

# Chairman's statement

**We have stepped up our participation in the debate on shaping the energy future – ensuring that, while we continue to deliver strongly today, we are also planning for tomorrow.**

The Board is proposing a recommended final dividend of

**24.84p**

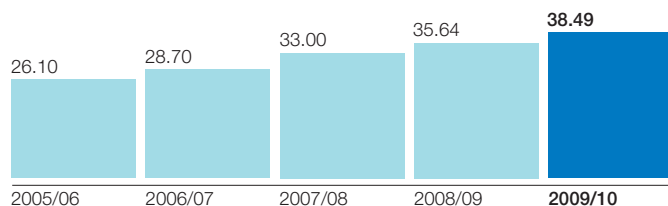
2008/09: 23.00p

We are also targeting an increase of

**8%**

per annum until 2011/12

Dividends per share  
pence



I am pleased to report another strong set of results for 2009/10. Our priorities arising from the Board's strategy are now well embedded and driving performance across the Company. The line of sight concept seeks to link each employee with our corporate vision, which is set out in the Operating and Financial Review.

This year, we experienced difficult weather conditions in both the UK and the US, resulting in high levels of gas demand. Significant reengineering and investment in our UK gas national transmission system has been undertaken over recent years to construct and facilitate additional sources of supply connection as North Sea gas outputs have reduced. However, vital as having made the right hardware and system investment decisions was, it was the skill, dedication and professionalism of our people that allowed us successfully to meet these severe, weather-driven challenges.

Over the last year, we have stepped up our participation in the debate on shaping the energy future – ensuring that, while we continue to deliver strongly today, we are also planning for tomorrow. I am confident National Grid can adapt and deliver the significant changes that the future energy environment will require, while delivering value to our shareholders.

## Investment and balance sheet

We maintain a disciplined approach to our capital investment and efficient management of our balance sheet. Since the merger of National Grid and Lattice in 2002, this has enabled us to return almost £10 billion of capital to shareholders, which includes more than doubling our dividend in the process. National Grid plays a vital role in delivering essential UK energy infrastructure and we are entering an era of significantly higher capital investment. We are, therefore, announcing a £3.2 billion rights issue, which we believe will enable us to continue to deliver our growth strategy in the UK and maintain our single A credit ratings in our UK operating companies.

## Our people

I believe the commitment of our employees makes possible the delivery of our promises, obligations and ambitions. We seek to develop their talent, through new and innovative ways of enhancing their capabilities and leadership skills. We also strive to ensure National Grid will continue to attract new talent and be seen as an employer of choice.

We encourage the excellence of our employees through the Chairman's awards, in the areas of inclusion and diversity, safety, health, environment, community, and customer delivery. This year, more than 240 nominations were submitted, which allowed us to recognise the outstanding achievements of those employees who go well above and beyond their work requirements.

We recognise that having an appropriately skilled workforce is fundamental both now and into the future and we also acknowledge the challenge achieving this entails. We are taking firm action to ensure we have a robust pool of employees with the right skills and capabilities and in the right roles to achieve our mutual ambitions. We have created a number of targeted solutions to assist our employees in maximising their performance.

## Safety and wellbeing

Safety is paramount in all our undertakings and we believe that everyone in National Grid, collectively and individually, has a part to play to achieve it. I am glad to report a further improvement in our safety performance across the Company.

The wellbeing of our employees has been an important consideration for us throughout 2009/10. This is not only important for the health and happiness of our employees but also plays a vital role in our success. We have been encouraging our employees to make a positive impact on their wellbeing and the wellbeing of those around them and have seen good use of health kiosks and cardiovascular screening.

## Community

I am encouraged by the career progression of the young people who have completed the Young Offender Programme, which provides skills training and employment for offenders nearing the end of their sentence. Not only is it reducing reoffending from 70% to less than 7% for those completing the programme in our industry, but it also provides talented employees for more than 80 other companies who have been engaged with us on the programme.

