once certain thresholds are achieved, as well as updated pension and property tax expense for current year data. The final decision did not include approval of a revenue decoupling mechanism, pension and OPEB tracker or inflation tracker.

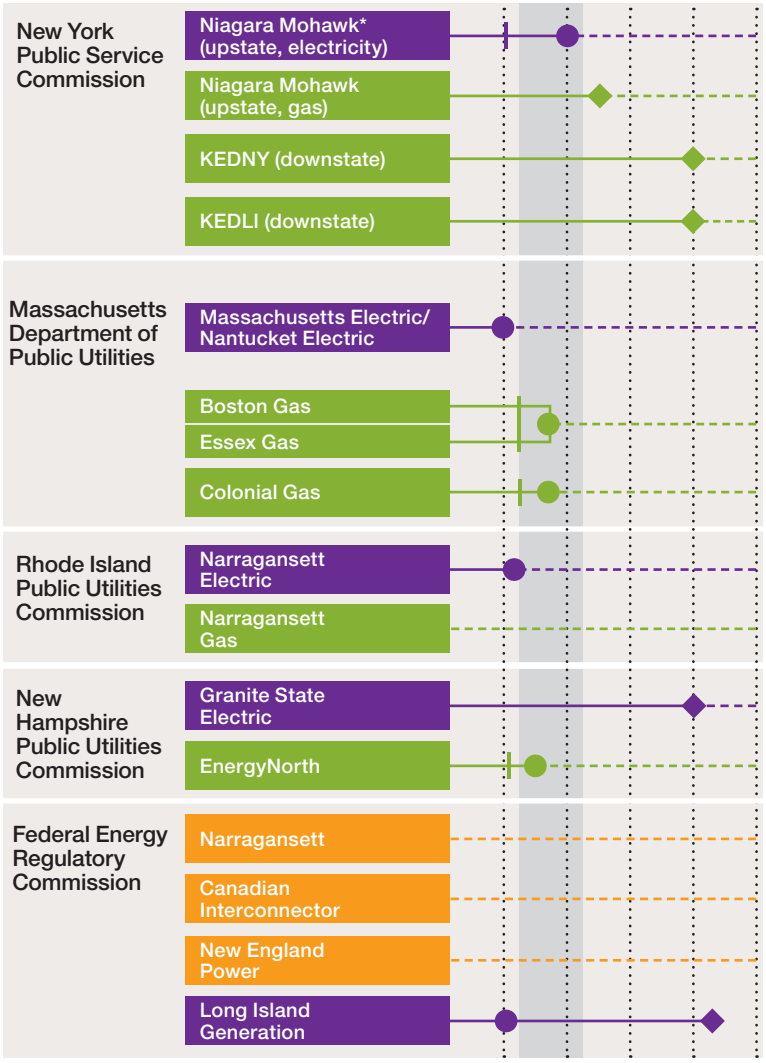
### Disposal of New Hampshire businesses

On 8 December 2010, National Grid signed an agreement with a subsidiary of Algonquin Power & Utilities Corp. for the sale of the EnergyNorth gas and Granite State electricity companies. The transaction is expected to close in the second half of 2011/12.

## Liberty Consulting Group audit

In September 2010, we commissioned Liberty Consulting Group (Liberty), a nationally recognised leader in providing independent audits of regulated businesses, to conduct a comprehensive review of our cost allocation process. Liberty was hired following questions about our cost allocation processes which surfaced during the upstate New York electricity and Massachusetts gas rate cases in August 2010. After a five month review, Liberty issued its final report including recommendations on our US accounting systems and practices. The review found no evidence of deliberate misallocation of expenses. Liberty's recommendations, including a focus on financial reporting by jurisdiction rather than by line of business, improving controls and training related to cost allocation, and moving toward a single, consolidated financial platform and cost allocation methodology, are generally in line with actions we are already taking to implement improvements.

## Summary of US price controls and rate plans




| Regulator | Rate plan | Rate base | Equity to debt ratio | Allowed return on equity | Actual return on equity | Revenue decoupling† | Capital tracker‡ | Commodity bad debt true up§ | Pension/ OPEB true up◊ |
|---|---|---|---|---|---|---|---|---|---|
| New York Public Service Commission | Niagara Mohawk* (upstate, electricity) | $3,674m* | 48 : 52 | 9.3% | 6.8% | ✓ | P | P | ✓ |
| | Niagara Mohawk (upstate, gas) | $890m | 44 : 56 | 10.2% | 6.2% | ✓ | ✗ | P | ✓ |
| | KEDNY (downstate) | $2,297m | 45 : 55 | 9.8% | 11.9% | P | P | P | ✓ |
| | KEDLI (downstate) | $1,943m | 45 : 55 | 9.8% | 10.2% | P | P | P | ✓ |
| Massachusetts Department of Public Utilities | Massachusetts Electric/ Nantucket Electric | $1,635m | 50 : 50 | 10.35% | 9.3% | ✓ | P | ✓ | ✓ |
| | Boston Gas | $1,334m | 50 : 50 | 9.8% | 0.7% | ✓ | P | ✓ | ✓ |
| | Essex Gas | $257m | 50 : 50 | 9.75% | 5.9% | ✓ | P | ✓ | ✓ |
| | Colonial Gas | | | | | | | | |
| Rhode Island Public Utilities Commission | Narragansett Electric | $574m | 43 : 57 | 9.75% | 8.3% | F | P | P | ✗ |
| | Narragansett Gas | $337m | 48 : 52 | 10.5% | 0.3% | F | P | P | ✓ |
| New Hampshire Public Utilities Commission | Granite State Electric | $62m | 50 : 50 | 9.67% | 3.6% | ✗ | P | ✓ | ✗ |
| | EnergyNorth | $207m | 50 : 50 | 9.67% | 1.1% | ✗ | P | ✓ | ✗ |
| Federal Energy Regulatory Commission | Narragansett | $238m | 50 : 50 | 11.14% | 11.8% | N/A | ✓ | N/A | ✓ |
| | Canadian Interconnector | $61m | 40 : 60 | 13.0% | 13.0% | N/A | ✓ | N/A | ✓ |
| | New England Power | $902m | 65 : 35 | 11.14% | 11.6% | N/A | ✓ | N/A | ✓ |
| | Long Island Generation | $529m | 45 : 55 | 10.75% | 11.2% | N/A | ✓ | N/A | ✓ |

Transmission
Gas Distribution
Electricity Distribution & Generation

Rate plan ends
Rates continue indefinitely
Rate filing made
New rates become effective

✓ Feature in place
✗ Feature not in current rate plan
P Feature partially in place
F Feature requested in pending filing per legislation

* Both transmission and distribution, excluding stranded costs

**†Revenue decoupling**
A mechanism that removes the link between a utility's revenue and sales volume so that the utility is indifferent to changes in usage. Revenues are reconciled to a revenue target, with differences billed or credited to customers. Allows the utility to support energy efficiency.

**‡Capital tracker**
A mechanism that allows for the recovery of the revenue requirement of incremental capital investment above that embedded in base rates, including depreciation, property taxes and a return on the incremental investment.

**§Commodity related bad debt true up**
A mechanism that allows the Company to reconcile commodity related bad debt to either actual commodity related bad debt or to a specified commodity related bad debt write-off percentage. For electricity utilities, this mechanism also includes working capital.

**◊Pension/OPEB true up**
A mechanism that reconciles the actual non capitalised costs of pension and other post-employment benefits and the actual amount recovered in base rates. The difference may be amortised and recovered over a period or deferred for a future rate case.

# Business drivers, principal risks and opportunities

## Business drivers

There are many factors that influence the success of our business and the financial returns we obtain. We consider the factors described here 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 regulatory approved price controls in the UK and rate plans in the US. These arrangements include incentive and/or penalty arrangements. The terms of these arrangements have a significant impact on our revenues.

### 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 Grain LNG importation terminal are determined by long-term contractual arrangements with blue chip customers.

### People

The skills and talents of our employees, along with succession planning and the development of future leaders, are critical to our success. We believe that business success will be delivered through the performance of all current and future employees, and enhanced by having a workforce that is diverse in its cultural, religious and community influences.

## Principal risks and opportunities

There are a number of risks that might cause us to fail to achieve our vision or to deliver growth in shareholder value. We can mitigate many of these risks by acting appropriately in response to the factors driving our business. The principal risks are described here. For more detail on risks, see pages 91 to 93.

### Regulatory settlements and long-term contracts

Our ability to obtain appropriate recovery of costs and rates of return on investment is of vital importance to the sustainability of our business. We have an opportunity to help shape the future of the regulatory environment, for example in our rate filings in the US. If we fail to take these opportunities, we risk failing to achieve satisfactory returns.

### 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. Failure to achieve satisfactory performance could affect our ability to deliver the returns we and our stakeholders expect.

### Talent and skills

Harnessing and developing the skills and talent of our existing employees, and recruiting, retaining and developing the best new talent, will enable us to improve our capabilities. Failure to engage and develop our existing employees or to attract and retain talented employees could hamper our ability to deliver in the future.

## Objectives

We have developed the Company strategy and objectives to address the key business drivers and risks, ensuring we manage the business appropriately so as to mitigate risks and optimise opportunities. For more detail on objectives, see pages 38 and 39.

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

Building trust, transparency, and an inclusive and engaged workforce

Developing our talent, leadership skills and capabilities

## Key performance indicators (KPIs)

We use a variety of performance measures to monitor progress against our objectives. Some of these are considered to be key performance indicators and are set out here. For more detail on performance, see pages 40 to 69.

- Adjusted earnings per share
- Group return on equity
- Total shareholder return
- Employee engagement index

### Capital investment

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

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

### Relationships and responsibility

Our reputation is vitally important to us. We only earn the trust and confidence of our stakeholders by conducting our business in a responsible manner. Our reputation depends on our behaviours being lawful and ethical, on complying with our policies and licences, and on living up to our core values.

### 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.

### Investment in our networks

Our future organic growth is dependent on the delivery of our capital investment plans. In order to deliver sustainable growth with superior financial performance we will need to finance our investment plans. Instability in the financial markets, loss of confidence by investors, or inadequate returns on our investment may restrict our ability to raise finance.

### Safety, reliability and customer service

The returns we generate are dependent on operating safely and reliably, and providing a quality service to customers. If we fail to meet our regulatory targets or the high standards we set ourselves, we risk loss of reputation as well as financial penalties imposed by regulators.

### Efficiency

Simplifying and standardising our systems and processes will drive efficiency and reduce costs. Transforming our operating model should enable us to deliver increased value to our shareholders. If we do not achieve the expected benefits in efficiency, then shareholder value will not grow as we hope or will diminish.

### Sustainability and climate change

Safeguarding our global environment for future generations is dependent on integrating sustainability and climate change considerations into our business decisions and influencing legislators, regulators, employees, customers and suppliers to address climate issues and become more environmentally responsible.

### Expanding our capabilities and identifying growth opportunities

We seek to identify, evaluate and acquire new businesses that build on our core regulated operations. If we are unable to acquire businesses with the correct strategic fit it may restrict our future growth and our ability to increase shareholder value. The acquisition of new businesses is dependent on our ability to fund transactions through internal cash flows or the issuance of new debt or new shares.

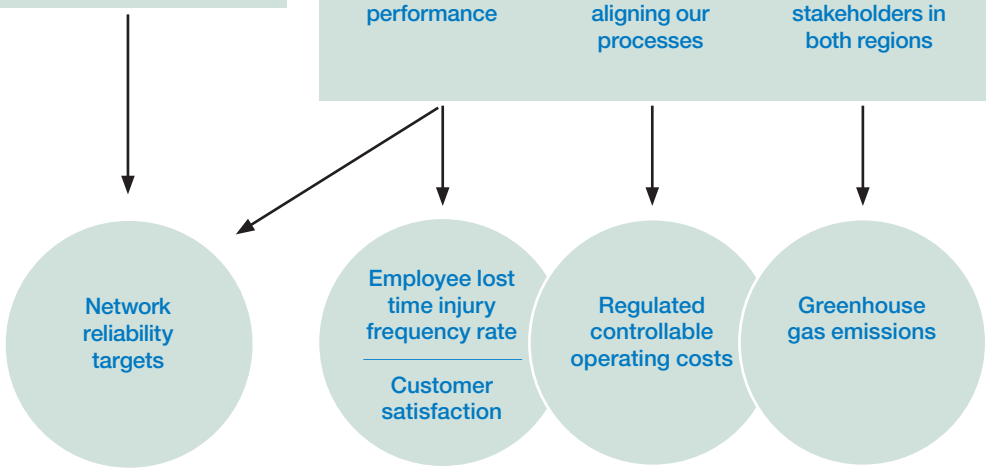
Modernising and extending our transmission and distribution networks

Driving improvements in our safety, customer and operational performance

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

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

Expanding our capabilities and identifying new financeable opportunities to grow



# Vision, strategy and objectives

## Vision

Our vision is the long-term aspiration for National Grid: what we want to be in the future. Our vision statement has remained unchanged since we first published it in 2007:

**We, at National Grid, will be the foremost international electricity and gas company, delivering unparalleled safety, reliability and efficiency, vital to the wellbeing 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.**

## Strategy

Our strategy is a medium-term step in our journey to achieve the vision: what we will be doing over the next few years. It is also the overarching principle which provides commercial context to each of the objectives and actions.

Our strategy is designed to ensure that the objectives remain aligned with the factors that drive our business. To see how those factors are aligned, see pages 36 and 37. For the last three years, our strategy has been expressed in these terms:

**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.**

## Objectives

To guide leaders, managers and individuals in our businesses and help deliver the strategy, we set out eight Company objectives:

- 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

These are the objectives against which our performance has been measured this year. A summary of our progress is set out below, and a detailed discussion of our performance against each of the objectives can be found on pages 42 to 53.

## Line of sight

In a number of places in this report, we refer to the principle of line of sight. What we mean by this principle is that the individual objectives of every employee should be set by reference to the Company objectives, strategy and vision, ensuring that every individual is encouraged and incentivised to contribute to the same collective goals. Consequently the actions required to deliver the strategy are allocated and aligned with employee responsibilities.

## Performance for growth

Our performance, talent and reward management process for managers is known as performance for growth (P4G). Formal annual P4G performance appraisals are carried out for every manager against their individual objectives and against the National Grid leadership qualities. The appraisal assesses both what the individual has achieved during the year and how those outcomes have been achieved. Our staff performance and reward framework for non managerial grades, delivering performance, applies the same principles in aligning individual objectives with those of the Company.

## Strategy for 2011/12

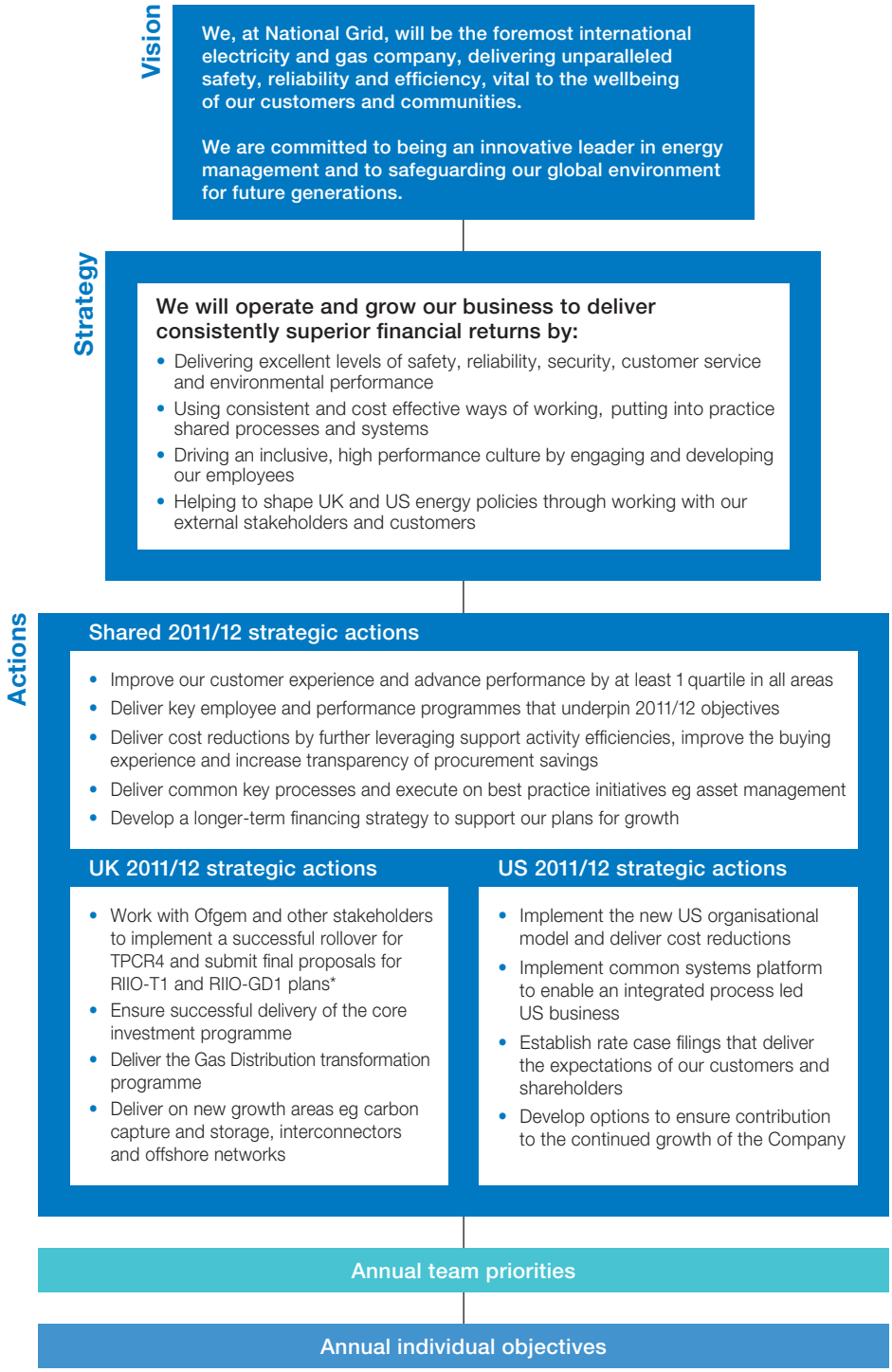
We have updated our line of sight framework and this refreshed framework reflects the new organisational arrangement, namely moving from a line of business structure to a regional structure, as set out on page 22. In addition, we have increased the level of transparency of our strategic actions. This change will improve the connection between individual actions and the achievements the organisation needs to make in the year.

The refreshed framework is shown opposite. This reflects our modified operating model in explicitly organising our business on a regional basis: UK and US. Our strategy is evolving to reflect the different challenges and operating environments we face (eg the regulatory frameworks differ significantly between the UK and US, as well as differences in energy policy direction). We will continue to exploit the scale benefits of having a global business, as set out in the shared strategic actions, but our new regional organisation will also help us to overcome the different challenges that our businesses face while ensuring a clear link with all our stakeholders.

We have worked hard to ensure that future UK price controls reflect the need for substantial and timely investments to ensure climate change targets and security of supply requirements are met, while delivering acceptable and timely returns.

In the US, our focus remains on filing rate plans and achieving appropriate rate outcomes, while also addressing our cost base. 2010/11 has seen some progress but there is more to do.

# 2011/12 line of sight framework




*These are the forthcoming price controls for our UK regulated businesses. Transmission price control 4 (TPCR4) is the one year extension of the current price control for transmission to March 2013. The first RIIO price controls (RIIO-T1 for transmission, RIIO-GD1 for gas distribution) will start in April 2013

# Key performance indicators (KPIs)

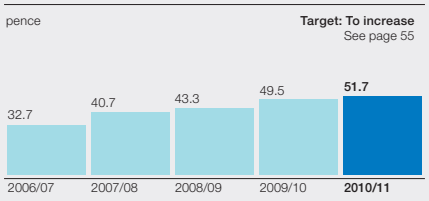
## Financial KPIs

| Company strategy and objectives | Financial KPIs | Definitions |
|---|---|---|
| Sustainable growth and superior financial performance | Adjusted earnings per share | Adjusted earnings* divided by the weighted average number of shares |
| | Total shareholder return | Average of the closing daily TSR levels for the 30 day period up to and including that date, assuming dividends have been reinvested |
| Delivering strong, sustainable regulatory and long-term contracts with good returns | Group return on equity | Adjusted earnings* with certain regulatory based adjustments divided by equity |
| Becoming more efficient through transforming our operating model and increasingly aligning our processes | Regulated controllable operating costs | Regulated controllable operating costs, excluding bad debts, as a proportion of regulated assets |

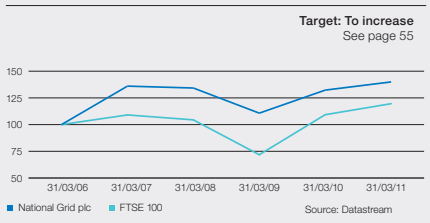
Our performance and the progress we have made against our strategic aims and against the objectives we have set ourselves are described below and on the following pages. Commentary on our overall financial results can be found on pages 54 to 59, and information on the performance and financial results of each line of business is set out on pages 60 to 68.

We measure the achievement of our objectives both through the use of qualitative assessments and through the monitoring of quantitative indicators. To provide a full and rounded view of our business, we use non-financial as well as financial measures. Although all these measures are important, some are considered to be of more significance than others, and these more significant measures are designated as KPIs. Our financial and non-financial KPIs are highlighted here. KPIs are used as our primary measures of whether we are achieving our principal strategic aims of sustainable growth and superior financial performance. We also use KPIs to measure our performance against our objectives; the relationships between the objectives and the KPIs is explained above.