I am also proud of the leading role we are taking to aid and educate the communities in which we operate with regards to energy efficiency. Our 3% Less challenge in the US asks all our customers to work with us in reducing their energy consumption by 3% a year for the next 10 years. In the UK, we continue our involvement with the affordable warmth programme, which to date has seen more than 647,000 households benefit from energy efficiency measures. Such programmes see us leading by example. We appreciate the importance of being a positive partner in the communities in which we operate and remain committed to safeguarding our global environment for future generations.

## Governance

We have consistently demonstrated a commitment to leading governance at Board level and hence throughout the Company. We welcome recent reviews by the Financial Reporting Council and, based on the December 2009 proposals for the revised UK Corporate Governance Code, we do not anticipate any major changes to our already robust approach to corporate governance matters. However, from the 2010 Annual General Meeting onwards, we intend to introduce an annual re-election for the Chairman and all Directors to enhance further our governance processes.

We also believe that good governance emanates from a quality Board. Critical to this are the breadth of our Non-executive skill set along with specialised knowledge, both of which provide the potential for a healthy and necessary level of challenge in the boardroom. Following our annual appraisal of Board effectiveness, we have again assessed the fitness of our Board to participate meaningfully in the debate and make the objective judgements inevitably required. I am satisfied that the composition of our Board enables it to fulfil its role in an effective way.

## Dividend policy

We are again recommending a dividend increase of 8% for 2009/10, giving a final dividend of 24.84 pence per share, with a total for the year of 38.49 pence per share. This brings a 62% increase in our dividend over the last 5 years.

## Outlook

The Board continues to have confidence that the strategy and objectives we are pursuing will allow National Grid to grow and deliver our commitment of value creation to our shareholders. In parallel, we remain focused on identifying further improvements in safety, reliability and efficiency, while being a valued partner to our customers and the communities in which we operate. We will also maintain our endeavours to be at the centre of a low carbon economy.



Sir John Parker

Chairman



## Keeping the gas flowing

In January 2010, the UK endured difficult winter weather with an extended period of low temperature and significant volume of snowfall leading to record highs in gas demand on two consecutive days. At the same time, a number of unplanned supply disruptions introduced additional commercial and operational complications. Actions taken in recent years to increase the capacity and flexibility of our infrastructure, together with the dedication of our employees, meant we were able to deliver the security and reliability our customers need and expect.

We have built greater flexibility into our network, with newly commissioned assets providing diversity of supply capability and the reengineering of our existing assets allowing improved efficiency. However, our employees are what makes it work. Our operational employees, both in the field and in the gas national control centre (pictured above), worked tirelessly to ensure supplies were maintained.

# Chief Executive's review

I am confident that our focused strategy remains the right one to bring long-term benefits to all our stakeholders.

Planned investment  
in 2010/11

**£3.9bn**

Reduction in employee lost  
time injury frequency rate

**40%**



The energy industry in 2020 is predicted to look very different to the one we know today. Significant change will be required if we are to ensure security of supply as we move to a low carbon economy where energy efficiency and affordability go hand in hand with responsibility and sustainability. National Grid is at the heart of delivering the UK's energy policy while, at the same time, in the US we are continuing to reset our rate plans.

## Financials

Our low risk strategy, combined with our disciplined capital investment approach, continues to enable us to steer a strong path through periods of economic uncertainty. We have delivered another strong financial performance this year. Cash generated from operations was over £4.3 billion, revenue was nearly £14 billion while adjusted operating profit and adjusted earnings per share were higher by 7% and 14% respectively. We continue to deliver energy in a safe, reliable and efficient manner while maintaining our 8% dividend growth target until 2012 for our shareholders.

Controlling our costs remains an important feature benefiting both customers and investors. Last year we announced an additional metric to make our cost performance more transparent. We monitor regulated controllable operating costs. While this remains an important measure of our performance, we believe it is informative to compare those costs to our total regulated assets to measure our efficiency as the business grows. I am delighted to say that this metric has improved this year, with controllable costs falling to 7.6% of regulated assets compared with 8.0% last year.