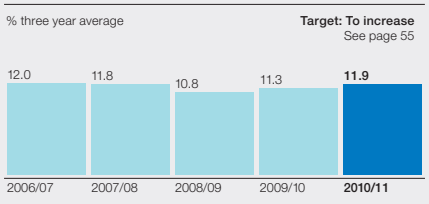
### Adjusted earnings per share*+†



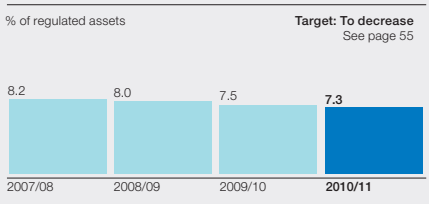

### Total shareholder return




### Group return on equity^




### Regulated controllable operating costs◊




* Adjusted earnings exclude exceptional items, remeasurements and stranded cost recoveries
\+ 2007/08 data include continuing operations acquired with KeySpan for the period from 24 August 2007 to 31 March 2008 or as at 31 March 2008
† Comparative data have been restated for the impact of the bonus element of the rights issue and the scrip dividend issues
^ 2007/08 results include KeySpan operations on a pro forma financial performance basis assuming the acquisition occurred on 1 April 2007
◊ Prior years have been restated on a constant currency basis

## Non-financial KPIs

| Company objectives | Non-financial KPIs | Definitions |
|---|---|---|
| Modernising and extending our transmission and distribution networks | Network reliability targets | Various definitions appropriate to the relevant line of business |
| Driving improvements in our safety, customer and operational performance | Customer satisfaction | Our position in customer satisfaction surveys |
| | Employee lost time injury frequency rate | Number of employee lost time injuries per 100,000 hours worked on a 12 month basis |
| Building trust, transparency and an inclusive and engaged workforce | Employee engagement index | Employee engagement index calculated using responses to our employee survey |
| Positively shaping the energy and climate change agenda with our stakeholders in both regions | Greenhouse gas emissions | Percentage reduction in greenhouse gas emissions against our 1990 baseline |

### Network reliability targets

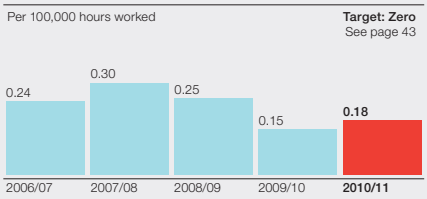
| | Performance | | | | | Measure | Target |
|---|---|---|---|---|---|---|---|
| | 06/07 | 07/08 | 08/09 | 09/10 | **10/11** | | 10/11 |
| Electricity transmission – UK | 99.9999 | 99.9999 | 99.9999 | 99.9999 | **99.9999** | % | 99.9999 |
| Gas transmission – UK | 100 | 100 | 100 | 100 | **100** | % | 100 |
| Gas distribution – UK | 99.999 | 99.999 | 99.9999 | 99.999 | **99.999** | % | 99.999 |
| Electricity transmission – US | 259 | 437 | 266 | 147 | **414** | MWh losses | <204 |
| Electricity distribution – US | 121 | 110 | 114 | 114 | **123** | Mins of outage | <122 |

See page 45 for additional details on network reliability

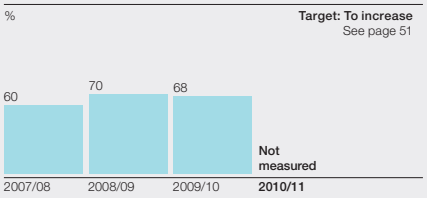
### Customer satisfaction

| | Performance (quartile) | | | Measure | Target |
|---|---|---|---|---|---|
| | 08/09 | 09/10 | **10/11** | | |
| Gas Distribution – UK | 4th | 4th | **4th** | Quartile ranking | To improve |
| Gas Distribution – US: Residential | 4th | 3rd | **2nd** | Quartile ranking | To improve |
| Gas Distribution – US: Commercial | 3rd | 2nd | **4th** | Quartile ranking | To improve |
| Electricity Distribution & Generation: Residential | 4th | 4th | **3rd** | Quartile ranking | To improve |
| Electricity Distribution & Generation: Commercial | 4th | 3rd | **2nd** | Quartile ranking | To improve |

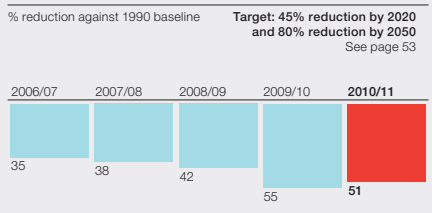
### Employee lost time injury frequency rate




### Employee engagement index




### Greenhouse gas emissions~




~ 2007/08 restated due to improved baseline data relating to KeySpan. Previously published figure excluding KeySpan was 30%

# Performance against objectives

We use a number of detailed performance measures in addition to the key performance indicators (KPIs) shown on pages 40 and 41, reflecting the scale and complexity of our operations. We use qualitative assessments to judge progress against our objectives in areas where numerical measures are less relevant.

## Alignment of performance measures and strategy

Our strategy and the Company objectives for 2010/11 are set out on page 38. Our performance in implementing the key elements of our strategy is measured in the following ways.

### We will build on our core UK and US electricity and gas regulated business base...

We invest in our existing business in order to improve efficiency and reliability and to support our targeted dividend growth. We will also consider acquisitions in these core areas, but only where we believe we can derive added value for our investors.

Our KPIs in this area, as shown on pages 40 and 41, are total shareholder return and network reliability. Other performance measures include capital investment (see pages 47 to 49), and dividend growth (see page 55).

### ...and financial discipline...

We seek to control operating costs and to invest capital only where we expect to be able to obtain an acceptable return. We are committed to maintaining a single A range credit rating at the UK operating company level.

Our KPI in this area, as shown on page 40, is regulated controllable operating costs presented as a proportion of regulated assets. Other performance indicators include regulatory returns (see page 31 for UK returns and page 35 for returns for US businesses) and interest cover (see page 56).

### ...to deliver sustainable growth...

There are a number of factors that determine the extent to which growth is sustainable. We believe that operational excellence will help us to build and maintain good relationships with our customers and regulators. Managing the skills and talents of our employees helps us to recruit, retain and develop the best possible talent, creating a diverse and motivated workforce and positioning ourselves to take advantage of present and future opportunities.

Our KPIs in this area, as shown on page 41, are customer satisfaction, employee lost time injury frequency rate, employee engagement index and greenhouse gas emissions. Other performance measures include measures of gender and ethnic mix.

### ...and superior financial performance.

We aim to deliver superior returns to our investors, and to ensure that the value we create is reflected in our share price.

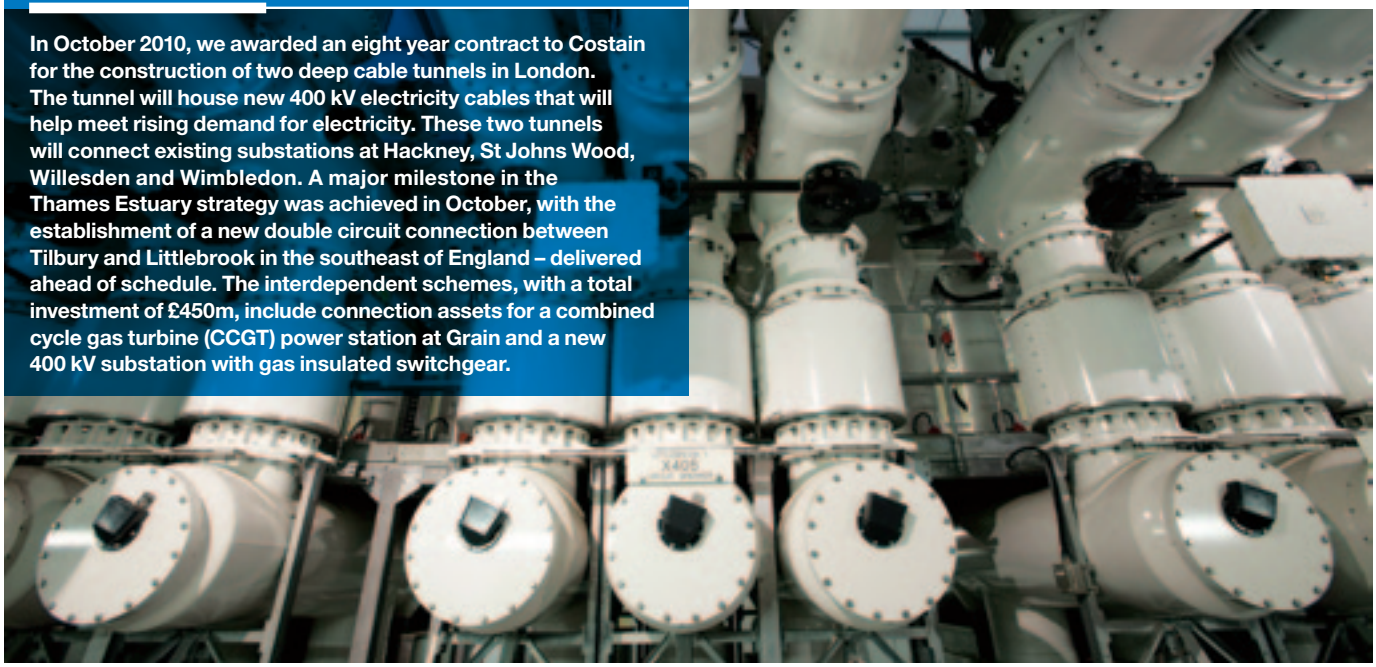
Our KPIs in this area, as shown on page 40 and discussed on page 55, are total shareholder return and adjusted earnings per share. Other performance measures include adjusted operating profit for the year (see pages 56 to 59) and operating cash flows (see page 69). A full discussion of our financial performance can be found on pages 54 to 69.

## Future changes to performance measures

Following the strategic review discussed on page 38, and the adoption of the new Company and regional objectives noted on page 39, we will be reviewing our KPIs and other performance measures and will report any changes in the 2011/12 Annual Report and Accounts.

## OCTOBER 2010

**In October 2010, we awarded an eight year contract to Costain for the construction of two deep cable tunnels in London. The tunnel will house new 400 kV electricity cables that will help meet rising demand for electricity. These two tunnels will connect existing substations at Hackney, St Johns Wood, Willesden and Wimbledon. A major milestone in the Thames Estuary strategy was achieved in October, with the establishment of a new double circuit connection between Tilbury and Littlebrook in the southeast of England – delivered ahead of schedule. The interdependent schemes, with a total investment of £450m, include connection assets for a combined cycle gas turbine (CCGT) power station at Grain and a new 400 kV substation with gas insulated switchgear.**



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

### Safety

Safety is critical both to business performance and to helping to define the culture of the Company for our employees. We recognise that our operations potentially give rise to risk and that some of our assets could have catastrophic consequences to surrounding communities if not properly controlled. We believe we can eliminate or minimise those risks to achieve zero injuries or harm and to safeguard members of the public. We further believe that everyone in National Grid, collectively and individually, has a part to play in achieving this.

### Process safety

Process safety has been in the headlines in recent years as a result of incidents affecting other companies such as the Deepwater Horizon incident in the Gulf of Mexico, the Buncefield explosion in the UK and the San Bruno pipeline explosion in California. While we have not had any significant incidents, operating major hazard sites and pipelines means managing process safety risks is always at the front of our thoughts in the way we run our business. As well as ensuring we have effective management systems in place, we look to incidents at other companies to learn any lessons.

We have continued to report process safety KPIs up to Executive level throughout the year and have focused on the effectiveness of the action plans to address any issues. This has been reinforced by getting our leadership team out into the field to discuss process safety. We see this as a critical element to demonstrating both leadership commitment and that we listen to the views of our employees.

In 2010/11, we continued to converge our approach to process safety management across the Company with the development of a Group level major accident hazard framework. Each part of our business has an effective safety management system in place which is the product of the legislation in the region and specific asset management policies. While this has delivered compliance, the implementation of a Group framework will ensure greater consistency and support the drive for continual improvement. With elements covering risk assessment, control standards and overarching management requirements, implementation throughout 2011/12 will require each part of the business to demonstrate it has adequate controls in place. This will be supported by a cross group peer review process to provide assurance and facilitate the sharing of good practice.

### Occupational safety

We report our employee 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 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.

Following a significant reduction in lost time injury frequency rate from 0.25 in 2008/09 to 0.15 in 2009/10, this year saw a slight deterioration, although most of the gains made in the previous year have been sustained. At the end of 2010/11, lost time injury frequency rate was 0.18 and the number of lost time injuries was 96 compared with 86 in 2009/10. Definitions for lost time injury and lost time injury frequency rate are included in the glossary on page 185.

At the same time, we have seen a significant improvement in the lost time injury performance of our contract partners' workforce. In 2010/11, there were 51 contractor lost time injuries compared with 85 in 2009/10.

The principal causes of lost time injuries were road traffic collisions, musculoskeletal injuries and slips, trips and falls. This year has seen a range of programmes implemented to improve performance in these areas including: installing cameras in our vehicles in the US to enable better investigation of road traffic collisions; running safe driving workshops in conjunction with local police forces in the UK; sharing good practice from the US soft tissue injury prevention programme to develop a similar programme in the UK looking at ergonomic assessment; early referral of injury to physiotherapists; and rehabilitation of people with long-term injuries.

However, lost time injury frequency rate only shows part of the picture and we measure a range of other KPIs internally to ensure we control our safety risks. This year has seen particular emphasis on high potential incidents. These are typically the near misses that do not result in harm, but have the potential for serious injuries. Examples include: dropped loads, vehicles overturning, contact with overhead electrical conductors and damaging underground cables. Distinguishing these incidents in terms of potential severity has allowed us to use novel ways to communicate learning to our workforce, such as publishing a 'red top' style newspaper featuring the stories of people involved in the incidents. It also provides the focus on developing campaigns to improve performance before people get hurt.

### Public safety

The safety of the public in the communities we serve is of prime importance to us. In 2010/11, 52 members of the public were injured as a result of our activities, compared with 39 in 2009/10 (restated from 44 to remove five incidents not attributable to National Grid activities). The principal causes of injury were slips, trips and falls around our streetworks and road traffic collisions with our vehicles.

### Enforcement action

During 2010/11, we received two Improvement Notices in the UK from the Health and Safety Executive (HSE). The first was in relation to the maintenance of a short section of buried steel pipe running from an LPG vessel at one of our training centres. The notice was complied with and the pipe was subsequently found to be plastic. The second notice was in relation to our approach to collecting data on the condition of service pipes in blocks of flats. We have agreed a programme of work with the HSE to be completed by the end of September 2011.

In the US, we received five citations from the Occupational Safety and Health Administration totalling $21,750 (£13,854). These were as a result of an incident in an excavation where the side collapsed injuring an employee.

# Performance against objectives continued

### Customer service

Excellent customer service is not only consistent with our values and simply the right thing to do, it makes good business sense as good customer service means fewer complaints and decreased rework.

#### Gas Distribution UK

Over the summer of 2010, work was completed on a new five year Gas Distribution customer strategy. While building on a number of existing initiatives to improve customer performance, we expect to benefit from continuous improvement to our current working practices and processes, and the implementation of our new customer and user friendly systems (see Gas Distribution front office on page 50).

We recognise that system and process change alone is not enough to get us to our targets; we require more to deliver the standards of customer service to which we aspire. In 2011/12, we aim to change the look and feel of the interaction customers experience with us through the internet and printed media, including reviewing other companies' methods to determine best practice. We will be able to use better management information to identify areas for closer focus for continuous improvement. We will develop and implement a stakeholder communication plan and implement training to support delivery of customer service. We will also improve our complaints handling processes to ensure we meet the Ofgem incentive and drive down complaints by understanding root causes and learning from them.

It is important to develop meaningful performance measurement tools, including performance targets for employees and contract partners to incentivise excellent performance.

Early indications are that our new strategy is driving improvements. All our networks are moving forward and we are scoring at or above our expectations for customer satisfaction.

#### Transmission UK

Transmission UK is facing a period of unprecedented change within the energy sector. To deliver our part in meeting the government targets we will need to be a flexible organisation that is in tune with the market environment and with our customers.

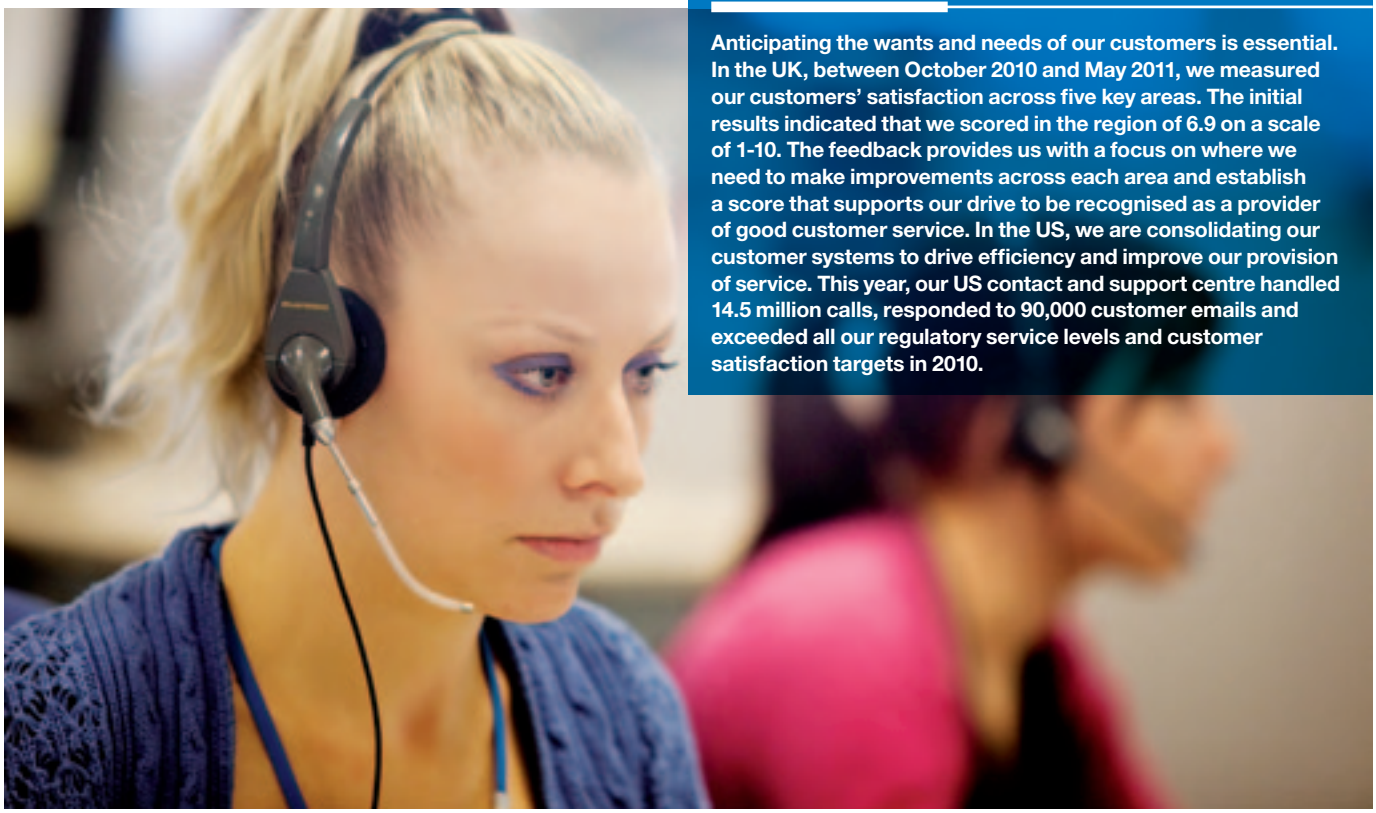
Our growing list of customers includes new developers, (from nuclear to wind, both on and offshore, wave and tidal power), gas storage and our more conventional gas and electricity customer connections. These new entrants will need our help in understanding our business and its complexity. We should not forget that we have a significant existing customer group who rightly expect us to deliver great customer service too. As customers ourselves, this is something we can and do expect.

Using information we have gathered from our customers and our employees, we are on our way to making the cultural shift in the way we behave and the way in which we do things. We are reviewing our internal interactions to assess their impact on our service provision, we are looking to ensure our website is a valued information resource, we will communicate the service level our customers can expect and are supporting our employees in developing their customer service skills.

We will continue to listen and respond to our customers and act upon their feedback. It is important to us that our customers recognise us as a company that is good to do business with and one that listens.

## OCTOBER 2010

**Anticipating the wants and needs of our customers is essential. In the UK, between October 2010 and May 2011, we measured our customers' satisfaction across five key areas. The initial results indicated that we scored in the region of 6.9 on a scale of 1-10. The feedback provides us with a focus on where we need to make improvements across each area and establish a score that supports our drive to be recognised as a provider of good customer service. In the US, we are consolidating our customer systems to drive efficiency and improve our provision of service. This year, our US contact and support centre handled 14.5 million calls, responded to 90,000 customer emails and exceeded all our regulatory service levels and customer satisfaction targets in 2010.**



## US

Anticipating the wants and needs of our customers is essential to creating a future which delivers customer satisfaction. This year we have advanced projects supporting further consolidation of our customer systems which will drive efficiency and also provide improved customer service. The focus remained on strengthening our proactive collections strategy which provides for flexibility to treat customers differently based on their risk profile, no longer employing a uniform approach for all customers. In addition, we are piloting a home working programme for some of our employees designed to enhance employee satisfaction and loyalty while driving cost efficiencies.

### Customer satisfaction

Reliable and efficient customer services are priorities. Improvements in our operations and how customers conduct their business with us have led to improvements in customer satisfaction. A key customer satisfaction metric comes from the J.D. Power and Associates independent customer satisfaction studies. Since the beginning of 2009, we have shown improvement overall in the J.D. Power satisfaction studies, moving from third to second quartile in two surveys, moving from fourth to third quartile in a third survey but falling to the fourth quartile in the commercial gas distribution survey in 2011.

We continue to enhance the experience customers have with us, giving them the channels and options they want to conduct their business with us. Our contact and support centre exceeded all regulatory service level and customer satisfaction targets in 2010.

The contact and support centre is the face of the Company to each and every one of our customers. Last year the centre handled 14.5 million calls, conducted 850,000 customer office interviews and responded to 90,000 customer emails. The success of our credit and collection programmes have helped to mitigate the effects of the economy on our bad debts, with write-offs being reduced by over $54 million (£34 million). Our consumer advocacy group assisted over 18,000 of our most vulnerable customers, who have demonstrated an inability to pay their energy bills, by identifying available programmes or services and implementing personalised payment plans designed to meet their individual needs.

### Customer energy solutions

The customer energy solutions (CES, formerly customers and markets) group was designed to deliver integrated energy management solutions to help customers make better energy choices. Established in May 2010, CES is responsible for understanding market and customer needs, developing energy products and services, delivering integrated energy solutions and maintaining relationships with communities, key customers and local governments in support of business plans and priorities.

Given our customers' economic concerns, CES's marketing communications use bill inserts, direct mail and social media to provide customers with tips on how to manage their energy usage. To drive energy efficiency performance in our service territory, CES manages more than 100 different programmes across our regions and a budget of more than $400 million (£250 million) and growing. Since the inception of our efficiency programmes, more than 5.5 million National Grid customer projects have been completed in New England, saving over $4.0 billion (£2.5 billion) in lifetime energy costs and other benefits. Our programmes save customers nearly $80 million (£50 million) annually.

CES is also responsible for stakeholder management, which involves engaging the communities we serve when we are planning large construction projects to improve our service to customers. Further, as part of our energy management portfolio we consistently engage in research and development opportunities to provide diverse energy solutions offerings that include solar generation, alternative fuel and energy efficient options for our residential and commercial customers. We also help drive regional economic growth through economic development programmes.

## Reliability

### Transmission

We continue to maintain a world class standard of transmission network reliability in the UK, with reliability scores of 99.9999% for electricity and 100% for gas. Electricity network availability, which is affected by asset replacement activity, was 93.6% on average (2009/10: 94.76%), increasing to 96.95% (2009/10: 97.55%) for the winter peak demand.

In the US, annual electricity transmission network availability improved significantly to 99.97% from 98.8% last year. Peak demands were 7.580 GW in New England and 6.915 GW in upstate New York.

### Gas Distribution

In the UK, despite the severe winter, we again achieved a high network reliability level of 99.999%, reflecting the low volume of customer interruptions during the year. We met our regulatory standards of service with the exception of one dealing with a category of connection quotations and several dealing with gas escapes. The coldest weather in December in over a century significantly increased emergency workload and hindered our engineers' travel. As a result we fell short in six of our eight standards of service for gas escapes, where we are required to attend 97% of the escapes between one and two hours of the report.

The US Gas Distribution business met all regulatory requirements regarding 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; inspections; meter changes; and main and service replacements.

### Electricity Distribution & Generation

We achieved all our regulatory reliability targets in upstate New York, Long Island and Nantucket. Massachusetts Electric achieved one regulatory target but failed to meet the other because of a wind storm in February. We have filed a request for this event to be excluded, but may incur a penalty of $5.5 million (£3.5 million) if that request is not granted. In New Hampshire we achieved one of our two regulatory targets, but no penalty applies for failure to meet the second target. In Rhode Island we failed to meet our regulatory targets and may incur a small penalty.

# Performance against objectives continued

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

### Regulation

For a full description of UK regulation, including the key elements of current price controls and developments in the year, see pages 30 and 31.

For a full description of US regulation, including the key elements of our current rate plans and developments in the year, see pages 32 to 35.

### Long-term contracts

On 7 May 2010, we signed an agreement with Cape Wind Associates to buy clean power from the first large scale offshore wind farm in the US. On 22 November 2010, the Massachusetts regulator approved the amended 15 year power purchase agreement between Massachusetts Electric, Nantucket Electric, Cape Wind Associates and the Attorney General of the Commonwealth of Massachusetts. We have an option to extend the contract for a further 10 years. Under the contract, we will purchase 50% of the wind farm's output at a fixed rate per kilowatt hour in the first full year of operation, rising at 3.5% per annum thereafter. This includes electricity, capacity and renewable energy attributes, and will begin on the commercial operation date of the facility, which is anticipated to be by the end of 2012. The contract will enable us to comply with the Massachusetts renewable energy and greenhouse gas emissions reduction requirements, and will enhance reliability and moderate peak load. Cape Wind has a capacity of 468 MW.

On 30 June 2010, pursuant to Rhode Island legislation passed in 2010, Narragansett Electric and Deepwater Wind signed an amended 20 year power purchase agreement for electricity generated from Deepwater's initial 28.8 MW offshore wind project near Block Island, Rhode Island. On 11 August 2010, the Rhode Island regulator approved the power purchase agreement between the two companies. The agreement is an amendment of an earlier purchased power agreement executed in 2009 but includes, among other things, a fixed bundled price under the contract in its first year as well as the ability of any project savings to be flowed through the agreement for the benefit of our customers. The initial offshore wind project will include up to eight turbines and we would buy Deepwater's output for a fixed rate per kilowatt hour in 2013, escalating at 3.5% per year.

## NOVEMBER 2010

**In the UK, a new high pressure pipeline was constructed in the Cotswolds to satisfy the requirement for additional capacity into the gas national transmission system. Gas can now be transported from the Wormington compressor station to an above ground installation at Sapperton in Gloucestershire via a pipeline over 40 km long. This pipeline presented significant design and engineering challenges and, due to environmental and physical constraints, the majority of the pipeline had to be routed through an area of outstanding natural beauty. The project team established relationships with statutory consultees, landowners and residents affected by the construction activities. We received praise from Cotswold District Council and Conservation Board for our workmanship.**


After completion

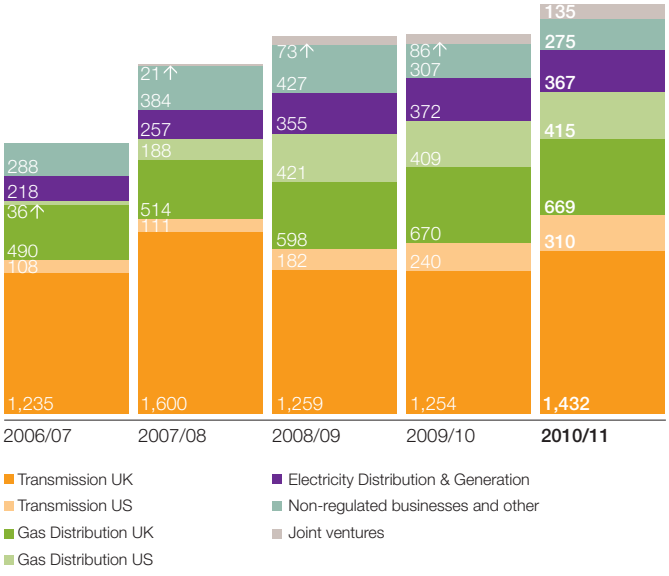

During works

## Modernising and extending our transmission and distribution networks

The principal measure we use to monitor organic investment is capital expenditure, including investment in property, plant and equipment, and software. The graph below shows our capital expenditure over the last five years, by segment. The largest area of organic growth is in the Transmission segment in the UK, and we expect that to be the case for the next few years.

**Capital expenditure by segment**

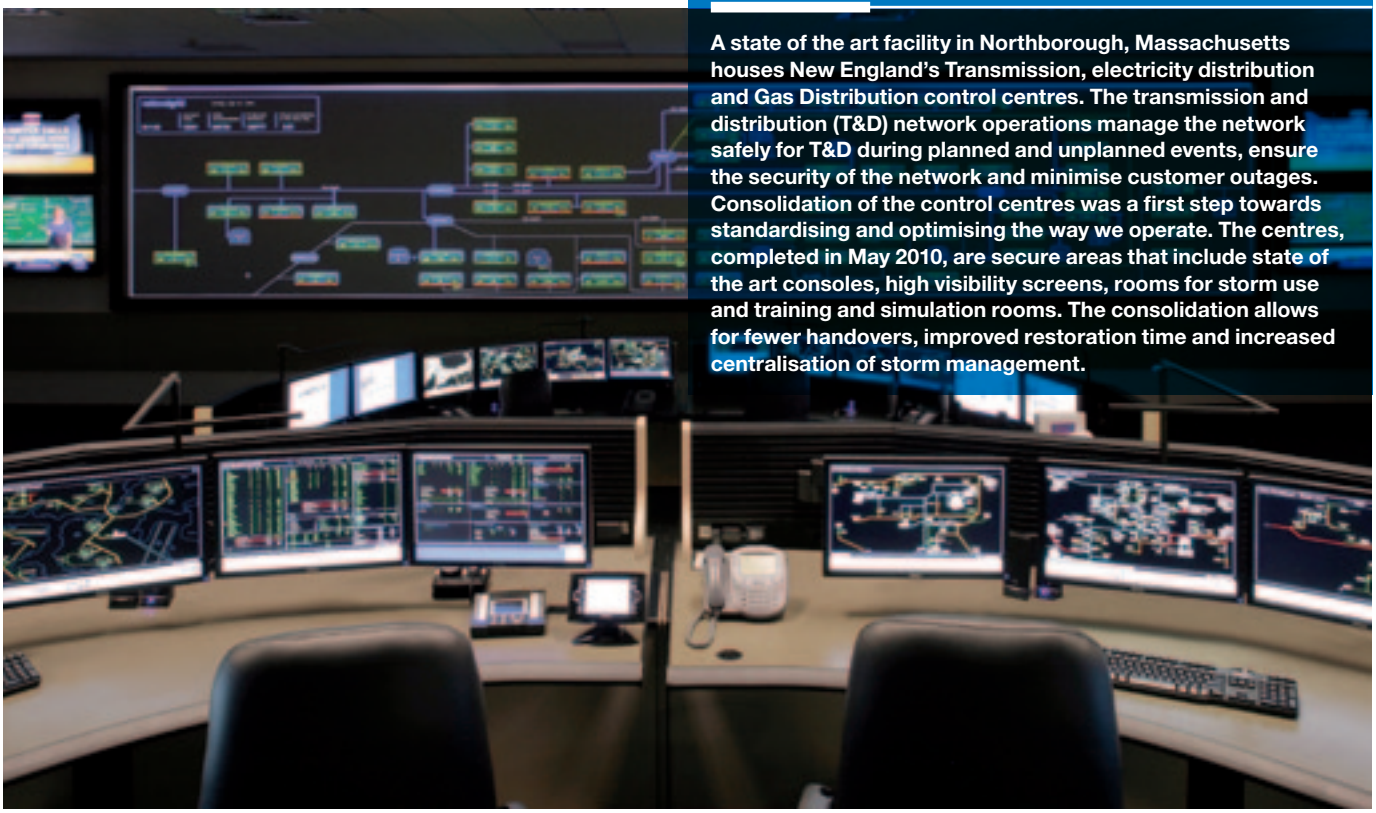
£m




We have delivered a record level of capital investment this year of £3,603 million, including joint ventures, with significant projects across the Company but particularly in the UK where investment is focused on structural changes to the sources of gas and electricity supply. Ageing equipment and carbon reduction targets are leading to the retirement of existing generating capacity and demands to connect low carbon and renewable generation. Our role is to ensure that these new sources of energy can be delivered to areas of demand: a critical role in meeting the UK government's climate change agenda and achieving the associated $CO_2$ reduction targets by 2020. We continue to expect this to drive further growth in capital investment in coming years.

Over the past year we saw further increases in demand for connections of renewable generation to the UK electricity transmission system. In 2010/11, the level of renewable generation already connected or with firm connection requests reached the level required to meet the UK renewable energy target of more than 30% of electricity being generated from renewable sources by 2020.

We ensure, before any investment is undertaken, that we are clear how and when it will be remunerated and we only look to invest capital where we expect to be able to earn an acceptable return. Combined with procurement efficiencies this disciplined approach to capital investment has restricted the level of increase in our capital expenditure to approximately £265 million compared with last year.



## MAY 2010

**A state of the art facility in Northborough, Massachusetts houses New England's Transmission, electricity distribution and Gas Distribution control centres. The transmission and distribution (T&D) network operations manage the network safely for T&D during planned and unplanned events, ensure the security of the network and minimise customer outages. Consolidation of the control centres was a first step towards standardising and optimising the way we operate. The centres, completed in May 2010, are secure areas that include state of the art consoles, high visibility screens, rooms for storm use and training and simulation rooms. The consolidation allows for fewer handovers, improved restoration time and increased centralisation of storm management.**

# Performance against objectives continued

### Transmission UK

Capital investment of £1,432 million in 2010/11 (2009/10: £1,254 million; 2008/09: £1,259 million) mainly related to UK electricity transmission including investment to facilitate connection of renewable generation, the Thames Estuary reinforcement and our London cable tunnels project. Capital investment included £27 million with respect to intangible assets, principally software applications (2009/10: £21 million; 2008/09: £18 million).

### Transmission US

Capital investment was £310 million in 2010/11 (2009/10: £240 million; 2008/09: £182 million). After excluding the £1 million effect of exchange movements, capital investment increased by £69 million in 2010/11 compared with 2009/10. The change principally reflects the increased investment in improving regional reliability including the New England East-West Solution, and the refurbishment of overhead lines in New England.

### Gas Distribution UK

Capital investment of £669 million in 2010/11 (2009/10: £670 million; 2008/09: £598 million) consisted of £476 million replacement expenditure (2009/10: £465 million; 2008/09: £425 million) and £193 million other capital investment (2009/10: £205 million; 2008/09: £173 million). Expenditure on software applications included within the above amounts was £75 million (2009/10: £54 million; 2008/09: £22 million). The increase in expenditure is primarily driven by the Gas Distribution front office system (see page 50).

Replacement expenditure increased by £11 million compared with 2009/10. Performance under the mains and services replacement incentive scheme has been adversely affected by the severe winter weather and we therefore expect to make a loss on this incentive in 2010/11.

In collaboration with our gas alliance and coalition partners, we have replaced 1,791 kilometres of metallic gas main this year and more than 15,000 kilometres since 2002/03. The vast majority of this relates to the long-term gas main replacement programme agreed with the Health and Safety Executive.

The reduction in other capital expenditure in 2010/11 compared with 2009/10 primarily reflects the completion of a major new pipeline in west London in 2009/10.

### Gas Distribution US

Capital expenditure of £415 million in 2010/11 (2009/10: £409 million; 2008/09: £421 million) mainly related to the replacement, reinforcement and extension of our US gas distribution networks. After excluding the effect of exchange movements of £1 million in 2010/11 compared with 2009/10, capital expenditure increased by £5 million, reflecting a greater volume of main and service replacements, coupled with higher growth programme spending, partially offset by a decrease in reliability programme spending.

### Electricity Distribution & Generation

Capital investment of £367 million in 2010/11 (2009/10: £372 million; 2008/09: £355 million) mainly related to distribution line mandatory installations and statutory inspection and maintenance programmes, and policy driven spending associated with our feeder hardening, reliability, asset improvement and load relief programmes, substation asset condition improvement, solar investment and main office and special purpose facility renovations. After excluding the effect of exchange movements of £1 million in 2010/11 compared with 2009/10, capital investment decreased by £6 million.

### Non-regulated businesses and other

Capital investment amounted to £275 million in 2010/11 (2009/10: £307 million; 2008/09: £427 million). We have delayed a decision on the construction of a fourth phase at our Isle of Grain LNG terminal until demand is clearer.

## DECEMBER 2010

**Grain LNG's phase III capacity expansion began commercial operations in December 2010. During the winter cold spell, on a number of occasions Grain LNG had the highest output of the country's three LNG terminals. In early January 2011, the 200th LNG vessel was unloaded bringing the amount of energy delivered into the UK gas market through the terminal to almost 200,000 GWh. Capacity is now equivalent to 20% of annual UK gas demand, helping to meet the UK's strategic need for a more diverse energy mix. Grain LNG now has two jetties, capable of berthing and unloading the world's largest LNG ships with a capacity of up to 265,000 cubic metres, into four of the world's largest above ground LNG storage tanks.**

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

In addition to the capital expenditure discussed above, we are actively investigating opportunities in relation to offshore transmission, possible electricity interconnectors with Belgium and Norway, and carbon capture and storage technology.

We will consider acquiring new businesses in our core markets of electricity and gas delivery in the UK and US.

We use the aggregate consideration paid and debt assumed to monitor this investment in new businesses. There is no specific target because each investment is considered on its own merits. We also monitor synergy savings generated following an acquisition.

There have been no acquisitions during the last two years.

### Grain LNG

On 1 December 2010, we commenced commercial operations for the phase III capacity expansion of our LNG importation terminal at the Isle of Grain (Grain LNG), on time and to budget. Following the arrival of the first commissioning cargo of LNG on 29 October, the commissioning process was completed in just over a month, delivering a 50% increase in terminal capacity for the start of the winter period. This was achieved while continuing to deliver a high standard of service and meeting the daily operational needs of our existing customers.

At Grain LNG, work will continue through 2011/12 on reducing our carbon footprint. An innovative solution has been developed to use hot water from a nearby electricity plant to heat the LNG to convert it back to its gaseous form for supply.

The commitment to safety at Grain LNG was recognised by the Gas Industry Safety Group who gave us the accolade of an outstanding safety performance award.

An investment of around £1 billion has made Grain LNG one of the world's largest importation facilities, making a vital contribution to UK energy supply security.

### Offshore transmission

The UK government has stated its commitment to supporting offshore wind generation and, together with Ofgem, has established a competitive offshore transmission regulatory regime. The first and second round of tenders, collectively known as the transitional regime, are under way to identify licensees to own and operate offshore transmission assets. In April 2011, National Grid Offshore Ltd was selected, along with three other bidders, to tender for each of the Lincs, Gwynt-y-Mor and London Array phase 1 wind farm projects, which collectively have a value of just over £1 billion.

### Belgian interconnector

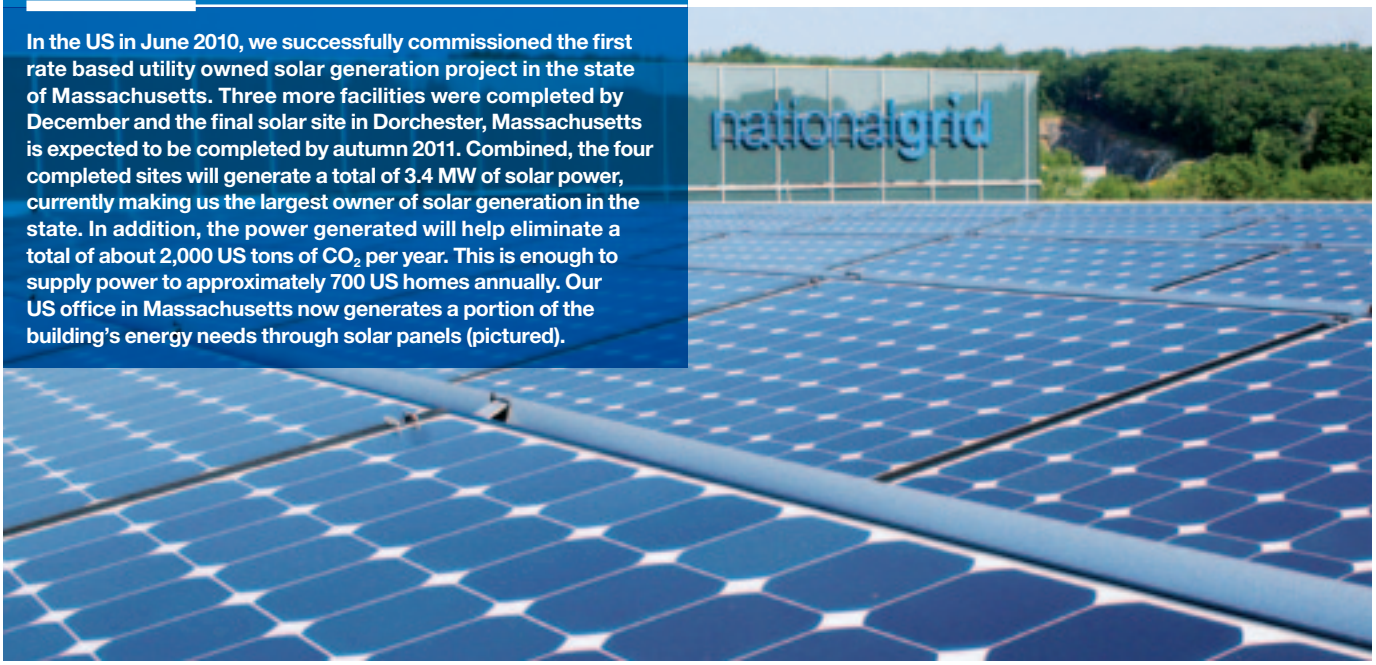
National Grid and Elia, the Belgian transmission system operator, continue to develop a project to construct a 1,000 MW electricity interconnector between the two countries. During 2010, a geophysical survey was completed and work is well under way in respect of a geotechnical survey. The results of the surveys will be used to inform the marine consenting activities and subsea cable design.

Discussions between National Grid, Elia and the two national energy regulators to find an acceptable regulatory framework are ongoing. During 2011, applications will be submitted to the respective consenting authorities in the UK and Belgium.

National Grid is also exploring further electricity interconnector projects to Norway and a second link to France.

## JUNE 2010

**In the US in June 2010, we successfully commissioned the first rate based utility owned solar generation project in the state of Massachusetts. Three more facilities were completed by December and the final solar site in Dorchester, Massachusetts is expected to be completed by autumn 2011. Combined, the four completed sites will generate a total of 3.4 MW of solar power, currently making us the largest owner of solar generation in the state. In addition, the power generated will help eliminate a total of about 2,000 US tons of $CO_2$ per year. This is enough to supply power to approximately 700 US homes annually. Our US office in Massachusetts now generates a portion of the building's energy needs through solar panels (pictured).**



# Performance against objectives continued

### Carbon capture and storage (CCS)

Since 2009, we have been working in partnership with Scottish Power and Shell on a CCS demonstration project at Longannet in Scotland. As part of this project, we are investigating the potential to reuse one of our high pressure natural gas transmission pipelines for the transportation of carbon dioxide. During 2010, National Grid conducted a range of tests at Spadeadam in Cumbria to help establish safety standards in relation to this new technology. On Humberside, we are working to develop a potential shared pipeline network and storage site – a CCS cluster – and we are involved in a further project on Teesside.

### Technological developments

The breadth of technological advances that offer opportunities and challenges to us across our businesses is vast, and we continually seek to identify them and feed them into our assessment process as early as possible.

Smart grid technology offers many possibilities, from radically improving our customer engagement and satisfaction through to further automating our electricity distribution systems, to reduce or eliminate interruptions to supply. Future networks will be cleaner, more integrated and more resilient and will offer the customer control over how and when they use their energy.

Advancements in gasification and anaerobic digestion technologies already mean many sources of waste in society and industry can be used as cost effective sources of gas for injection into the gas distribution networks. This offsets natural gas requirements and contributes to lower carbon intensity at the point of combustion.

Large scale battery energy storage is beginning to look attractive for a number of applications in managing our networks as we integrate more intermittent renewable and distributed generation sources. Adding large scale storage onto our network offers numerous operational and commercial opportunities.

Breakthroughs in voltage source converter technology will lead to high voltage direct current becoming the technology of choice within the next five to 10 years for bulk energy transfer over long distances, opening up opportunities for greater interconnection of networks and the development of offshore supergrids.

We are active participants in these and many other technologies as we look to trial and deploy those that offer business value and environmental benefits as soon as possible on our networks. To meet the challenges of a low carbon future, we believe new technology breakthroughs will be required and the pace of development will increase. To keep abreast we take a proactive approach with many external partners including leading technology providers, academics, research agencies, industry commentators and venture capitalists.

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

### Gas Distribution front office (GDFO)

GDFO is a significant investment for National Grid in the replacement of our legacy IT applications for asset and work management systems and is planned to be deployed in three stages. The core of the new system is SAP with three further satellite applications providing the specialist software we need to optimise our asset management capabilities and ensure our field staff are able to respond to customers quickly and effectively.

The first release of the new front office system went live in October 2010 to over 1,000 employees who operate the maintenance process. We were also able to implement an early release to emergency response teams in the West and East Midlands areas ahead of the winter. As with all major IT projects, there were teething problems to resolve in the first few weeks after going live and we were able to gain valuable experience through the winter of how the new system works.

The next two stages of GDFO implementation will take place in 2011/12. In the spring/summer, we will complete the full rollout to the remaining 1,000 emergency response staff, add additional data capture functionality to the maintenance teams' application and introduce a new customer system into our call centres. The customer system will benefit from the integrated design. It will provide much greater information on job progress and any previous work at the customer's premises, and enable rapid communication of issues to and from the field in response to customers' needs. The final stage, following later in 2011/12, will be for our repair teams and to get all remaining new construction and mains replacement work flowing through the new system.

GDFO is not just a large IT replacement project. It forms the foundation of a wider transformation that is under way in Gas Distribution. The emphasis in our new operating model is to focus on improvements to all our processes. This focus will deliver big benefits for our customers and will enhance the efficiency and effectiveness of our operations. Coupled with the enhanced functionality from the investment in IT, we will be able to streamline our organisation and take advantage of our scale of operation.

### Information services (IS) transformation

The IS transformation programme establishes a global IS function delivering services and new solutions to all parts of the Company.

The transformation programme is underpinned by establishing a number of contracts for services that National Grid can leverage from the broader IT marketplace where such commodities (eg email and virtualisation services) can deliver excellence with economy of scale pricing. Some of the key contracts have been put in place this year with the remainder planned for next year. Sourcing decisions are taken with full consultation with the appropriate bodies and sympathetic consideration of the impact on employees.

An essential component of the transformation programme is to ensure that the structure of the IS department and its commercial arrangements are consistent with the overall National Grid strategy and specific line of business objectives. The IS strategy and associated architecture plans are well developed to deliver efficiencies in the existing IT services through consolidation and rationalisation but also to invest in the new capabilities necessary to meet the challenges ahead.

The IS leadership team is well established and the overall organisational structure is evolving as the commercial contracts are put in place. Key functions that are critical to IS delivery are being developed to ensure we have the right internal capabilities in areas such as business relationships, security, architecture and strategy.