We are now confident about both the requirement for a step up in investment, which is at the heart of delivering the UK's energy policy, and the level of returns that this will earn. We foresee that over the next 5 years expenditure will be in the order of £22 billion compared with £14 billion during the last 5 years.

The single A ratings of our UK operating companies, together with our disciplined investment approach and proven track record of delivering large scale capital programmes, are at the core of our competitive positioning. We are announcing a £3.2 billion rights issue. We believe that by raising equity now we will be able to strengthen the Company's long-term competitive position, and enable National Grid to take advantage of these growth opportunities, while maintaining our current credit ratings and delivering shareholder value.

## Safety

Safety is paramount to National Grid. This year, we achieved a 40% improvement in our employee lost time injury frequency rate, down from 0.25 to 0.15, demonstrating what our individual and collective efforts can achieve. However, we are always mindful that we cannot rest on our success. During the year, we have become increasingly focused on process safety. We have worked to ensure that controls are in place to prevent major incidents and have made significant improvements both in understanding and measuring the associated risks. This will continue to be a major area of focus in coming years.

## Strategy

Our strategy remains exactly the same – to build on our core UK and US, electricity and gas businesses, while we maintain the financial discipline to deliver sustainable growth. Last year we further developed our scenario planning models, to help us better predict where to target our investment over the next decade and beyond. It is currently expected that around 25% of existing

generating plants in the UK will come offline in the next decade. Our predictions, which are aligned with others in the industry, show that there is a significant need for investment in the UK to address the ageing generation fleet, enable connection of new generation, upgrade our existing systems and replace more aged assets than ever before. What that means for National Grid is that significant investment in our gas and electricity infrastructure will continue to be essential.

## Investing for growth

This year we invested £3.3 billion, a new record rate, to satisfy the needs of our customers.

I see these as very exciting times for National Grid and our shareholders. In the coming years, we expect to invest above the record level seen in 2009/10 to make sure that energy supplies are secure and that our essential infrastructure is able to handle the changing energy landscape.

We are seeking to ensure that, when we invest, we either lock in regulatory returns or underpin with long-term contracts. All investments will be evaluated against our disciplined capital investment criteria. Capital is only committed if it meets these criteria and has the ability to deliver acceptable returns.

## Regulation

In the US, our focus continues to be on restoring baseline business performance principally by filing new rate plans, which we have done in 65% of our businesses. In each, we seek to establish new rates to recover the cost of running our businesses, to achieve real-time cost recovery of future investment, and to secure and earn acceptable returns.

In the UK, we continue to feed in to Ofgem's RPI-X@20 regulatory reform effort, which seeks to determine if the traditional UK approach to network regulation is fit for the future. As a consequence of this project, the next transmission price control review has been delayed by a year and will be implemented from April 2013. We anticipate that the roll-over year will not introduce fundamentally different arrangements relative to the existing price control.

## People and talent

Everything we do is delivered through our people. One of my personal priorities is to ensure National Grid is a place where our employees are able to perform and grow to the best of their abilities. We have embedded a number of tools launched last year, including: an inclusive leadership course; a training course for first line supervisors; and an enhanced course for our top talent in senior management.

In light of research we commissioned this year into the attitudes of young people towards engineering, we reviewed our education and skills programme. One resulting initiative is School Power, where our employees are leading a programme of activities designed to inspire and motivate children to learn about science and technology. As well as striving to make engineering and science an attractive and exciting career choice for young people to aspire to, we are partnering with universities in the UK and US to advance the teaching of engineering, facilitate research and development and increase the pool of potential new talent for the Company.

## Looking forward

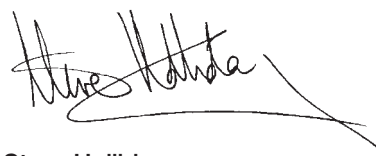
As we look towards the future, we are seeing a number of exciting UK investment opportunities that range from reinforcing our assets to investing in non-regulated opportunities that will allow

us to earn acceptable returns. I am confident that our focused strategy remains the right one to bring long-term benefits to all our stakeholders.