The next stages for the transformation are the completion of the contract placements, the transitioning activities necessary to establish the new arrangements and ensuring the delivery of the benefits. Alongside transformation, the demand for investments in IT systems next year is significant with a range of large projects across the UK and US being delivered or initiated to support key business initiatives.

### US foundation

The US foundation programme is a critical enabler in the delivery of many of our strategic objectives. The primary focus of the programme is to provide an integrated SAP platform that will ensure process and systems standardisation. Creating a highly integrated IS infrastructure in the US, this programme will move the systems and business processes used to support finance, human resources, supply chain and certain elements of our operational systems such as fleet and inventory management to one common structure that will streamline reporting and reduce risk.

### UK business process outsourcing

The outsourcing of some of our UK shared services activities to an external service provider in India was undertaken during the year. This should deliver both financial and process benefits over the next five years.

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

### Employees

We employ over 27,000 people. Communication is a key theme both at a corporate and business level. Multiple communication channels are used throughout National Grid, including the use of various business specific intranets, which we continue to develop to ensure the timely passing of information to employees.

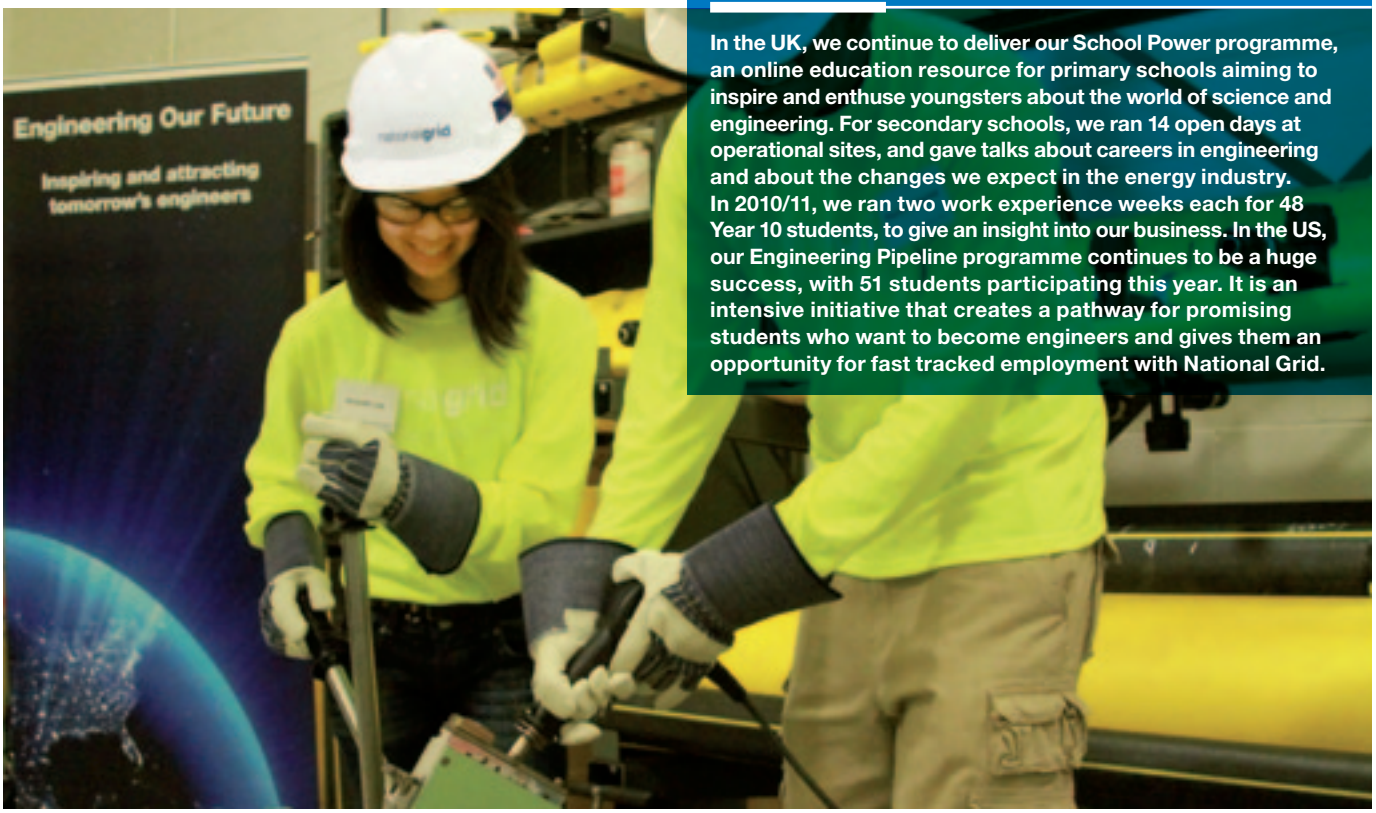
Employee engagement continues to be a key focus for National Grid. 2010 saw an unprecedented employee survey response rate of 97%. This response rate generated an extremely large amount of data and feedback to review.

As always, we have worked to engage teams throughout the business in creating action plans to address survey feedback. We also regularly seek feedback about the survey process, and teams have consistently expressed a desire to have more time to ensure their actions translate into meaningful results. Therefore, we have decided to postpone the 2011 survey to enable us to work more deeply on action planning and other key engagement activities.

We are working at an Executive level to ensure we create visible links between performance and engagement, as we feel the two are interconnected and vital to our success. Throughout 2011, we will be working on reinforcing the link between performance and engagement, and supporting our survey champions as we prepare to launch the 2012 employee survey.

## 2010–2011

**In the UK, we continue to deliver our School Power programme, an online education resource for primary schools aiming to inspire and enthuse youngsters about the world of science and engineering. For secondary schools, we ran 14 open days at operational sites, and gave talks about careers in engineering and about the changes we expect in the energy industry. In 2010/11, we ran two work experience weeks each for 48 Year 10 students, to give an insight into our business. In the US, our Engineering Pipeline programme continues to be a huge success, with 51 students participating this year. It is an intensive initiative that creates a pathway for promising students who want to become engineers and gives them an opportunity for fast tracked employment with National Grid.**



# Performance against objectives continued

### Inclusion and diversity

Measures such as the percentages of female and ethnic minority employees continue to be reviewed regularly at Executive Committee level. As at 31 March 2011, 22.3% of our employees were female and 13.5% were from ethnic minority groups. This compares with respectively 22.7% and 13.5% at 31 March 2010 and 22.6% and 13.2% at 31 March 2009.

We aim to ensure equal opportunity in recruitment, career development, promotion, training and reward for all employees, including those with disabilities. Where existing employees become disabled, our policy is to provide continuing employment and training wherever practical.

Following the decision not to undertake a full employee survey in 2011, we are using an external partner to conduct a number of focus groups with a cross section of employees. These focus groups, in conjunction with interviews with senior management, will provide us with valuable insight into how inclusion and diversity are perceived within National Grid.

We have continued to make our inclusive leadership programme available to our middle managers in the UK, while the Foundations of Leadership (FoL) programme, which is aimed at the next generation of managers and which contains an inclusive leadership module, has been completed by 500 employees since 1 April 2010. In addition, in the US a programme focusing on the prevention of workplace bullying and sexual harassment was also implemented; approximately 97% of US non union employees had completed the training by 31 March 2011.

For a fourth year we have received 100% in the Human Rights Campaign's Equality Index in the US. In the UK, we have been placed in the Top 100 of the Stonewall Workplace Equality Index for the third year running, and were also in the Times Top 50 Employers for Women. In December 2010, National Grid was featured in Profiles in Diversity Journal as a leader in diversity, and was also recognised for its work in the US on supplier diversity.

Our employee resource groups, which cover areas including gender, ethnicity, disability, faith, sexual orientation and new employees, continue to deliver results in three areas: providing professional development opportunities for members through workshops and programmes; supporting the Company's community relations activities through fundraising, volunteering, and providing support to organisations such as the American Association of Blacks in Energy; and working to increase broader understanding of inclusion through workshops, presentations and other educational events.

We have established a programme known as level playing field which seeks to address the ongoing challenge we face around retention of under represented groups such as women and ethnic minorities. The programme is designed to enhance or make better use of existing processes such as mentoring and sponsorship, drive individual accountability for inclusion within the performance management framework, and encourage the application of flexible working policies.

### Developing our talent, leadership skills and capabilities

Talent development continues to be a critical lever for successful business performance. During the past year, we completed the development of our leadership transitions strategy. In 2008, developing future leaders (DFL) was created for senior leaders, in 2009, FoL was created for front line or first time leaders and in 2010, we launched two programmes targeted at middle level leaders focused on their leadership style and business acumen. Middle managers also have access to a suite of solutions that can be used to customise a curriculum for their unique needs. Given our significant investment in leadership development, we set out to evaluate the impact of DFL and FoL with the help of an external party. The results were compelling. For FoL, participation in the programme was associated with lower turnover rates and improvements in performance ratings. For DFL, participants showed improvements in leadership ratings and in several managerial indices from the employee survey.

To support the development needs of the broader management population, a comprehensive portfolio of classroom based and eLearning solutions was introduced covering the areas of communication, performance management, business acumen and general management. More will be added as further business needs are identified. In 2010/11, over 97,000 learning hours were delivered in professional and leadership development.

We continued our focus on safeguarding our future talent. In the US, 21 highly energetic and skilled graduates have taken on a variety of roles as the first class to graduate from the graduate development programme. Across the US, 51 high school students participated in a one week 'introduction to engineering' academy as part of the US launch of Engineering our Future. In the UK, 164 new early career learners were inducted into various strategic technical programmes. The UK apprenticeship training programmes enjoy Ofsted outstanding ratings on all criteria and we were awarded the East Midlands National Training Award for our advanced apprenticeship model.

To accommodate year on year growth in technical training needs in both the UK and US, significant investments have been made in expanding the Eakring, Nottinghamshire and Millbury, Massachusetts learning centres. In 2010/11, nearly one million learning hours of technical development were delivered.

We have incorporated cutting edge technology into our learning strategy to accommodate diverse learning styles and manage costs. This includes 3D technology, eLearning modules, online assessments, SmartBoards and virtual classrooms.

## Positively shaping the energy and climate change agenda

We aim to take the lead on the energy and climate change issues facing society. We will not simply react to the initiatives of other relevant bodies. Instead, we will be proactive in leading the agenda to make sure we help to safeguard the environment. We will continue to press for ambitious national and international plans to tackle the causes and consequences of climate change.

We are invited to have a seat at the table on a range of policy debates on facilitating the move to a low carbon economy. For example, in New York and Massachusetts we were asked to serve on both the climate change policy teams and adaptation committees. In the UK, we have worked closely with the Department for Environment, Food and Rural Affairs (Defra) on the implementation of climate change adaptation reporting.

We have continued to work with Ceres in the US and with the Worldwide Fund for Nature (WWF) in the UK to seek their views on our internal and external efforts to reduce our climate change impacts and shape our positive influence on legislators and regulators.

We run nationally recognised energy efficiency programmes with customers in the US, where we are also actively promoting the use of renewables, having signed a contract with the country's first offshore wind development project (see page 46).

### Climate change

We have continued with our climate change strategy and energy efficiency programmes, focusing on initiatives that are cost effective and regulated. We remain committed to our 45% by 2020 and 80% by 2050 greenhouse gas emissions reduction targets for our Scope 1 and 2 emissions.

During 2010/11, each line of business worked to deliver their targets under year one of our first five year plan for greenhouse gas reduction. The plan established a trajectory to 2015 as the half way point to our 2020 target. Performance against the plan is linked to the executive compensation scheme. A more detailed breakdown of our emissions and performance against the plan can be found on our website.

Our total Scope 1 and 2 emissions for 2010/11 were 9.7 million tonnes carbon dioxide equivalent ($CO_2e$), compared with 8.8 million tonnes in 2009/10. Our 2010/11 performance equates to a 51% reduction against our 1990 baseline, but is an increase of 4% with respect to our 1990 baseline compared with 2009/10. Virtually all of this is attributable to increased utilisation of our generating plant on Long Island in order to meet increased consumer demand and to pick up capacity shortfall from other generators. We have continued to invest in modernisation of these plants and this has resulted in a 3.8% increase in efficiency, or a saving of 35,375 tonnes $CO_2e$ over the year on a like for like output basis.

As a result of participating in the World Resources Institute/World Business Council for Sustainable Development pilot study during 2010, we are now in a position to report our Scope 3 emissions in more detail. Our Scope 3 emissions for 2010/11 consisted of: 5.1 million tonnes $CO_2e$ associated with electricity transmission and distribution losses; 2.8 million tonnes associated with the procurement of goods and services; and 29.6 million tonnes associated with sold product (gas and electricity) in the US.

A significant part of our investment in infrastructure is associated with modernising our networks and building connections to low carbon sources of energy. As a consequence, we expect our Scope 3 emissions due to this to increase in the short term as we play our part in decarbonising the economy. We then anticipate a reduction in our reported transmission and distribution losses as the grid average carbon intensity decreases. In the US, our reported emissions associated with customers may rise as our customer base increases. However, as many of our new customers were previously using fuel oil supplied by others for domestic heating, which is a more carbon intensive fuel, on a like for like basis this will have resulted in a regional reduction in emissions that does not appear on our inventory. Our energy efficiency campaigns are also supporting a reduction in the energy used by our customers.

We believe that a strong carbon price signal in the economy is essential to driving the right behaviours and to the delivery of a low carbon society. During 2010/11, we introduced a carbon price of £52 per tonne into our investment appraisals in order to challenge our designs and better understand where our opportunities for decarbonisation exist. As a regulated utility, we recognise that we will not always be funded to invest on this basis under existing rate agreements and, in such circumstances, the information that we gather will be used to inform future discussions.

It is equally important we understand the impact of past global emissions on future climate change. We have been working with the UK Met Office to understand how these changes might affect our UK and US infrastructure and future energy demand.

During 2010, we were asked by Defra to represent the energy sector on a project to develop climate adaptation risk assessments for our regulated UK gas and electricity businesses. Our assessment process used the government's latest available climate change scenarios to test the resilience of our networks to a range of future conditions. The feedback from the process showed that National Grid has a good understanding of the risks posed by potential future climate change and has a high degree of resilience already built into its networks. The ongoing monitoring and appropriate mitigation of the risks from a changing climate will be through our day-to-day business risk management processes. The full reports can be found on our website. In the US, we are working with state task forces and the primary focus of our adaptation work has been on flood risk assessment and mitigation requirements for our electricity assets. In 2011/12, we will continue to work with our respective governmental and local agencies as this field of study and research evolves.

# Financial performance

## Contents



## Measurement of financial performance

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

### 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.

The first of these components is referred to as an adjusted profit measure, also known as a business performance measure. This is the principal measure used by management to assess the performance of the underlying business.

Adjusted results exclude exceptional items, remeasurements, stranded cost recoveries, and the amortisation of acquisition-related intangibles. These items are reported collectively as the second component of the financial measures.

The items comprising the second component are excluded from the adjusted profit measures used by management to monitor financial performance as they are considered to distort the comparability of our reported financial performance from year to year.

Accounting policy T on page 117 explains in detail the items which are excluded from our adjusted profit measures.

Adjusted profit measures have limitations in their usefulness compared with the comparable total profit measures as they exclude important elements of our financial performance. However, we believe that by presenting our financial performance in two components it is easier to read and interpret financial performance between periods, as adjusted profit measures are made more comparable by removing the distorting effect of the excluded items, and those items 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, 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 the excluded items 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 dollars and so the related amounts that are reported in sterling depend on the dollar to sterling exchange rate. As the average rate of the dollar at $1.57:£1 in 2010/11 was stronger than the average rate of $1.58:£1 in 2009/10, the same amount of revenue, adjusted operating profit and operating profit in dollars earned in 2009/10 would have been reported as £29 million, £3 million and £4 million higher respectively if earned in 2010/11. In 2008/09 the average rate was $1.54:£1; if the revenue, adjusted operating profit and operating profit in dollars recognised in 2008/09 was earned in 2009/10 it would have been reported as £261 million, £27 million and £23 million lower respectively.

However, the effect of movements in the dollar exchange rate on adjusted operating profit and operating profit in 2010/11 was entirely offset by the impact of interest and tax charges denominated in dollars, when translated into sterling. This includes the effect of derivative financial instruments that swap debt raised in other currencies into 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 2009/10 would have been no different if translated at the 2010/11 average exchange rate of $1.57:£1 (2008/09: £7 million and £5 million lower respectively if translated at the 2009/10 average exchange rate of $1.58:£1).

The balance sheet at the end of the financial year has been translated at an exchange rate of $1.61:£1 at 31 March 2011 ($1.52:£1 at 31 March 2010).

### Continuing and discontinued operations

The financial results of our businesses and segments and of our other activities (as described on pages 60 to 68) are presented within continuing operations. There were no discontinued operations in 2010/11 or in 2009/10. Discontinued operations in 2008/09 comprised the Ravenswood generation station in New York, KeySpan Communications and KeySpan engineering companies.

### Timing

Our profit for the year includes a number of timing differences, including an over-recovery of revenues compared to regulatory allowed revenues, of £270 million. These timing differences are, by their nature, unpredictable, but our current expectation is that they will not recur in 2011/12. The closing balance of over-recovery at 31 March 2011 was £66 million. All other things being equal, that balance should be returned to customers in 2011/12, which would lead to a variance of £336 million when comparing 2011/12 operating profit to 2010/11.

### Key performance indicators (KPIs)

#### Total shareholder return (TSR)

We measure total shareholder return as a KPI on a cumulative three year basis. The measure reflects changes in our share price and also assumes that dividends paid to shareholders over that period were reinvested in our shares. Cumulative total shareholder return for the period from 1 April 2008 to 31 March 2011 was 4% (1 April 2007 to 31 March 2010: -3%; 1 April 2006 to 31 March 2009: 11%). This reflects the fact that, although equity prices generally fell sharply amid the turbulence in the financial markets during 2008/09, the subsequent recovery during 2009/10 and 2010/11 has reversed those losses.

We have changed the presentation of TSR from previous years in order to align the Company KPI with the methodology which will be used to determine an element of Executive Directors' remuneration under the new Long Term Performance Plan (see page 98).

#### Group return on equity

We measure our performance in generating value from the investments we make by dividing our annual return by our equity base. Our annual return consists of adjusted earnings, amended for a number of items including regulatory depreciation, retail price index (RPI) inflation on our UK regulatory asset value (RAV), and a pension deficit adjustment. Our equity base consists of invested capital less opening net debt. Invested capital is the opening UK RAV inflated to mid year using RPI inflation, plus opening US invested capital excluding stranded cost assets and assets disposed in the year, plus the closing net book value of 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 our rights issue.

We monitor our performance using a three year average return rather than a return for a specific year. We believe this provides a better measure of our ongoing performance because it helps to reduce short-term fluctuations due to temporary market conditions such as inflation volatility. For 2010/11, our three year average return on equity was 11.9%, compared with 11.3% in 2009/10 and 10.8% in 2008/09. The increase in the year was primarily driven by movements in UK inflation.

#### Regulated controllable operating costs

We measure regulated controllable operating costs as a proportion of our regulated assets, as measured by our RAV in the UK and our rate base in the US.

This ratio decreased to 7.3% in 2010/11, compared with 7.5% in 2009/10 and 8.0% in 2008/09 on a constant currency basis, reflecting our continuing drive to improve our efficiency while maintaining safety and reliability.

#### Adjusted earnings per share

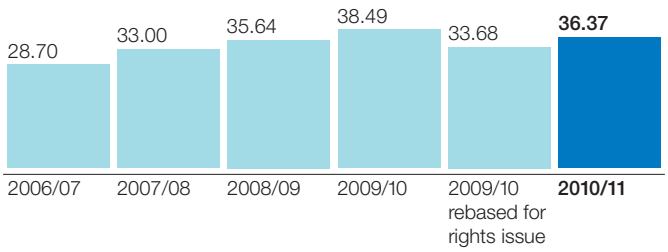
We monitor our financial performance during the year by measuring adjusted earnings per share. This and other profit measures are described on the following pages.

### Other performance measures

#### Dividends and dividend cover

The proposed total ordinary dividend for 2010/11 amounts to £1,275 million or 36.37 pence per ordinary share. This represents an increase of 8% over the previous year's ordinary dividend per share of 38.49 pence, after adjusting for the bonus element of the rights issue.

**Dividends per share**
pence




The table below 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, and represent the gross dividends declared whether settled in cash or by new shares.

| Dividends | 2011 pence | 2010 pence | 2009 pence | 2008 pence | 2007 pence |
|---|---|---|---|---|---|
| Interim | **12.90** | 13.65 | 12.64 | 11.70 | 10.90 |
| Final | **23.47** | 24.84 | 23.00 | 21.30 | 17.80 |
| Total | **36.37** | 38.49 | 35.64 | 33.00 | 28.70 |

| Dividends per ADS | $ | $ | $ | $ | $ |
|---|---|---|---|---|---|
| Interim | **1.02** | 1.15 | 0.95 | 1.21 | 1.03 |
| Final | **1.90** | 1.77 | 1.74 | 2.05 | 1.76 |
| Total | **2.92** | 2.92 | 2.69 | 3.26 | 2.79 |

# Financial performance continued

Dividends expressed in dollars per American Depositary Share (ADS) in the table on page 55 reflect the amounts paid or payable to ADS holders, rounded to two decimal places.

The total ordinary dividend per share was covered 1.4 times by adjusted earnings from continuing operations per ordinary share (2009/10: covered 1.5 times; 2008/09: covered 1.4 times) and covered 1.8 times by earnings per ordinary share from continuing operations (2009/10: covered 1.5 times; 2008/09: covered 1.0 times).

For the final dividend of 2008/09, and subsequent dividends, shareholders were offered the option of a scrip dividend, whereby they could elect to receive the dividend in the form of new shares rather than cash. The proportion of shareholders taking up the scrip dividend option was as follows:

| Dividend | Proportion taking up scrip |
|---|---|
| 2008/09 final | 25% |
| 2009/10 interim | 20% |
| 2009/10 final | 23% |
| 2010/11 interim | 14% |

In accordance with IFRS, the final dividend proposed in respect of each financial year is reported in the financial statements for the following year. Therefore, the proposed final dividend for 2010/11 of 23.47 pence per share, amounting to approximately £824 million (assuming all dividends are settled in cash), will be reported in the financial statements for the year ending 31 March 2012.

## Interest cover

In order to deliver sustainable growth, we must be disciplined in the way we manage our balance sheet. The principal measure we use to monitor financial discipline is interest cover, being a measure of the cash flows we generate compared with the net interest cost of servicing our borrowings.

Our long-term target range for interest cover is between 3.0 and 3.5. Interest cover for the year ended 31 March 2011 was above our target range, having fallen slightly to 3.8 compared with 3.9 for the year ended 31 March 2010 (year ended 31 March 2009: 3.1). The primary reasons for the decrease in 2010/11 were increased interest expense on our index-linked debt, due to the return of UK inflation, offset by a reduction in debt following the rights issue in June 2010 and higher levels of cash inflows from operations during the financial year.

## Profit for the year

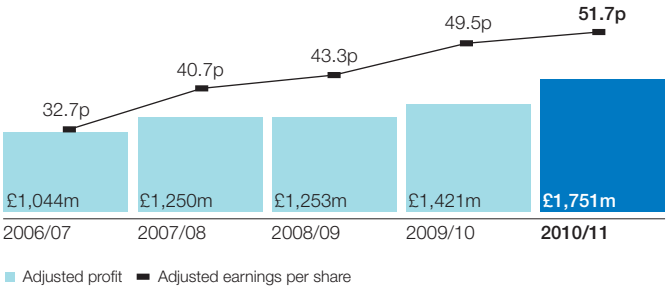
### Adjusted profit, adjusted earnings and adjusted earnings per share

Adjusted profit for the year from continuing operations was £1,751 million in 2010/11 (2009/10: £1,421 million; 2008/09: £1,253 million). Adjusted earnings, being adjusted profit for the year from continuing operations attributable to equity shareholders of the parent, were £1,747 million (2009/10: £1,418 million; 2008/09: £1,250 million).

Adjusted earnings per share from continuing operations were 51.7 pence in 2010/11, 49.5 pence per share in 2009/10 and 43.3 pence per share in 2008/09.

The following chart shows the five year trend in adjusted profit and adjusted earnings per share.

**Adjusted profit and adjusted earnings per share**



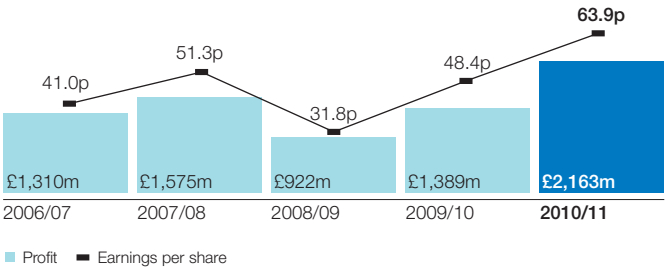

### Profit, earnings and earnings per share

Profit for the year from continuing operations was £2,163 million in 2010/11 (2009/10: £1,389 million; 2008/09: £922 million). After excluding amounts attributable to non-controlling interests, earnings were £2,159 million in 2010/11, compared with £1,386 million in 2009/10 and £919 million in 2008/09.

Total earnings per share from continuing operations were 63.9 pence in 2010/11, 48.4 pence per share in 2009/10 and 31.8 pence per share in 2008/09.

The following chart shows the five year trend in profit and earnings per share from continuing operations.

**Profit and earnings per share**




The increases in profit and adjusted profit, and in earnings and adjusted earnings, were a consequence of the changes in operating profit, net finance costs, exceptional finance costs and remeasurements, and taxation described in the following sections.

In accordance with IAS 33, all earnings per share and adjusted earnings per share amounts for comparative periods have been restated as a result of shares issued via scrip dividends and the bonus element of the rights issue.

## Reconciliation of adjusted earnings to earnings

Adjusted earnings are presented in note 8 to the consolidated financial statements, under the heading adjusted earnings – continuing operations.

| Continuing operations | Years ended 31 March 2011 £m | 2010 £m | 2009 £m |
|---|---|---|---|
| Adjusted earnings | **1,747** | 1,418 | 1,250 |
| Exceptional items | **(16)** | (270) | (247) |
| Remeasurements | **219** | 17 | (340) |
| Stranded cost recoveries | **209** | 221 | 256 |
| Earnings | **2,159** | 1,386 | 919 |

## Reconciliation of adjusted earnings per share to total earnings per share

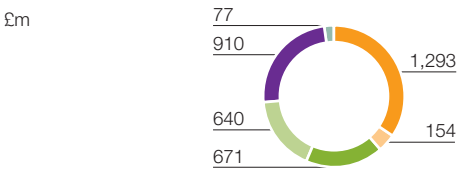
| Continuing operations | Years ended 31 March 2011 £m | 2010 £m | 2009 £m |
|---|---|---|---|
| Adjusted earnings per share | **51.7** | 49.5 | 43.3 |
| Exceptional items | **(0.5)** | (9.4) | (8.6) |
| Remeasurements | **6.5** | 0.6 | (11.8) |
| Stranded cost recoveries | **6.2** | 7.7 | 8.9 |
| Earnings per share | **63.9** | 48.4 | 31.8 |

## Revenue by operating segment

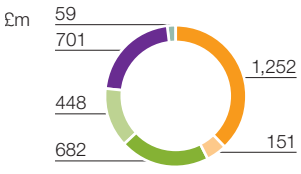
| Continuing operations | Years ended 31 March 2011 £m | 2010 £m | 2009 £m |
|---|---|---|---|
| Transmission UK | **3,484** | 3,475 | 3,517 |
| Transmission US | **429** | 405 | 420 |
| Gas Distribution UK | **1,524** | 1,518 | 1,468 |
| Gas Distribution US | **3,811** | 3,708 | 4,786 |
| Electricity Distribution & Generation | **4,567** | 4,339 | 4,972 |
| Other activities | **678** | 741 | 750 |
| Total segmental revenues | **14,493** | 14,186 | 15,913 |
| Less: sales between operating segments | **(150)** | (179) | (226) |
| Total | **14,343** | 14,007 | 15,687 |

## Operating profit by segment

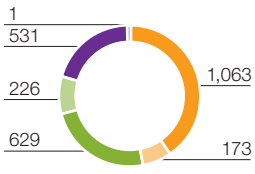
Year ended 31 March 2011




Year ended 31 March 2010



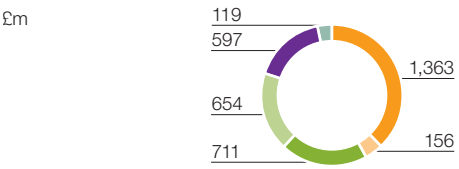

Year ended 31 March 2009



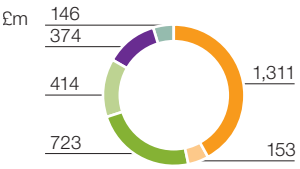

Transmission UK · Gas Distribution UK · Electricity Distribution & Generation
Transmission US · Gas Distribution US · Non-regulated businesses and other

## Adjusted operating profit by segment

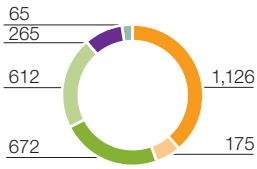
Year ended 31 March 2011




Year ended 31 March 2010




Year ended 31 March 2009




Transmission UK · Gas Distribution UK · Electricity Distribution & Generation
Transmission US · Gas Distribution US · Non-regulated businesses and other

## Reconciliation of adjusted operating profit to adjusted profit and adjusted earnings

| Continuing operations | Years ended 31 March 2011 | 2010 | 2009 |
|---|---|---|---|
| | **£m** | £m | £m |
| Adjusted operating profit | **3,600** | 3,121 | 2,915 |
| Net finance costs excluding exceptional items and remeasurements | **(1,134)** | (1,155) | (1,150) |
| Share of post-tax results of joint ventures | **7** | 8 | 5 |
| Adjusted profit before taxation | **2,473** | 1,974 | 1,770 |
| Taxation excluding tax on exceptional items, remeasurements and stranded cost recoveries | **(722)** | (553) | (517) |
| Adjusted profit | **1,751** | 1,421 | 1,253 |
| Attributable to non-controlling interests | **(4)** | (3) | (3) |
| Adjusted earnings | **1,747** | 1,418 | 1,250 |
| | **pence** | pence | pence |
| Adjusted earnings per share | **51.7** | 49.5 | 43.3 |

## Reconciliation of operating profit to profit and earnings

| Continuing operations | Years ended 31 March 2011 | 2010 | 2009 |
|---|---|---|---|
| | **£m** | £m | £m |
| Total operating profit | **3,745** | 3,293 | 2,623 |
| Net finance costs | **(1,128)** | (1,108) | (1,234) |
| Share of post-tax results of joint ventures | **7** | 8 | 5 |
| Profit before taxation | **2,624** | 2,193 | 1,394 |
| Taxation | **(461)** | (804) | (472) |
| Profit | **2,163** | 1,389 | 922 |
| Attributable to non-controlling interests | **(4)** | (3) | (3) |
| Earnings | **2,159** | 1,386 | 919 |
| | **pence** | pence | pence |
| Earnings per share | **63.9** | 48.4 | 31.8 |

# Financial performance continued

## Reconciliation of adjusted operating profit to total operating profit

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.

| | Years ended 31 March | | |
|---|---|---|---|
| **Continuing operations** | **2011 £m** | 2010 £m | 2009 £m |
| Adjusted operating profit | **3,600** | 3,121 | 2,915 |
| Exceptional items | **(350)** | (268) | (275) |
| Remeasurements | **147** | 71 | (443) |
| Stranded cost recoveries | **348** | 369 | 426 |
| Total operating profit | **3,745** | 3,293 | 2,623 |

## Reconciliation of adjusted profit before tax to total profit before tax

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

| | Years ended 31 March | | |
|---|---|---|---|
| **Continuing operations** | **2011 £m** | 2010 £m | 2009 £m |
| Adjusted profit before taxation | **2,473** | 1,974 | 1,770 |
| Exceptional items | **(380)** | (301) | (275) |
| Remeasurements | **183** | 151 | (527) |
| Stranded cost recoveries | **348** | 369 | 426 |
| Total profit before taxation | **2,624** | 2,193 | 1,394 |

### Diluted earnings per share

Diluted adjusted earnings per share from continuing operations were 51.4 pence in 2010/11 (0.3 pence lower than basic adjusted earnings per share), compared with 49.3 pence in 2009/10 (0.2 pence lower) and 43.1 pence in 2008/09 (0.2 pence lower).

Diluted earnings per share from continuing operations were 63.6 pence in 2010/11 (0.3 pence lower than basic earnings per share from continuing operations), compared with 48.2 pence in 2009/10 (0.2 pence lower) and 31.7 pence in 2008/09 (0.1 pence lower).

The principal reason for the dilution in each year relates to employee share plans.

### Net finance costs

Net finance costs excluding exceptional items and remeasurements were £1,134 million in 2010/11 compared with £1,155 million in 2009/10 and £1,150 million in 2008/09. The slight decrease in 2010/11 compared with 2009/10 primarily reflected lower net pension interest due to higher plan assets and higher rates of return on those assets, offset by higher accretions on index-linked debt following the return of UK inflation. The slight increase in 2009/10 compared with 2008/09 primarily reflected an increase in net pension interest due to a fall in the value of plan assets, partially offset by a lower effective interest rate due to lower RPI and LIBOR rates.

### Exceptional items

Exceptional charges of £350 million in 2010/11 consisted of restructuring costs of £89 million, environmental charges of £128 million, impairment costs and related charges of £133 million and other charges of £15 million, offset by net gains on disposals of three subsidiaries and an associate of £15 million.

Exceptional charges of £268 million in 2009/10 consisted of restructuring charges of £149 million, environmental charges of £63 million and other charges of £67 million, offset by net gains on disposals of £11 million.

Exceptional charges of £275 million in 2008/09 consisted of restructuring charges of £192 million, environmental charges of £78 million and other charges of £5 million.

## Exceptional finance costs and remeasurements

There were £73 million of exceptional finance costs during 2010/11 relating to the early redemption of debt following the rights issue in June 2010, offset by £43 million of exceptional interest income relating to tax settlements in the US. There were £33 million of exceptional finance costs during 2009/10 relating to the early redemption of debt. There were no exceptional finance costs in 2008/09.

Financial remeasurements relate to net gains on derivative financial instruments of £36 million (2009/10: £81 million gains; 2008/09: £82 million losses). The financial element of commodity contract revaluations was nil in 2010/11 (2009/10: £1 million loss; 2008/09: £2 million loss).

### Taxation

A net charge of £461 million arose in 2010/11 (2009/10: £804 million; 2008/09: £472 million) comprising a £722 million charge (2009/10: £553 million charge; 2008/09: £517 million charge) on profit before tax excluding exceptional items, remeasurements and stranded cost recoveries, and a £261 million credit (2009/10: £251 million charge; 2008/09: £45 million credit) on exceptional items, remeasurements and stranded cost recoveries.

In 2010/11, exceptional items, remeasurements and stranded cost recoveries included a £226 million deferred tax credit arising on a reduction in the UK tax rate, and a £59 million tax credit primarily arising as a result of settling a number of KeySpan pre-acquisition items with the US tax authorities.

In 2009/10, exceptional items, remeasurements and stranded cost recoveries included a £41 million tax charge due to a change in US tax legislation under the Patient Protection and Affordable Care Act.

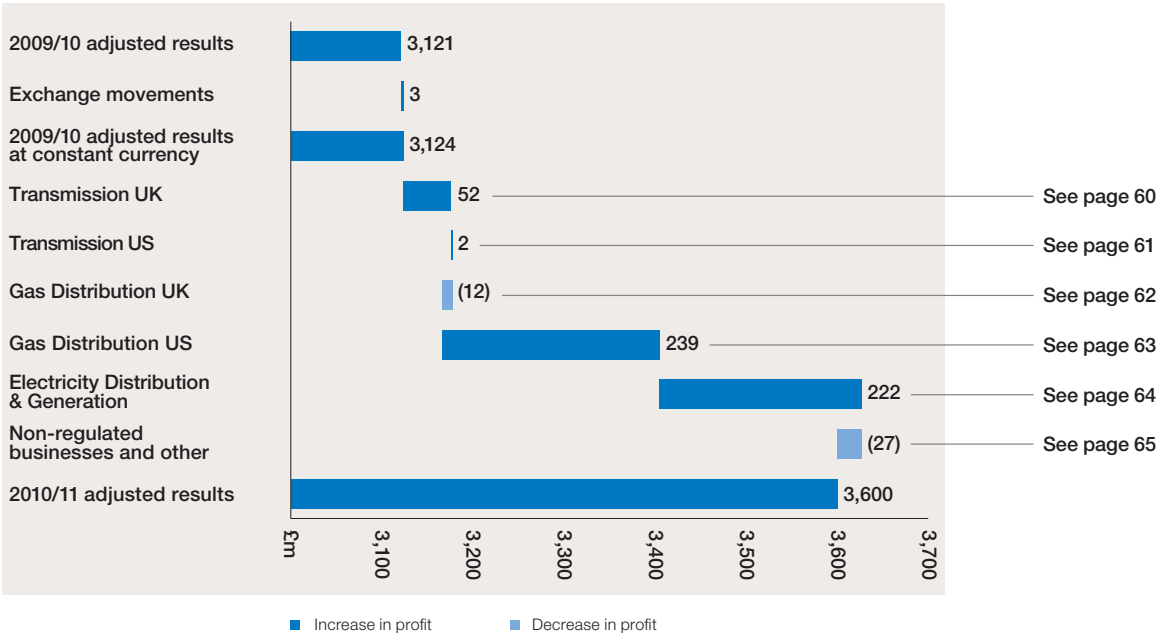
In 2008/09, exceptional items, remeasurements and stranded cost recoveries included a £49 million tax charge for increased deferred tax liabilities due to a change in the UK industrial buildings allowance regime.

The effective tax rates before and after exceptional items, remeasurements and stranded cost recoveries were 29.2% and 17.6% respectively (2009/10: 28.0% and 36.7%; 2008/09: 29.2% and 33.9%).

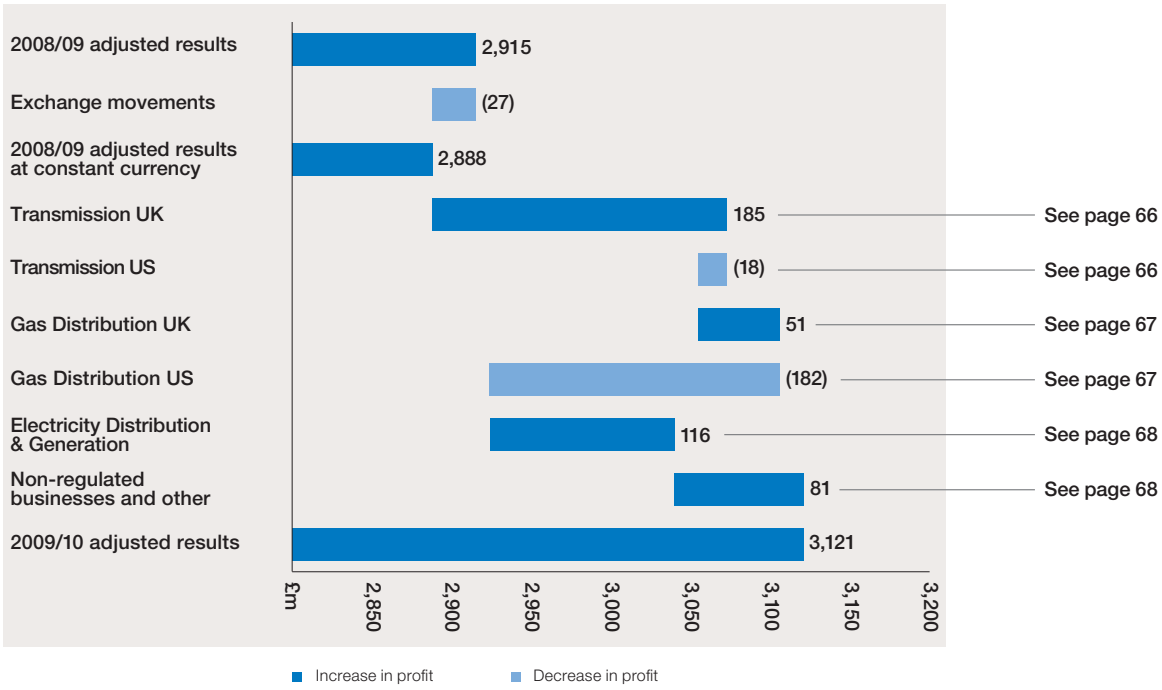
## Analysis of adjusted operating profit

The charts on this page analyse the movements in adjusted operating profit by segment, comparing 2010/11 with 2009/10 and comparing 2009/10 with 2008/09. The charts on the following pages show the principal movements in each segment. Analysis of 2010/11 compared with 2009/10 can be found on pages 60 to 65 and analysis of 2009/10 compared with 2008/09 can be found on pages 66 to 68.

### 2010/11 compared with 2009/10




### 2009/10 compared with 2008/09



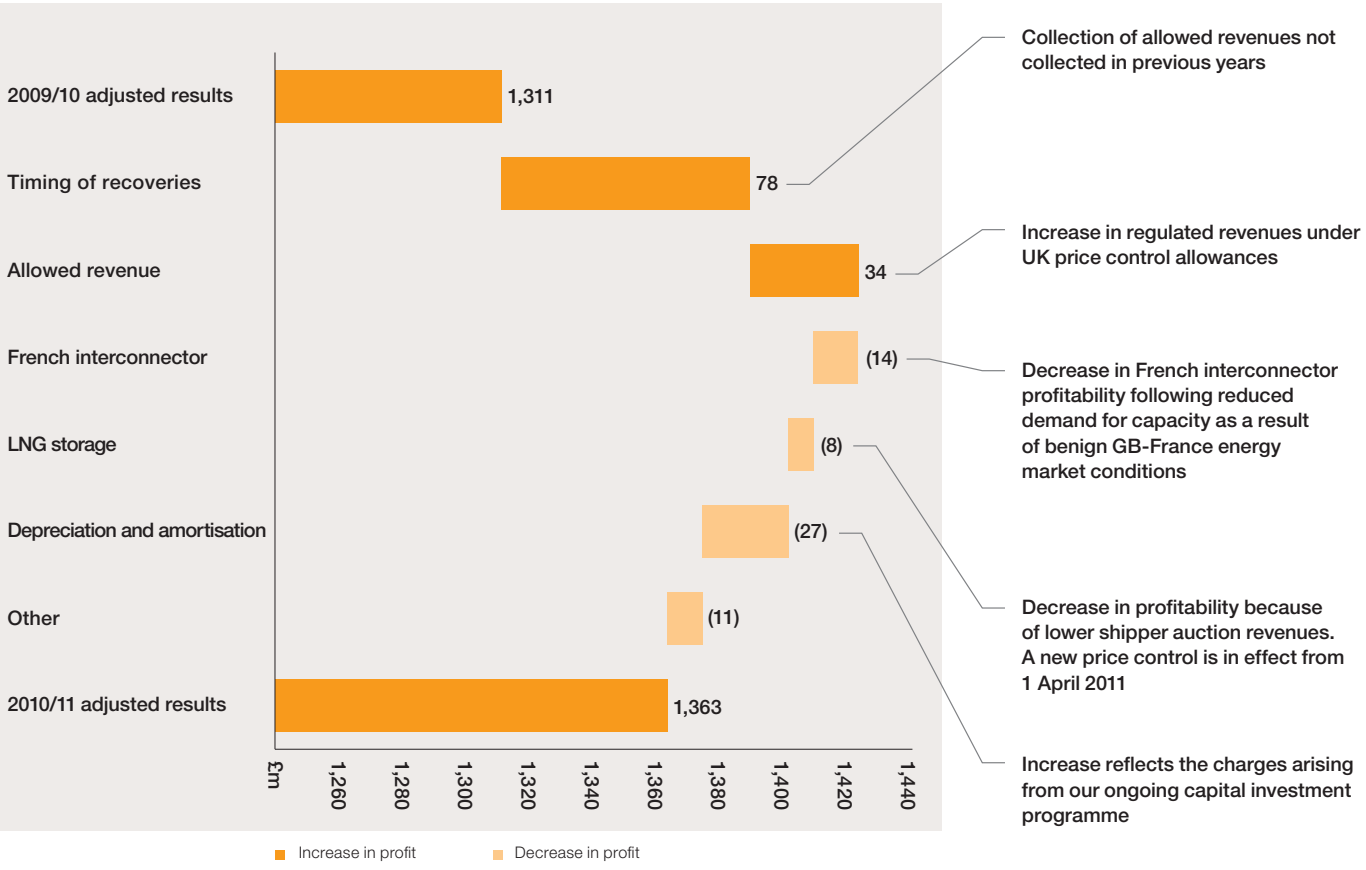
# Financial performance continued

## Transmission UK

The results of the Transmission UK segment for the years ended 31 March 2011, 2010 and 2009 were as follows:

| | Years ended 31 March | | |
|---|---|---|---|
| | **2011 £m** | 2010 £m | 2009 £m |
| Revenue and other operating income | **3,484** | 3,475 | 3,517 |
| Operating costs excluding exceptional items | **(2,121)** | (2,164) | (2,391) |
| Adjusted operating profits | **1,363** | 1,311 | 1,126 |
| Exceptional items | **(70)** | (59) | (63) |
| Operating profit | **1,293** | 1,252 | 1,063 |