The outlook for 2010/11 is that we will:

- continue to meet society's needs by delivering on our capital investment programme;
- maintain our strong balance sheet;
- invest in our people; and
- continue our leadership role in key UK and US policy areas, such as regulation and raising the profile of engineering.

In the following section of this Report you will see some of the projects that are critical to shaping our future.



**Steve Holliday**  
Chief Executive



## Investing for growth

We continue to work with governments and regulators on the reform necessary to create a clear and stable investment framework. Our capital expenditure was £3.3 billion during 2009/10 as we made essential investment to meet our customers' needs and begin to enable connection of changing sources of energy.

We are also driving improvements in the reliability of our transmission system and, in 2009, a major phase of investment in New England involving seven integrated transmission line and substation projects came into service. The new gas insulated switchgear substation at Wakefield Junction was designed to meet the long-term energy delivery needs of the greater Boston area and also, through removing obsolete sulphur hexafluoride (SF<sub>6</sub>) equipment, plays an important role in reducing our own greenhouse gas emissions.

# Shaping the future



## Operating the system in 2020

As the UK energy industry works to ensure continued security of supply we will face new challenges in operating an electricity transmission system with intermittent renewable generation, new larger nuclear power stations and greater interconnection. We expect that: day-to-day operation of the transmission networks will become more complex; the way we operate and the way the electricity market operates are likely to change; and the way that consumers interact with the market may also change.

We have been working with other energy companies, the UK government and Ofgem to produce a vision of the network reinforcements, market and framework changes required to meet these challenges. In 2009, we published a document describing the likely issues relating to operating the electricity transmission networks in 2020, including the challenges we will face in our role as system operator and an indication of the services we are likely to require going forward. We believe we can address these challenges by building on our expertise in operating transmission networks and by seeking out innovative solutions, which allow more parties to play a role in securing energy supply in the UK.



## Innovation

The role of research and development is vital as we strive to be an innovative leader. In 2009, a new National Grid power systems research centre opened at the University of Manchester. The two new laboratories are designed to support research into the reduction of electricity consumption and the development of renewables, energy storage and clean technology. The University is already home to the National Grid High Voltage Research Centre, which is the largest university-based facility of its type in the UK.

## Carbon capture and storage

Carbon capture and storage has the potential to play a vital role in the decarbonisation of electricity generation, involving the transportation of carbon dioxide produced during electricity generation to suitable storage sites. Having established key partnerships, we are now working on one of the world's first demonstration projects, seeking to reuse one of our high pressure natural gas transmission pipelines. We are investigating how our expertise in gas pipelines can be applied to allow us to contribute to the definition and engineering of a transport and storage solution.

## Smart grid progress

We are developing a solution combining smart meters, integrated high speed communication, distribution automation and home energy management. This solution could potentially optimise the flow of distributed energy resources; enhance the performance of electricity transmission and distribution systems; and help customers to behave more energy efficiently. We have made significant progress in our plans for the evaluation of smart grid technology, investing in a dedicated smart technology centre to allow extensive testing prior to deployment. This gives us the opportunity to understand the capabilities of potential new solutions. Subject to regulatory approval, our next step is to commence demonstration programmes to learn more about the wider benefits of various smart grid applications.



## Renewable gas

Renewable gas has the potential to make a significant contribution to renewable energy targets, while also helping to provide diversity and security of supply. National Grid is working to facilitate this important innovation through the development of three renewable gas projects. Newtown Creek in the US, situated at a wastewater treatment plant, is expected to be operational in 2011, subject to regulatory approval. Our two UK projects, in Suffolk and Manchester, are expected to be operational in 2010 and 2011 respectively. Such projects are designed to facilitate the injection of gas from sustainable sources into our existing gas distribution networks, allowing it to be delivered to customers to heat their homes and businesses.

Image source: © New York City Department of Environmental Protection Archives

# Changing our energy landscape

Given the central role National Grid plays in the energy industry, we are committed to taking a leading position, alongside governments and regulators, in shaping and facilitating the future energy landscape. Acting as: an innovator in the development of ideas and technologies; partner to create and support a framework through which new technologies can be demonstrated; and contributing actively to the development of policy.