### 2010/11 compared with 2009/10

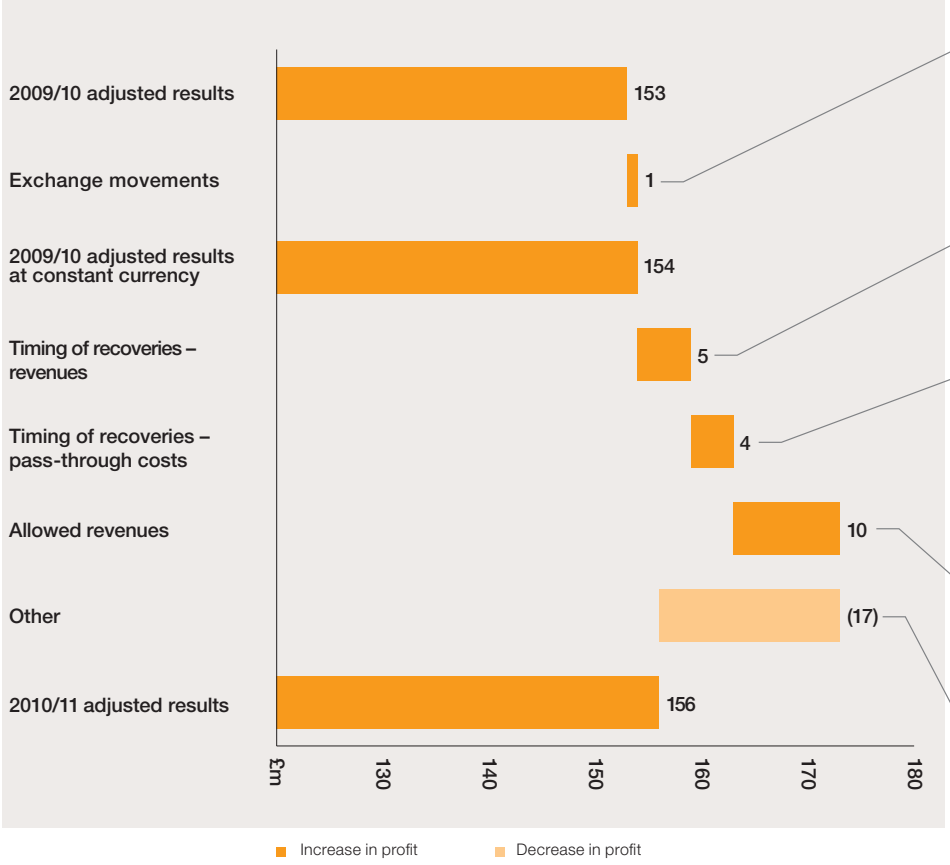


# Transmission US

The results of the Transmission US segment for the years ended 31 March 2011, 2010 and 2009 were as follows:

| | Years ended 31 March | | |
|---|---|---|---|
| | **2011 £m** | 2010 £m | 2009 £m |
| Revenue and other operating income | **429** | 405 | 420 |
| Operating costs excluding exceptional items | **(273)** | (252) | (245) |
| Adjusted operating profits | **156** | 153 | 175 |
| Exceptional items | **(2)** | (2) | (2) |
| Operating profit | **154** | 151 | 173 |

## 2010/11 compared with 2009/10




To compare the results of our US businesses on a like for like basis, we retranslate 2009/10 results at the 2010/11 average exchange rate

Timing of recoveries under our New York rate plan

Recovery of regulatory assessment costs in New York, which are fully recoverable as pass-through costs. The net £4m reflects recovery of prior year costs

Higher allowed revenues resulting from rate base increases in both New England and New York

Includes £12m for capital related expenses driven by the increase in the capital investment programme

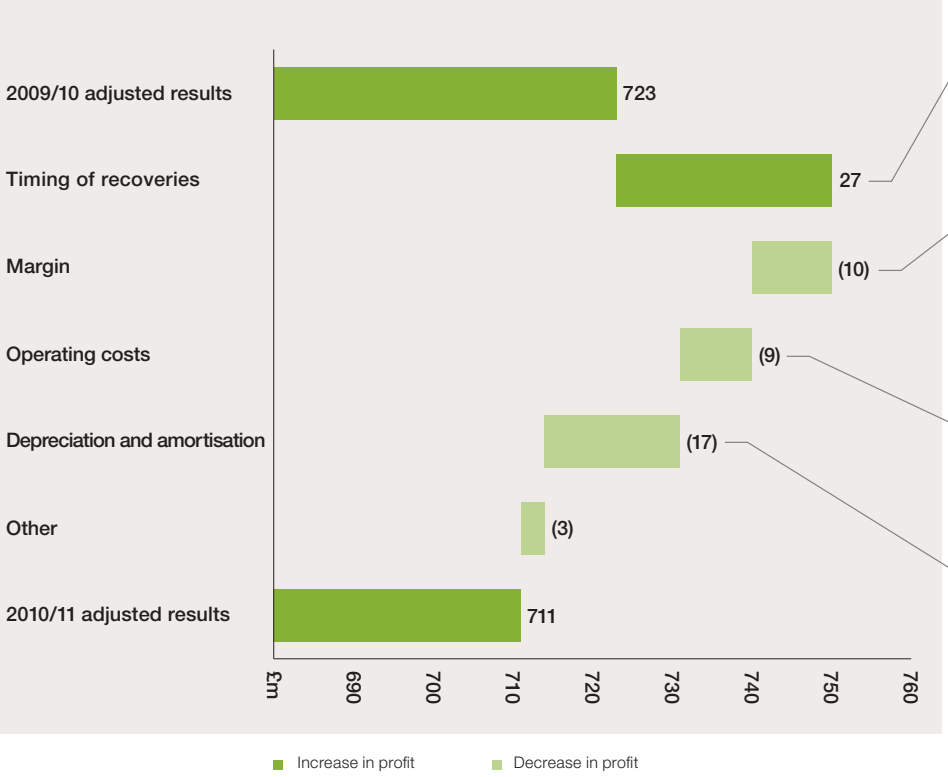
# Financial performance continued

## Gas Distribution UK

The results of the Gas Distribution UK segment for the years ended 31 March 2011, 2010 and 2009 were as follows:

| | Years ended 31 March | | |
|---|---|---|---|
| | **2011 £m** | 2010 £m | 2009 £m |
| Revenue and other operating income | **1,524** | 1,518 | 1,468 |
| Operating costs excluding exceptional items | **(813)** | (795) | (796) |
| Adjusted operating profits | **711** | 723 | 672 |
| Exceptional items | **(40)** | (41) | (43) |
| Operating profit | **671** | 682 | 629 |

### 2010/11 compared with 2009/10




Some costs incurred in one period are only recovered through revenue generated in a subsequent period. This gives rise to variations in profit from year to year

Price control revenue flat due to impact of negative RPI offset by small positive allowed real increase in revenues. Reduction in margin largely due to loss on non-formula work offset by shrinkage margin and incentive income

Higher pension costs and the impact of severe weather, partly offset by efficiency savings and lower insurance premiums

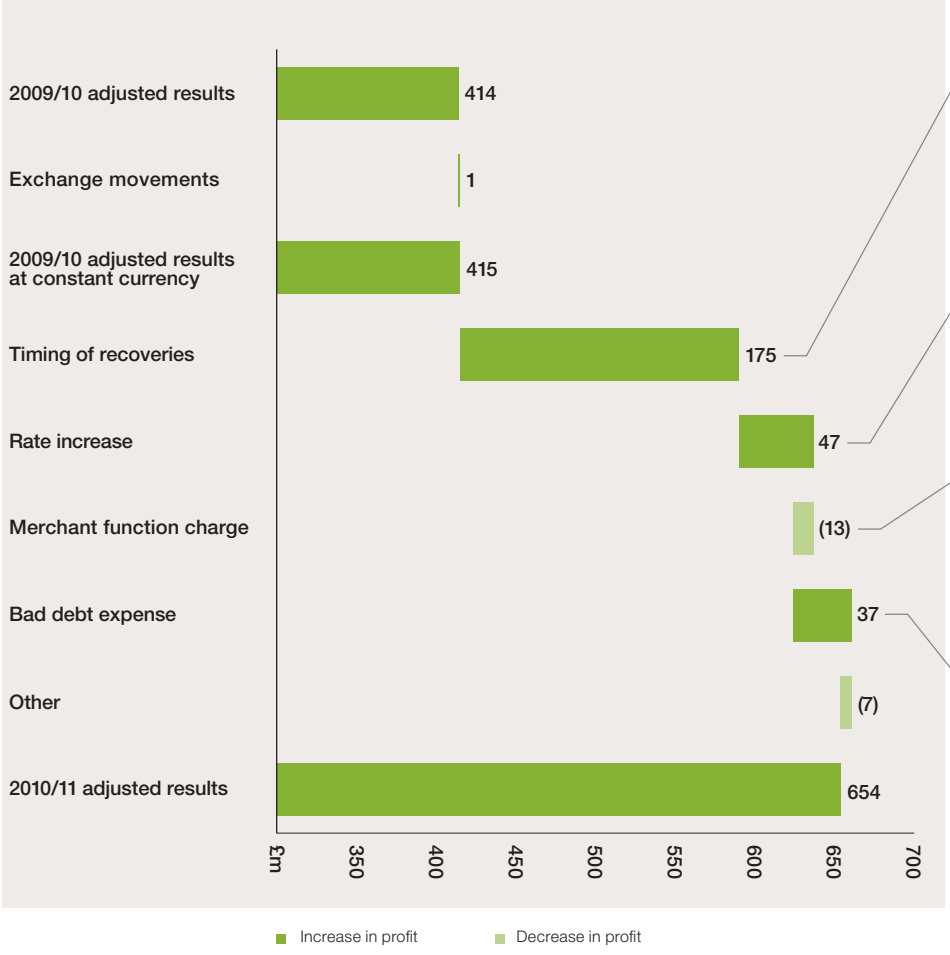
Reflects increased investment (see page 48), including Gas Distribution front office (see page 50) and completion of Harefield-Southall pipeline in 2009/10

# Gas Distribution US

The results of the Gas Distribution US segment for the years ended 31 March 2011, 2010 and 2009 were as follows:

| | Years ended 31 March | | |
|---|---|---|---|
| | **2011 £m** | 2010 £m | 2009 £m |
| Revenue | **3,811** | 3,708 | 4,786 |
| Operating costs excluding exceptional items and remeasurements | **(3,157)** | (3,294) | (4,174) |
| Adjusted operating profits | **654** | 414 | 612 |
| Exceptional items and remeasurements | **(14)** | 34 | (386) |
| Operating profit | **640** | 448 | 226 |

## 2010/11 compared with 2009/10




Pass-through costs which we are permitted to recover in full from customers. However, the recovery does not always occur in the same period as the cost itself, which gives rise to a timing difference affecting operating profit

Gas Distribution US benefited from approved rate increases and delivery rate adjustments in our downstate New York, Long Island, upstate New York, Massachusetts and New Hampshire territories

Lower merchant function charge recoveries due to lower gas costs which results in lower recoveries associated with commodity bad debt expense, return requirement on working capital related to gas purchased and return requirement on gas in storage

Lower bad debt expense due to lower net write-offs of £11m, lower reserve changes of £10m and lower New England gas commodity adjustments of £16m

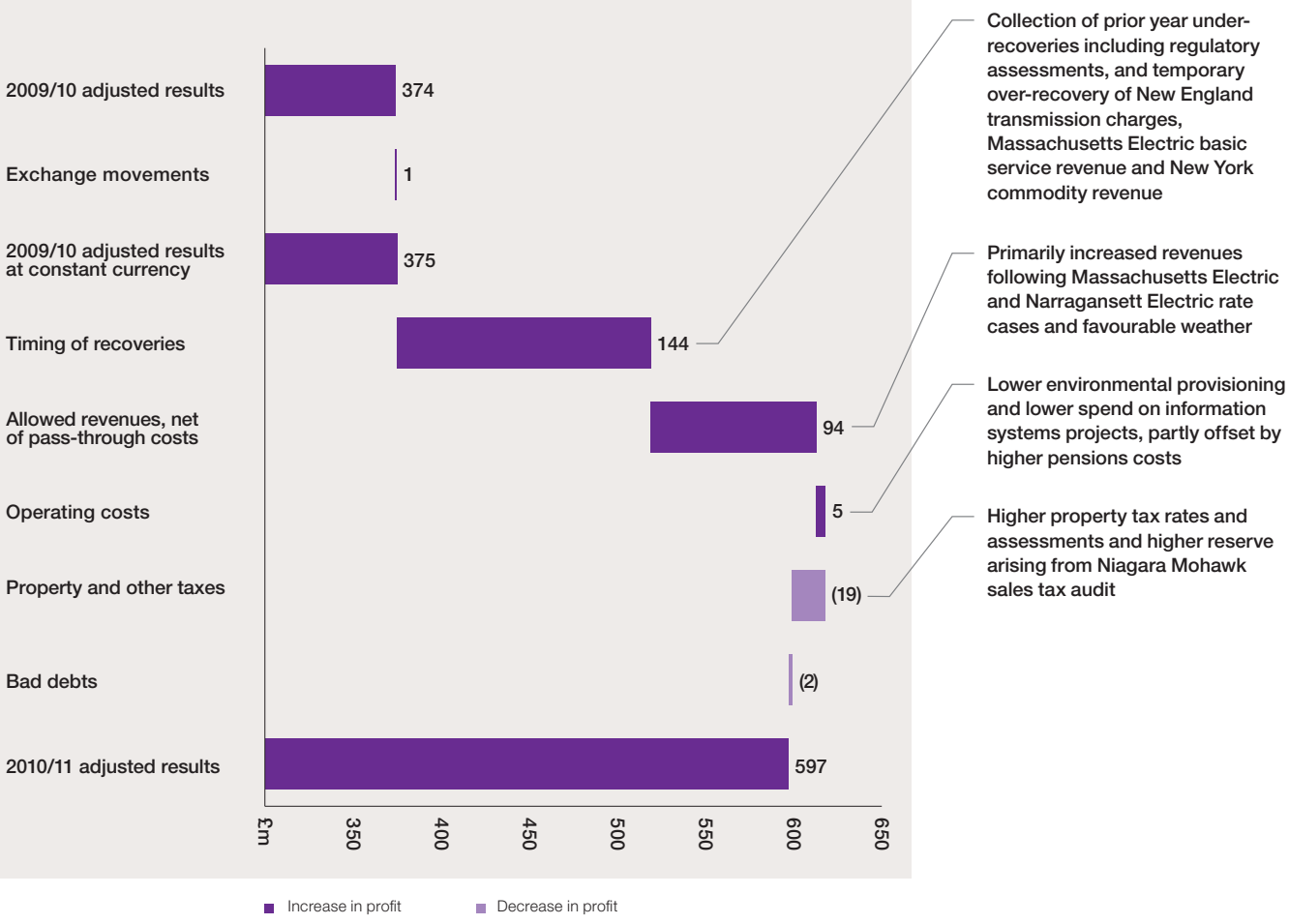
# Financial performance continued

## Electricity Distribution & Generation

The results of the Electricity Distribution & Generation segment for the years ended 31 March 2011, 2010 and 2009 were as follows:

| | Years ended 31 March | | |
|---|---|---|---|
| | **2011 £m** | 2010 £m | 2009 £m |
| Revenue excluding stranded cost recoveries | **4,212** | 3,963 | 4,537 |
| Operating costs excluding exceptional items and remeasurements | **(3,615)** | (3,589) | (4,272) |
| Adjusted operating profits | **597** | 374 | 265 |
| Exceptional items and remeasurements | **(35)** | (42) | (160) |
| Stranded cost recoveries | **348** | 369 | 426 |
| Operating profit | **910** | 701 | 531 |

### 2010/11 compared with 2009/10

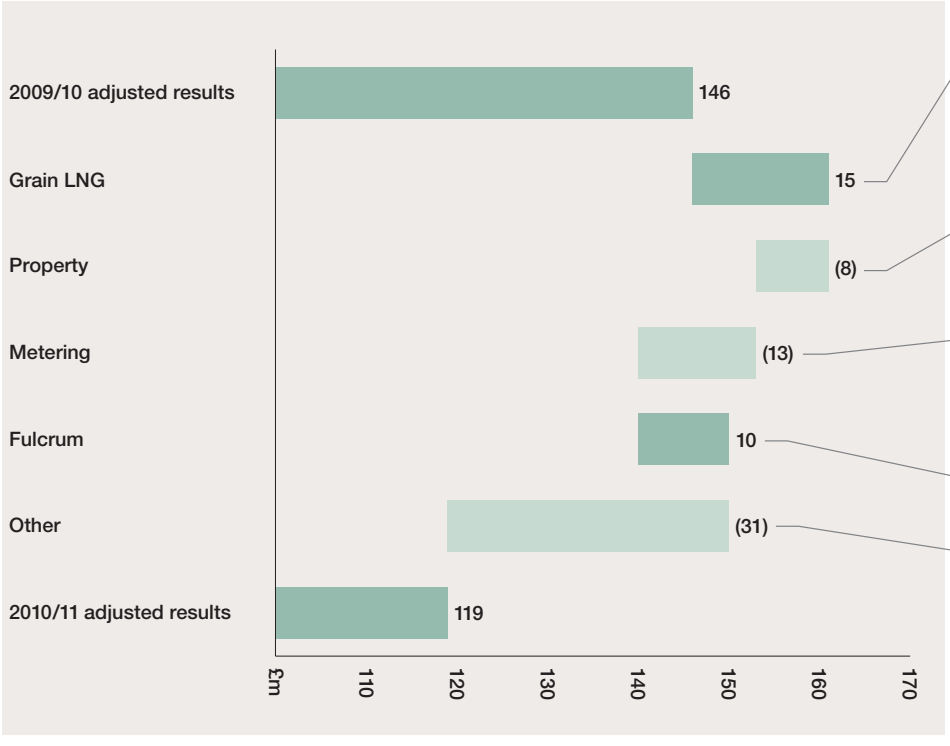


# Non-regulated businesses and other

The results of our non-regulated businesses and other activities for the years ended 31 March 2011, 2010 and 2009 were as follows:

| | Years ended 31 March | | |
|---|---|---|---|
| | **2011 £m** | 2010 £m | 2009 £m |
| Revenue and other operating income | **678** | 741 | 750 |
| Operating costs excluding exceptional items | **(559)** | (595) | (685) |
| Adjusted operating profit | **119** | 146 | 65 |
| Exceptional items | **(42)** | (87) | (64) |
| Operating profit | **77** | 59 | 1 |

## 2010/11 compared with 2009/10




Revenue £23m higher due to commencement of operation of phase III and partly inflation linked revenue. Costs increased by £8m due to commencement of operation of phase III

Higher level of disposals and profit from lettings, offset by increased rental and environmental charges

Portfolio growth at OnStream, our unregulated metering activities, offset by a decline in meter population in our regulated metering business

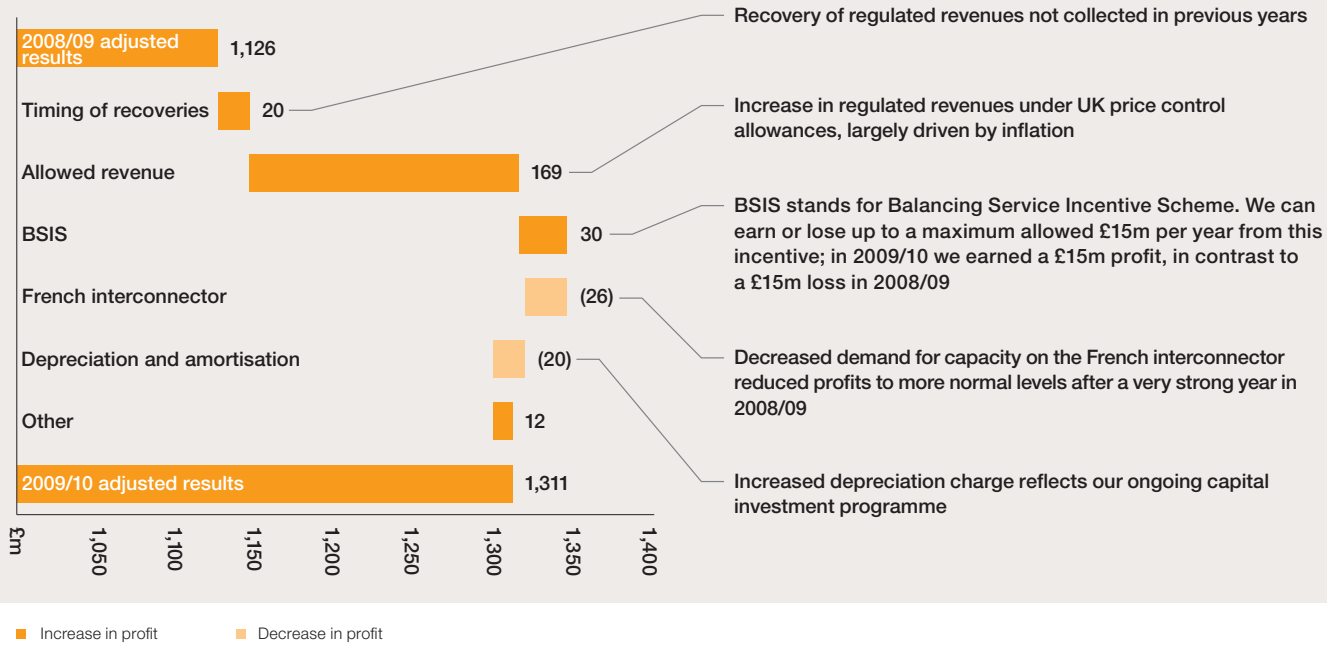
Disposal of loss making business

Includes £8m development costs in relation to carbon capture and storage and £23m costs associated with our systems programmes

# Financial performance continued

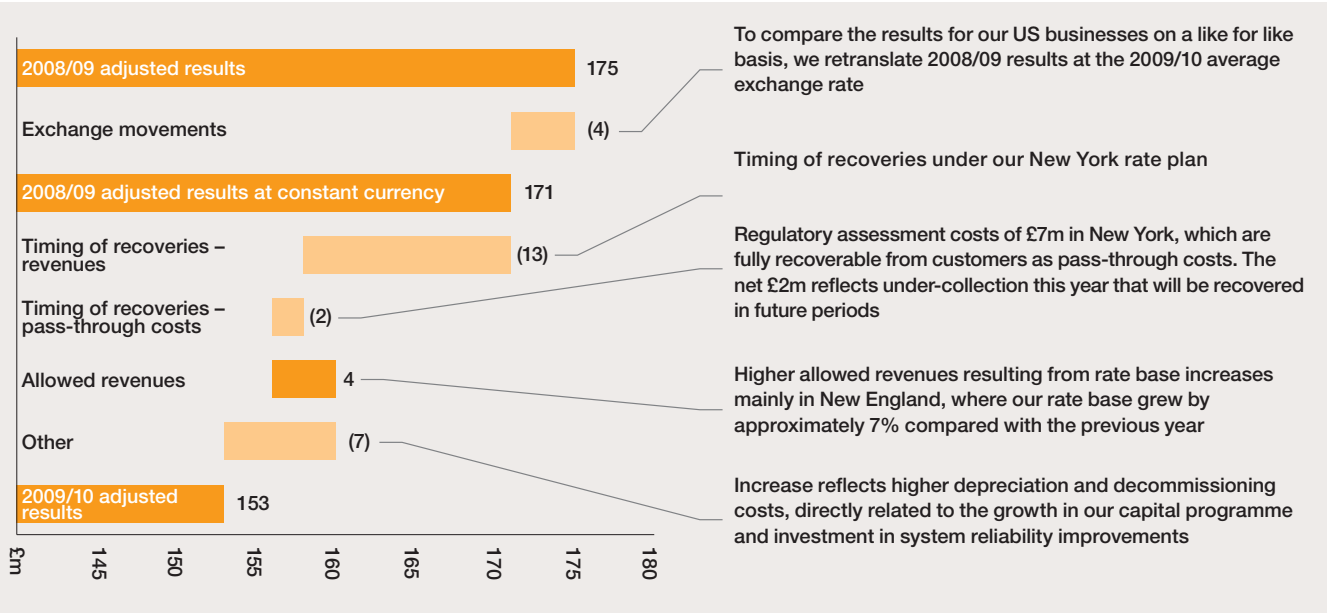
## Transmission UK

The principal movements between 2008/09 and 2009/10 for the Transmission UK segment were as follows:



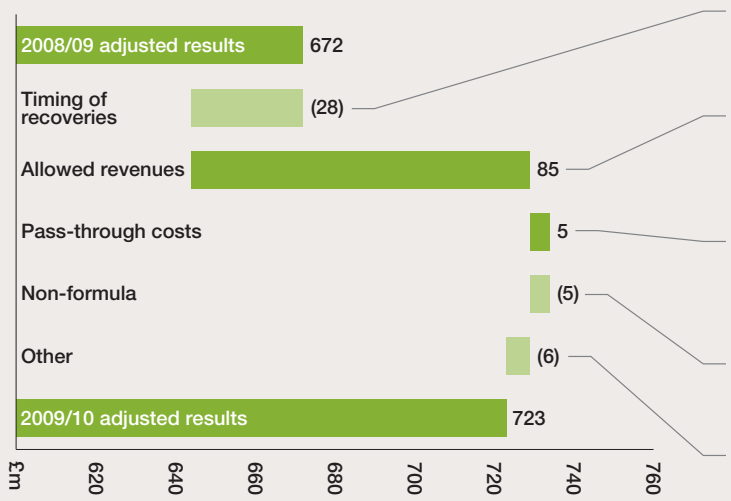

## Transmission US

The principal movements between 2008/09 and 2009/10 for the Transmission US segment were as follows:



# Gas Distribution UK

The principal movements between 2008/09 and 2009/10 for the Gas Distribution UK segment were as follows:




Some costs incurred in one period are only recovered through revenue generated in a subsequent period. This gives rise to variations in profit from year to year

Revenue increase 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

Pass-through costs are costs which are recoverable in full from customers. The recovery does not always fall in the same period in which the costs occur, which causes some variability in profit

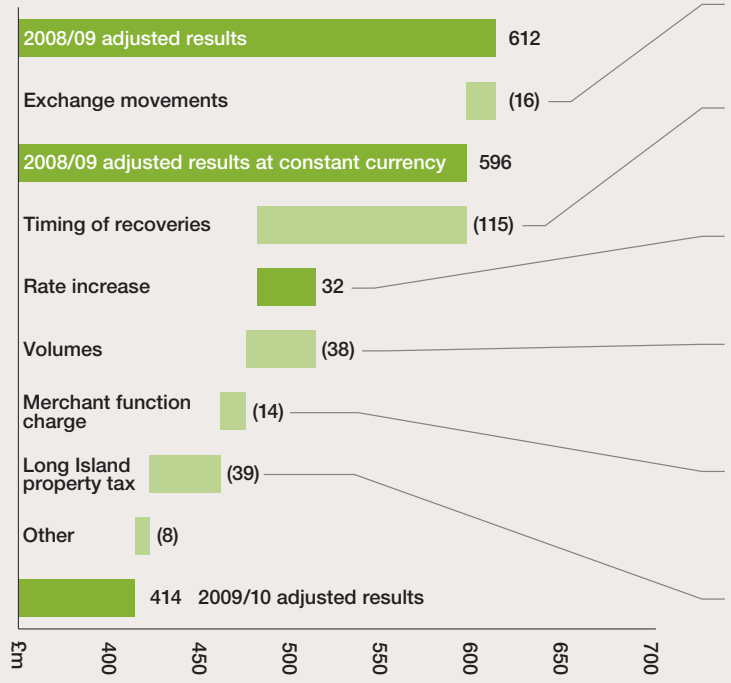
Decline in non-formula revenue driven primarily by a drop in non-regulated meter work, offset by a decline in costs due to reduced workload

Mainly higher depreciation charges due to our ongoing capital investment programme, together with higher costs associated with extreme winter weather conditions

Increase in profit  Decrease in profit

# Gas Distribution US

The principal movements between 2008/09 and 2009/10 for the Gas Distribution US segment were as follows:




To compare the results for our US businesses on a like for like basis, we retranslate 2008/09 results at the 2009/10 average exchange rate

Pass-through costs which we are permitted to recover in full from customers. However, the recovery does not always occur in the same period as the cost itself, which gives rise to a timing difference affecting operating profit

We benefited from approved rate increases and delivery rate adjustments in our downstate New York, Long Island, upstate New York, Rhode Island and New Hampshire territories

Decrease in volumes driven by warmer than normal weather, normal conservation/attrition and economic downturn impact of £67m partially offset by load additions of approximately 44,000 customers contributing £29m

Lower merchant function charge recoveries due to lower gas costs which results in lower recoveries associated with commodity bad debt expense, return requirement on gas purchased related working capital and return requirement on gas in storage

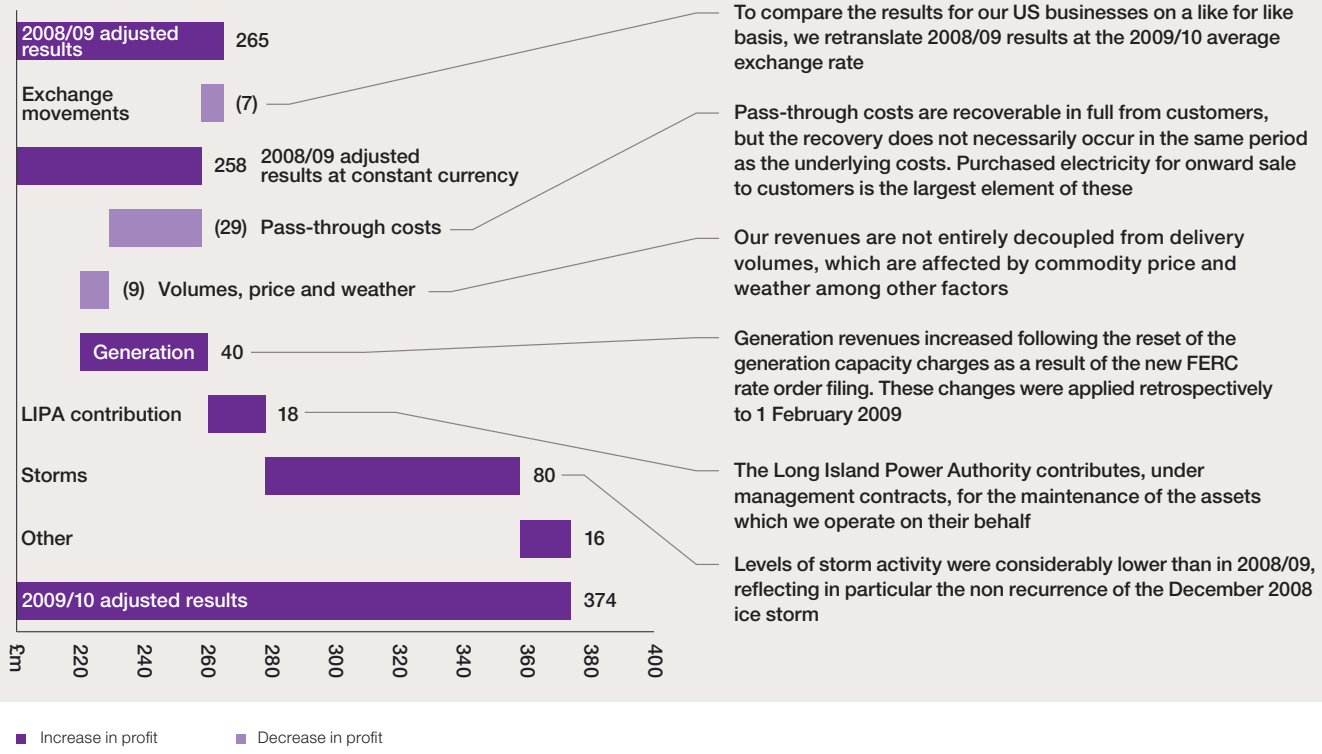
Cessation of Long Island property tax collections

Increase in profit  Decrease in profit

# Financial performance continued

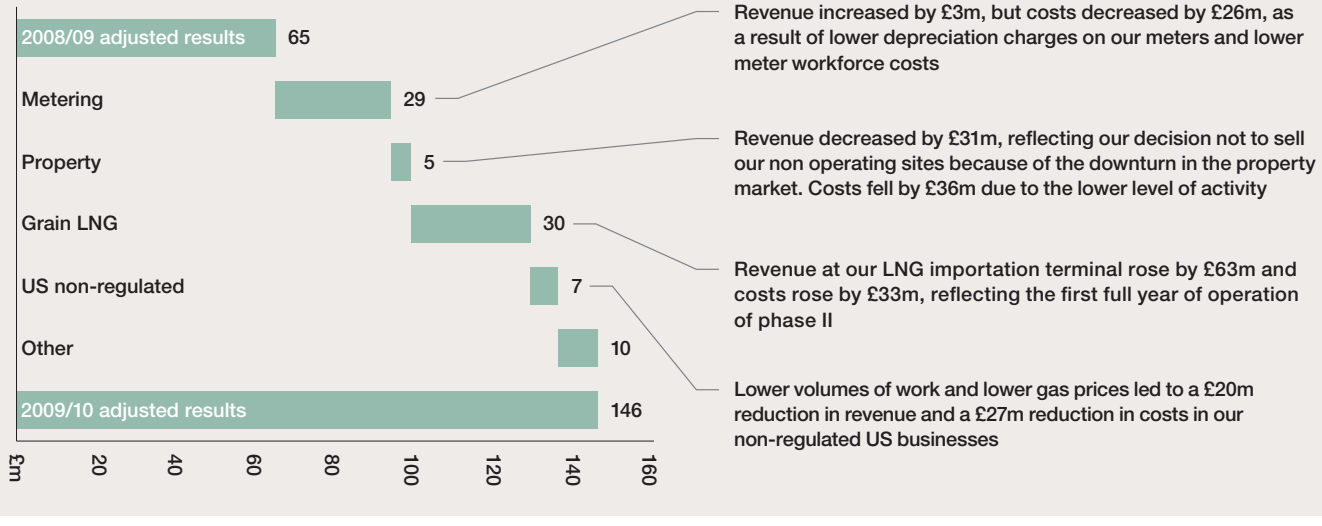
## Electricity Distribution & Generation

The principal movements between 2008/09 and 2009/10 for the Electricity Distribution & Generation segment were as follows:




## Non-regulated businesses and other

The principal movements between 2008/09 and 2009/10 for non-regulated businesses and other activities were as follows:

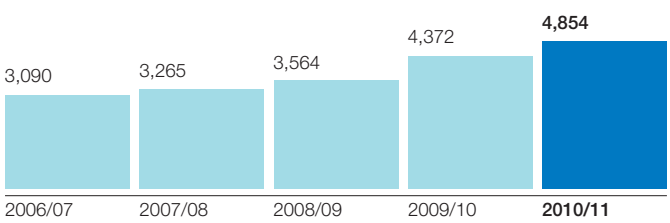


## Cash flows

### Cash flows from operating activities

Cash generated from continuing operations was £4,854 million in 2010/11, compared with £4,372 million in 2009/10 and £3,564 million in 2008/09. This included cash outflows for continuing operations relating to exceptional items of £147 million, £135 million and £131 million respectively, and cash inflows from stranded cost recoveries of £343 million, compared with £361 million and £359 million respectively.

**Operating cash flows**




After reflecting taxes, net cash inflow from operating activities was £4,858 million, compared with £4,516 million in 2009/10 and £3,413 million in 2008/09. This included net corporate tax receipts amounting to £4 million in 2010/11 (2009/10: £144 million tax receipts; £143 million tax payments).

### Cash flows from investing activities

Cash outflows from investing activities were £4,774 million in 2010/11, compared with £2,332 million in 2009/10 and £1,998 million in 2008/09.

Net purchases of financial investments were £1,577 million in 2010/11, compared with net sales of £805 million in 2009/10 and £99 million in 2008/09. Proceeds from sales of subsidiaries, joint ventures and other investments were £11 million in 2010/11, compared with £6 million in 2009/10 and £nil in 2008/09.

Excluding acquisitions and disposals of financial investments, cash outflows from investing activities for continuing operations increased by £60 million compared with 2009/10 (2009/10: decreased by £9 million compared with 2008/09). Investing activities of discontinued operations were £nil in the period and in 2009/10, compared with a cash inflow of £1,049 million in 2008/09.

### Cash flows from financing activities

Net cash outflows from financing activities excluding the rights issue were £3,644 million in 2010/11 compared with £2,212 million in 2009/10 and £877 million in 2008/09. This reflected net outflows from borrowings of £1,763 million (2009/10: £499 million outflow; 2008/09: £1,641 million inflow) and share repurchases of £3 million (2009/10: £7 million; 2008/09: £627 million).

Payments to providers of finance, in the form of interest and dividends, totalled £1,823 million in 2010/11 compared with £1,691 million in 2009/10 and £1,899 million in 2008/09.

Interest payments decreased from £1,003 million in 2009/10 to £965 million in 2010/11 (decreased from £1,061 million in 2008/09 to £1,003 million in 2009/10).

Dividends paid to shareholders increased from £688 million in 2009/10 to £858 million in 2010/11 reflecting both the increase in the amount of the dividend per share and the increase in the number of shares in issue following the rights issue in June 2010. Dividends paid to shareholders decreased from £838 million in 2008/09 to £688 million in 2009/10.

## Statutory disclosures

### Research and development

Expenditure on research and development during the year was £16 million (2009/10: £19 million; 2008/09: £10 million). This included development of new materials for use in the electricity transmission business and research into low carbon energy such as carbon capture and storage.

### Charitable donations

During 2010/11, approximately £13 million (2009/10: £11 million; 2008/09: £10 million) was invested in support of community initiatives and relationships. The London Benchmarking Group model was used to assess this overall community investment. Direct donations to charitable organisations amounted to £0.8 million (2009/10: £1.1 million; 2008/09: £1.4 million). In addition to our charitable donations, financial support was provided for our affordable warmth programme, education programme, university research and our Young Offenders Programme.

### Political donations and expenditure

National Grid made no donations in the UK or European Union during the year, including donations as defined for the purposes of the Political Parties, Elections and Referendums Act 2000. National Grid USA and certain of its subsidiaries made political donations in the US of $151,000 (£96,000) (2009/10: $177,000; 2008/09: $180,000) during the year to affiliated Federal and New York and New Hampshire state political action committees (PACs). National Grid USA's affiliated New York PACs were funded partly by contributions from National Grid USA and certain of its subsidiaries and partly by voluntary employee contributions. National Grid USA's affiliated New Hampshire PAC was funded wholly by contributions from National Grid USA and certain of its subsidiaries. National Grid USA's affiliated federal PACs were funded wholly by voluntary employee contributions.

### Policy and practice on payment of creditors

It is National Grid's policy to include in contracts or other agreements terms of payment with suppliers. Once agreed, National Grid aims to abide by these payment terms. The average creditor payment period at 31 March 2011 for National Grid's principal operations in the UK was 20 days (14 days at 31 March 2010).

# Financial position and financial management

## Contents



## 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 Funding and liquidity management on page 72 and in note 32(d) to the consolidated financial statements.

## Financial position

### Balance sheet

Our balance sheet at 31 March 2011 can be summarised as follows:

| | Assets £m | Liabilities £m | Net assets £m |
|---|---|---|---|
| Property, plant and equipment and non-current intangible assets | 32,457 | – | 32,457 |
| Goodwill and non-current investments | 5,369 | – | 5,369 |
| Current assets and liabilities | 2,822 | (3,794) | (972) |
| Other non-current assets and liabilities | 135 | (3,405) | (3,270) |
| Post-retirement assets and obligations | 556 | (2,574) | (2,018) |
| Deferred tax | – | (3,766) | (3,766) |
| Total before net debt | 41,339 | (13,539) | 27,800 |
| Net debt | 5,061 | (23,792) | (18,731) |
| **Total as at 31 March 2011** | **46,400** | **(37,331)** | **9,069** |
| Total as at 31 March 2010 | 43,553 | (39,342) | 4,211 |

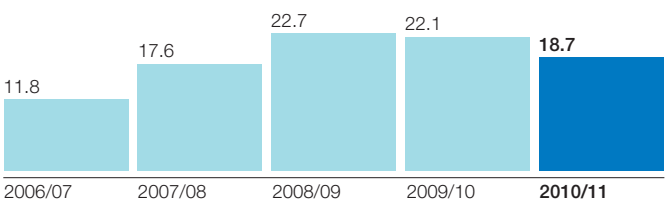
The increase in net assets from £4,211 million at 31 March 2010 to £9,069 million at 31 March 2011 resulted from: the profit for the year of £2,163 million; the rights issue which raised £3,214 million net of costs; income recognised directly in equity of £301 million; and other items totalling £38 million; offset by dividends payable net of scrip issues of £858 million.

### Net debt

Net debt decreased by £3,408 million from £22,139 million at 31 March 2010 to £18,731 million at 31 March 2011. Cash flow from operations of £4.9 billion and the net proceeds of the rights issue of £3.2 billion were offset by capital expenditure of £3.3 billion and payment of dividends of £0.9 billion, resulting in a net cash inflow of £3.9 billion. Interest charges of £1.2 billion were offset by a £0.7 billion impact of the movement in the dollar exchange rate on our dollar denominated debt and other fair value movements. A five year history of net debt is shown below.

**Net debt at 31 March**

£bn

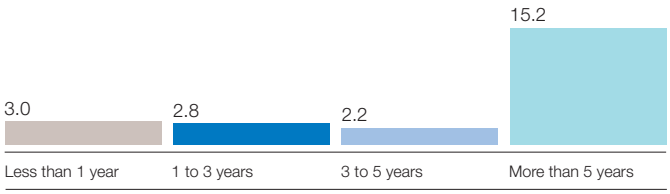



At 31 March 2011, net debt comprised borrowings of £23,198 million (2010: £25,124 million) including bank overdrafts of £42 million (2010: £29 million), less cash and cash equivalents of £384 million (2010: £720 million), financial investments of £2,939 million (2010: £1,397 million) and derivative financial instruments with a net carrying value of £1,144 million (2010: £868 million).

The maturity of borrowings at 31 March 2011 is provided in note 19 to the consolidated financial statements and is illustrated below.

**Maturity of borrowings at 31 March 2011**

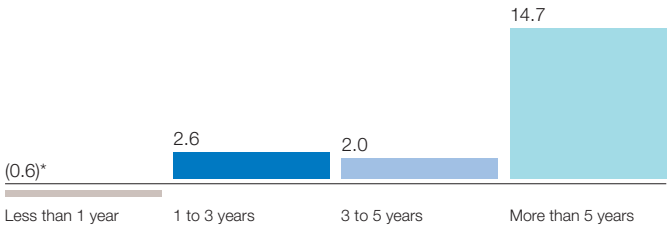
£bn




The maturity of net debt, defined as borrowings plus derivative financial liabilities, less cash and cash equivalents, current financial investments and derivative financial assets, is illustrated below.

**Maturity of net debt at 31 March 2011**

£bn




* Negative figure indicates that cash and short-term financial investments exceed debt maturities

## Capital structure

The principal measure of our balance sheet efficiency is our interest cover ratio as described on page 56. Our target long-term 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 (NGET plc) and National Grid Gas plc (NGG plc).

Interest cover for the year ended 31 March 2011 was above our target range, having fallen slightly to 3.8 from 3.9 for the year ended 31 March 2010. The primary reasons for the decrease in 2010/11 were increased interest expense on our retail price index (RPI) linked debt, due to the return of UK inflation, offset by a reduction in debt following the rights issue which completed in June 2010 and higher levels of operating cash inflows.

Gearing at 31 March 2011 and 31 March 2010, calculated as net debt expressed as a percentage of net debt plus net assets shown in the balance sheet, amounted to 67% and 84% respectively. We do not consider that this standard 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.

In addition, we monitor the regulatory asset value (RAV) gearing within each of NGET plc and the regulated transmission and distribution businesses within 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 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 2011 and 31 March 2010.

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 which no longer has a RAV associated with it.

| RAV gearing | 2011 % | 2010 % |
|---|---|---|
| Regulated transmission and distribution businesses within National Grid Gas plc | **54** | 57 |
| National Grid Electricity Transmission plc | **54** | 56 |

Some of our regulatory agreements impose lower limits for the long-term senior unsecured debt 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. One of the key limits requires National Grid plc to hold an investment grade long-term senior unsecured debt credit rating. We believe that our aim of maintaining single A range long-term senior unsecured debt credit ratings within our main UK operating companies is consistent with this.

## Rights issue

On 19 May 2010, the Board resolved to offer a fully underwritten rights issue to raise approximately £3.2 billion, net of expenses. The rights issue completed successfully in June, with 94.2% of qualifying shareholders taking up their rights. The capital raised will allow us to increase our capital investment in the UK significantly, and assist in maintaining single A credit ratings for our UK operating companies, thereby improving our long-term competitive position.

## Liquidity and treasury management

### Treasury policy

Funding and treasury risk management 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 84) 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 our funding and liquidity requirements. 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 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.

Commodity derivatives entered into in respect of gas and electricity commodities are used in support of the operational requirements of the business, and the policy regarding their use is explained on page 74.

# Financial position and financial management continued

## Current condition of the financial markets

The financial markets have essentially returned to normal for National Grid following the turmoil in the capital markets in 2008 and 2009. Following our rights issue, which completed in June 2010, our funding requirements were modest. Nevertheless, we issued approximately £0.8 billion of new long-term debt but also repurchased £1.3 billion and did not refinance £1.6 billion of debt maturities. In addition, we have issued £1.6 billion of commercial paper, £457 million of which remained outstanding as at 31 March 2011. We remain confident of our ability to access the public debt markets in the future.

## 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 cash flows. However, in the US our short-term cash flows are dependent on the price of gas and electricity and the timing of customer payments. 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 abnormally mild or extreme weather or economic conditions affecting the level of demand, can affect cash inflows in particular. In addition, our cash flows arising in the US are exposed to movements in the 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 73.

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 seek to enhance our cash flow forecasting processes on an ongoing basis. Cash flow forecasts, supplemented by a financial headroom analysis, are monitored 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 undertake transactions between certain subsidiary companies including paying dividends, lending cash and levying charges. Our assessment of National Grid's liquidity takes into account these restrictions.

## Funding and liquidity management

We maintain a number of commercial paper and medium-term note programmes in both the UK and US to facilitate short- and long-term debt issuance into the money markets and capital markets. National Grid plc also has a Securities and Exchange Commission registered debt shelf in place to facilitate long-term debt issuance specifically into the US capital markets. Details of the programmes we maintain can be found in the debt investors section of our website.

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 or other specific debt issuances. These have never been drawn and there is currently no intention to draw them in the future.

Details of the bank facilities we maintain can be found in the debt investors section of our website. During the year, the $850 million short-term syndicated committed facility at National Grid plc expired and was renewed at the same level, but over five years instead of 364 days. In addition, the long-term committed facilities at National Grid Electricity Transmission plc and National Grid Gas plc were renewed for four years at levels of £715 million and £425 million respectively.

None of the committed facilities were drawn at any time during the year. Note 34 to the consolidated financial statements shows the maturity profile of undrawn committed borrowing facilities at 31 March 2011.

To facilitate debt issuance into the capital and money markets, many of the companies within National Grid maintain credit ratings. Details of the long-term senior unsecured debt and short-term debt credit ratings respectively provided by Moody's Investor Services, Standard & Poor's and Fitch Ratings can be found in the debt investors section of our website.

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. Details relating to cash, short-term investments and other financial assets at 31 March 2011 are shown in notes 13 and 17 to the consolidated financial statements.

We believe that maturing amounts in respect of contractual obligations as shown in commitments and contingencies in note 28 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.

In line with our normal treasury practice we expect to continue to access the markets in order to manage actively our debt portfolio, optimise our finance costs and manage our refinancing risk.

## 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.

More details on derivative financial instruments are provided in note 14 to the consolidated financial statements.

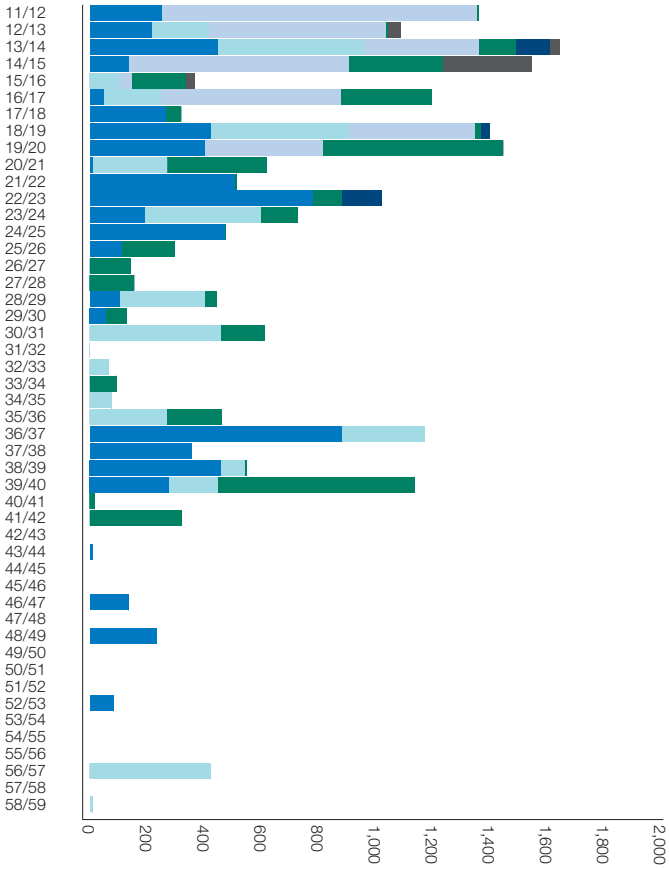
## Refinancing risk management

The Board controls refinancing risk mainly by limiting the amount of debt maturities arising on borrowings in any financial year.

The following chart shows the maturities of our long-term debt, which extend to 2058/59. This shows that, at 31 March 2011, we had £1.36 billion of long-term debt maturing in 2011/12, and no more than £1.64 billion of long-term debt maturing in any future year. We expect to be able to refinance this debt through the capital and money markets.

**National Grid long-term debt maturity profile**

£m




## 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 preset limits with a high degree of certainty.

Some of the bonds in issue from NGET plc and NGG plc are inflation linked, that is their cost is linked to changes in the UK retail price index (RPI). We believe that these bonds provide an appropriate hedge for revenues and our regulatory asset values that are also RPI linked under our price control formulae in the UK.

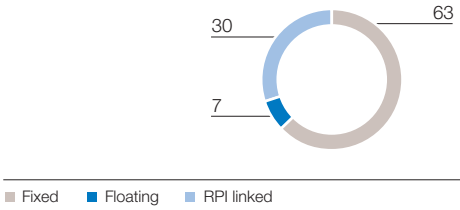
The performance of the treasury function in interest rate risk management is measured by comparing the actual total financing costs of its debt portfolio with those of a passively managed benchmark portfolio with set ratios of fixed-rate to floating-rate debt, to identify the impact of actively managing National Grid's interest rate risk. This is monitored regularly by the Finance Committee.

Within the constraints of our interest rate risk management policy, and as approved by the Finance Committee, we actively manage our interest rate exposure and therefore the interest rate profile shown at 31 March 2011 will change over time.

The chart below shows the interest rate profile of our net debt before derivatives.

**Interest rate profile pre-derivatives at 31 March 2011**

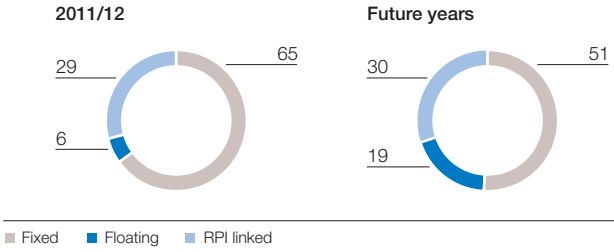
%




The chart below shows the impact, as at 31 March 2011, of derivatives on our net debt for 2011/12 and for future years. The 2011/12 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 2011**

%




In 2011/12, we expect our financing costs to continue to benefit from low short-term interest rates, some of which have already been locked in using short-term interest rate derivatives.

More information on the interest rate profile of our debt is included in note 32(a)(ii) to the consolidated financial statements.

## Foreign exchange risk management

Translation risk arising from assets and liabilities denominated in dollars forms our principal foreign exchange exposure. In relation to this risk, our objective is to maintain the ratio of dollar denominated financial liabilities to 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 dollars against the servicing of those liabilities.

We have a policy of managing our foreign exchange transaction risk by hedging contractually committed foreign exchange transactions occurring in currencies other than the dollar over a prescribed minimum size. This covers a minimum of 75% of such transactions occurring in the next six months and a minimum of 50% of such transactions occurring between six 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.

# Financial position and financial management continued

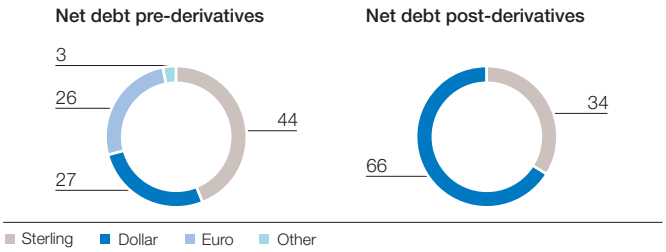
The result of this hedging activity is that our cash flow has limited exposure to foreign currencies.

Our capital expenditure programme over the next few years will result in material foreign currency exposures as we purchase raw materials and components from overseas suppliers. The treasury function will seek to manage these exposures through a range of hedging strategies and instruments.

In addition, we are exposed to currency exposures on borrowings in currencies other than sterling and the 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/dollar, as shown below.

**Currency profile at 31 March 2011**

%




More details can be found in note 32(a)(i) to the consolidated financial statements.

## Counterparty risk management

Counterparty risk arises from the investment of surplus funds, from the use of derivative instruments including commodity contracts, and from commercial contracts entered into by the businesses. The Finance Committee has agreed a policy for managing such risk. This policy sets limits as to the exposure that we can have with any one counterparty, based on that counterparty's credit rating from independent credit rating agencies. Our exposure to individual counterparties is monitored daily and counterparty limits are regularly updated for changes in credit ratings. We have a central treasury department, which is responsible for managing the policy. Where business areas enter into contracts carrying credit risk, part of the relevant counterparty limit can be allocated to the business area involved. This ensures that our overall exposure is managed within the appropriate limit.

Where multiple transactions are entered into with a single counterparty, a netting arrangement is usually put in place to reduce our exposure to credit risk in relation to that counterparty. When transacting interest rate and exchange rate derivatives, we use market standard documentation, which provides for netting in respect of all transactions governed by a specific agreement with a counterparty.

Further information on the management of counterparty risk is provided in note 32(c) to the consolidated financial statements.

## Valuation and sensitivity analysis

We calculate the fair value of debt and financial derivatives by discounting all future cash flows by the market yield curve, at the balance sheet date, including the credit spread for debt, and, in the case of financial derivatives, 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, 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 32(e) 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.

| | 2010/11 | | 2009/10 | |
|---|---|---|---|---|
| | **Income statement £m** | **Other equity reserves £m** | Income statement £m | Other equity reserves £m |
| UK retail price index ±0.50% | **19** | **–** | 17 | – |
| UK interest rates ±0.50% | **38** | **50** | 51 | 71 |
| US interest rates ±0.50% | **39** | **15** | 52 | 14 |
| US dollar exchange rate ±10% | **44** | **636** | 68 | 623 |

## 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 pre-defined 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. In the US, we also sell gas produced by our West Virginia gas fields.

In the US, during the year we also had a management contract with ConocoPhillips, under which we and ConocoPhillips 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. Profits associated with these activities were shared between us, ConocoPhillips and our customers in Massachusetts. This contract expired on 31 March 2011.

In our UK gas transmission operations, 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 pre-defined 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 may be used to reduce the risk and exposure to on the day entry capacity prices.

Our UK electricity transmission operations have also entered into electricity options, pursuant to the requirement to stabilise the electricity system in Great Britain through the operation of the British Electricity Trading and Transmission Arrangements. 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 national electricity transmission system operator role.

### 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 include contractual commitments to purchase energy under long-term contracts amounting to £3,543 million as at 31 March 2011 (2010: £3,948 million) of which £1,081 million is due within one year (2010: £1,195 million). Further information is included in note 28 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 £42 million (2010: £51 million), recorded as assets in our balance sheet and contracts with a negative value of £184 million (2010: £228 million) recorded as liabilities.

Commodity purchase contracts accounted for as derivatives include contracts for the forward purchase of electricity that reverted 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 £101 million liability at 31 March 2011 (2010: £127 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 under commodity remeasurements with the exception of those relating to our West Virginia gas fields that are designated as cash flow hedges.

We use NYMEX electricity and natural 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 2011 of £12 million (2010: £41 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.

In addition, we 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 fair value at 31 March 2011 of £33 million (2010: £45 million negative).

We also utilise over the counter gas swaps in the US to hedge the cash flow variability associated with forecast sales of a portion of gas production from our West Virginia gas fields.

### Sensitivity analysis

As described in note 33(d) to the consolidated financial statements, movements in commodity prices would have the following estimated impact on the financial statements in the value of commodities. This analysis does not take account of any change in the composition of our commodity portfolio.

| | **2010/11** | | 2009/10 | |
|---|---|---|---|---|
| | **Income statement £m** | **Other equity reserves £m** | Income statement £m | Other equity reserves £m |
| 10% increase in commodity prices | **58** | **–** | 71 | (1) |
| 10% decrease in commodity prices | **(54)** | **–** | (64) | 1 |

## Commitments and contingencies

Commitments and contingencies outstanding at 31 March 2011 and 2010 are summarised in the table below:

| | **2011 £m** | 2010* £m |
|---|---|---|
| Future capital expenditure contracted but not provided for | **1,614** | 1,738 |
| Total operating lease commitments | **795** | 926 |
| Power commitments | **3,543** | 3,948 |
| Guarantees and letters of credit | **762** | 1,189 |

* Comparatives have been restated to present items on a basis consistent with the current year classification

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 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 2011

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 2011 comprise commodity contracts carried at fair value and other creditors that represent contractual obligations falling due after more than one year.

# Financial position and financial management continued

Interest on borrowings is calculated based on borrowings at 31 March 2011 and does not reflect future debt issues. Floating-rate interest has been estimated using future interest rate curves at 31 March 2011.

| | Less than 1 year £m | 1-3 years £m | 3-5 years £m | More than 5 years £m | Total £m |
|---|---|---|---|---|---|
| **Financial liabilities** | | | | | |
| Borrowings | 2,616 | 2,762 | 2,141 | 15,314 | **22,833** |
| Interest payments on borrowings | 828 | 1,548 | 1,278 | 8,050 | **11,704** |
| Finance lease liabilities | 20 | 71 | 52 | 105 | **248** |
| Other non interest-bearing liabilities | 2,320 | 279 | – | – | **2,599** |
| Derivatives payments | 1,213 | 514 | 881 | 464 | **3,072** |
| Derivatives receipts | (1,596) | (1,056) | (1,151) | (455) | **(4,258)** |
| Commodity contracts | 290 | 124 | 62 | (19) | **457** |
| **Other contractual obligations** | | | | | |
| Capital commitments | 1,217 | 294 | 92 | 11 | **1,614** |
| Operating leases | 83 | 172 | 142 | 398 | **795** |
| Energy commitments | 1,081 | 808 | 513 | 1,141 | **3,543** |
| **Total at 31 March 2011** | **8,072** | **5,516** | **4,010** | **25,009** | **42,607** |

## Off balance sheet arrangements

There were no significant off balance sheet arrangements other than the contractual obligations and commitments described above.

## Details of material litigation as at 31 March 2011

We were not party to litigation that we considered to be material as at 31 March 2011. Save as set out below, there have been no governmental, legal or arbitration proceedings in the last 12 months which may have or have had significant effects on the Company's financial position or profitability.

### Metering competition investigation

As previously reported, on 25 February 2008 the Gas and Electricity Markets Authority (GEMA) announced it had decided we breached Chapter II of the Competition Act 1998 and Article 82 (now Article 102) of the Treaty of the Functioning of the European Union and fined us £41.6 million. Following appeals, the Competition Appeal Tribunal reduced the fine to £30 million and the Court of Appeal further reduced the fine to £15 million. On 22 March 2010, we applied to the Supreme Court for leave to appeal the Court of Appeal's judgement. On 28 July 2010, the Supreme Court denied our application and this ends the legal process. The £15 million fine was paid to GEMA on 1 April 2010.

### Gas Distribution mains replacement investigation

As previously reported, in October 2008 we informed Ofgem that mains replacement activity carried out by the UK Gas Distribution business may have been inaccurately reported. Ofgem has now concluded its investigation and, following the reaching of a settlement between Ofgem and National Grid Gas plc, on 6 January 2011 Ofgem announced its intention to impose a penalty of £8 million and to find National Grid Gas plc in breach of certain obligations in respect of the reporting of mains replacement data. Ofgem also stated that the penalty would have been higher had it not been for the cooperation and corrective action by National Grid Gas plc. On 10 March 2011, following the end of the period in which representations could be made in respect of the proposed decision, Ofgem wrote to National Grid Gas plc to confirm its decision. On 13 May 2011, we received the Final Penalty Notice and must pay the penalty by 27 June 2011.

### KeySpan Department of Justice investigation

As previously reported, in May 2007 KeySpan received a civil investigative demand (CID) from the Antitrust Division of the United States Department of Justice (DOJ), 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. In April 2008, we received a second CID in connection with this matter.

On 22 February 2010, DOJ filed a proposed final judgement in the US District Court for the Southern District of New York. Under the terms of the proposed settlement, DOJ and KeySpan agreed that KeySpan would pay $12 million (£7.5 million) in full and final resolution of DOJ's CIDs. This amount has been paid in full. The agreement contained no admissions of wrongdoing by KeySpan and was subject to court approval, which was obtained on 2 February 2011. On 9 February 2011, we transferred $12 million to DOJ in full and final settlement and this matter is now closed.

### KeySpan class action

Two putative class actions were commenced against KeySpan and Morgan Stanley, one in a New York state court and one in the federal court. The claims are based on allegations that the financial swap transaction between KeySpan and Morgan Stanley dated 18 January 2006 caused customers of Consolidated Edison, Inc. to overpay for electricity between May 2006 and February 2008. We believe that both complaints and their allegations are without merit and we have applied to have both actions dismissed. Our application for dismissal in the federal court was granted on 22 March 2011 but the plaintiffs may still appeal.

## Related party transactions

We provide goods and services to and receive goods and services from related parties, principally joint ventures. In the year ended 31 March 2011, we charged £11 million and received charges of £84 million from related parties (other than Directors) compared with £5 million and £73 million in 2009/10 and £4 million and £44 million in 2008/09.

Further information relating to related party transactions is contained within note 29 to the consolidated financial statements. Details on amounts paid to Directors are included within the Directors' Remuneration Report on pages 96 to 108.

## Retirement arrangements

We operate pension arrangements on behalf of our employees in both the UK and 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 September 2010 the UK government changed the basis for statutory pension increases from the retail price index (RPI) to the consumer price index (CPI). The scheme rules of our two UK pension schemes specifically reference RPI. As a consequence, the impact of the Government's move to CPI was predominantly limited to our guaranteed minimum pensions and the financial consequence was an approximate £55 million reduction in plan liabilities.

In the US, we operate a number of pension plans in the various states in which we operate, which provide both defined benefits and defined contribution benefits. We also provide post-retirement benefits other than pensions to the majority of employees. Benefits include health care and life insurance coverage to eligible retired employees.

### 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 liability | UK £m | US £m | Total £m |
|---|---|---|---|
| As at 1 April 2010 | (646) | (2,452) | (3,098) |
| Exchange movements | – | 125 | 125 |
| Current service cost | (90) | (112) | (202) |
| Expected return less interest | 79 | (54) | 25 |
| Curtailments, settlements and other | (7) | 2 | (5) |
| Actuarial gains/(losses) | | | |
| – on plan assets | 124 | 234 | 358 |
| – on plan liabilities | 301 | (88) | 213 |
| Employer contributions | 149 | 417 | 566 |
| **As at 31 March 2011** | **(90)** | **(1,928)** | **(2,018)** |
| Represented by: | | | |
| Plan assets | 15,353 | 4,616 | 19,969 |
| Plan liabilities | (15,443) | (6,544) | (21,987) |
| Net plan liability | (90) | (1,928) | (2,018) |

The amounts recorded in the balance sheet are based on International Accounting Standard 19, which requires 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.

Plan assets are measured at the bid market value at the balance sheet date. Plan liabilities are measured by discounting the best estimate of future cash flows to be paid out by the plans using the projected unit method. Estimated future cash flows are discounted at the current rate of return on high quality corporate bonds in UK and US debt markets of an equivalent term to the liability.

The principal movements in net obligations during the year arose as a consequence of actuarial gains on plan assets reflecting improvements in bond markets in particular and actuarial gains in the UK on plan liabilities principally as a consequence of using higher real discount rates partially offset by actuarial losses in the US due to a decrease in nominal discount rates.

### UK funding valuation

A triennial valuation is carried out for the independent trustees of our two UK defined benefit plans by professionally qualified actuaries, using the projected unit method. The purpose of the valuation is to design a funding plan to ensure that present and future contributions should be sufficient to meet future liabilities.

The 2010 valuations are nearing completion but the formal agreement has not yet been completed with the trustees. The valuations are on track to be completed by no later than the end of June 2011.

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 29.4% of pensionable payroll.

The last completed full actuarial valuation of 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.

### Contributions

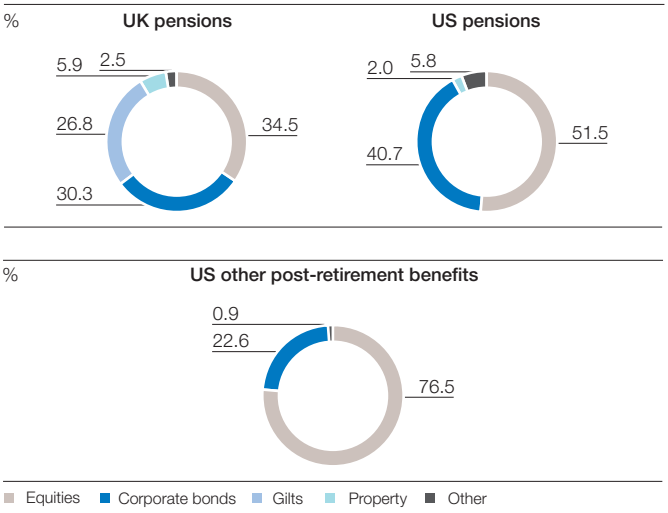
In addition to ongoing employer contributions, as part of the initial valuation discussions with the trustees of the National Grid Electricity Supply Pension Scheme it was agreed that a deficit payment of £45 million would be made in March 2011.

In accordance with our funding policy for US pension and other post-retirement benefit plans, we made contributions of £417 million in 2010/11 and expect to contribute approximately £413 million to these plans during 2011/12.

### Plan assets

Plan assets are predominantly invested in equities, corporate bonds, gilts, property and short-term investments. Our plans are trustee administered and the trustees are responsible for setting the investment strategy and monitoring investment performance, consulting with us where appropriate.

**Pension plan assets**
31 March 2011



# Accounting policies

## Basis of accounting

The consolidated financial statements present our results for the years ended 31 March 2011, 2010 and 2009 and our financial position as at 31 March 2011 and 2010. 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

IFRS provides certain options available within accounting standards. Material choices we have made, and continue to make, 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.

#### Customer contributions

Contributions received prior to 1 July 2009 towards capital expenditure are recorded as deferred income and amortised in line with the depreciation on the associated asset.

#### 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.

#### Timing of goodwill impairment reviews

Goodwill impairment reviews are carried out annually in the final quarter of the financial year.

## 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.

Certain accounting policies, described below, 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 the consolidated financial statements on pages 112 to 118.

#### 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 2011 are estimated at £303 million in the UK and £445 million in the US compared with £308 million and £415 million respectively at 31 March 2010.

#### 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.

#### 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 other comprehensive income or by being offset by adjustments to the carrying value of debt.

#### Exceptional items, remeasurements and stranded cost recoveries

Exceptional items, remeasurements and stranded cost recoveries 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 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, significant changes in environmental or decommissioning provisions, integration of acquired businesses, gains or losses on disposals of businesses or investments and debt redemption costs as a consequence of transactions such as significant disposals or issues of equity.

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 generation assets.

#### 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.

### 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. 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.

### 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 is that 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.

### Provisions

Provisions are made for liabilities, the timing and amount of which is uncertain. These include provisions for the cost of environmental restoration and remediation, decommissioning of nuclear facilities we no longer own but to which we still have a responsibility to contribute, 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 amounts and timing of cash flows relating to these liabilities are based on management estimates supported by external consultants.

### Pensions and other post-retirement obligations

Pensions and other post-retirement benefit obligations recorded in the balance sheet are calculated actuarially using a number of assumptions about the future, including inflation, salary increases, life expectancy, length of service and pension and investment returns, together with the use of a discount rate to calculate the present value of the obligation.

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.

### 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 judged 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:

### Revenue accruals

A 10% change in our estimate of unbilled revenues at 31 March 2011 would result in an increase or decrease in our recorded net assets and profit for the year by approximately £49 million net of tax.

### Asset useful lives

An increase in the economic useful lives of assets of one year on average would reduce our annual depreciation charge on property, plant and equipment by £40 million (pre-tax) and our annual amortisation charge on intangible assets by £7 million (pre-tax).

### Hedge accounting

If using our derivative financial instruments, hedge accounting had not been achieved during the year ended 31 March 2011 then the profit after tax for the year would have been £336 million higher than that reported net of tax, and net assets would have been £82 million lower.

### 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 £114 million and £11 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 £181 million.

### 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 £304 million, £162 million and £653 million and a change in the annual pension cost of £7 million, £8 million and £7 million respectively.

## Accounting developments

### Accounting standards, amendments to standards and interpretations adopted in 2010/11

In preparing our consolidated financial statements we have complied with International Financial Reporting Standards, International Accounting Standards and interpretations applicable for 2010/11. The standards, amendments to standards and interpretations adopted during 2010/11 are discussed in the consolidated financial statements on page 119. None of these resulted in a material change to our consolidated results, assets or liabilities in 2010/11 or in those of previous periods.

### Accounting standards, amendments to standards and interpretations not yet adopted

New accounting standards, amendments to standards and interpretations which have been issued but not yet adopted by National Grid are discussed in the consolidated financial statements on page 119.