A complex combination of energy sources, technologies and industry frameworks needs to be managed effectively if we are to maintain security of energy supply while moving to a low carbon economy. To achieve this, we need visionary leadership, a supportive regulatory regime and a higher profile for engineering to provide the necessary skills and innovation. National Grid is committed to taking a leading role in shaping this future energy landscape, seeking to ensure efficiency and affordability go hand in hand with responsibility, sustainability and continued security of supply.

## Energy efficiency initiatives



We have been offering energy efficiency programmes and initiatives to help customers lower their energy bills and help the environment for more than 20 years in the US. A significant initiative in 2009 was our 3% Less challenge, which asks our customers to commit to using 3% less energy a year for the next 10 years. Our website allows customers to take part in free energy evaluations, learn ways to reduce their energy use and sign a pledge. We have also introduced a home energy programme, where participating customers receive a monthly energy report that compares their actual energy use to that of their neighbours.

In the UK, we have established Affordable Warmth Solutions, an independent

community interest company that builds on the expertise and reputation of our former affordable warmth programme. The company brings together funding partners, local authorities and communities to provide efficient gas connections and new gas heating systems for the fuel poor. It has already delivered many schemes with more planned for 2010/11.

We believe that increased awareness and responsibility among energy users, together with a more collective and collaborative approach to meeting shared energy and environmental goals, marks a growing trend in the energy industry.



## Reservoir Woods

In May 2009, we opened the doors to Reservoir Woods, our new US headquarters. The office earned Platinum Leadership in Energy and Environmental Design rating for shell and core construction. The building incorporates over 40 environmental design and construction features including: a rainwater recycling system; exterior window shading to reduce cooling needs; and innovative interior lighting design. It not only shows National Grid's environmental commitment, but going forward will also offer cost efficiencies in operation and maintenance, as well as a healthy and productive place to work.



## Smart metering

Smart meters are the next generation of gas and electricity meters, offering the ability for customers to manage their energy usage better. In addition, they will offer a platform to maximise the benefits of other new technologies, including: smart grid, home microgeneration and electric vehicles. In line with National Grid's commitment to safeguard our global environment for future generations, OnStream has initiated an extensive transformation programme to deliver efficient customer service and dual fuel smart metering capabilities. In support of this, we have developed new smart electricity and gas meters with an innovative communications platform at their core. In conjunction with two energy suppliers, we intend to launch our field pilot in 2010, prior to full scale roll-out.

## 44,000 new US gas heating customers

One of the priorities for our US gas distribution business is to increase the number of consumers who use natural gas. For every new gas heating consumer there is an estimated saving of 36.5 tonnes of carbon dioxide over the 15 year life of the equipment – equivalent to removing 7 cars, each doing approximately 12,000 miles from US roads for a year. In 2009/10, National Grid connected more than 44,000 new gas heating customers.



# Energy efficiency

Becoming more energy efficient is vital if we are to meet the challenges facing the energy industry today and into the future. A world in which we use less energy, more efficiently, is needed. National Grid has a central role to play in this by: demonstrating leadership with our own attitude to energy efficiency; facilitating the development of efficient new technologies and technology applications; and educating consumers about their energy use, helping them to make their future energy use more affordable.

## Shaping the future continued



### Customer service advances

By delivering high standards of service and working in partnership with our customers we can build strong relationships with them and, at the same time, foster goodwill with other stakeholders including regulators and governments. In 2009, one of our actions to improve customer service and meet customer expectations more effectively involved setting up two new departments in the US. Customer energy solutions provides integrated energy solutions to enable our customers to manage their energy choices better. Customer service operations covers end-to-end customer processes to give our customers an improved experience of dealing with us.



### Building trust through continued reliability

Reliability is a priority for National Grid, not only to deliver all our current obligations, but also to ensure we continue to be recognised and trusted by governments and regulators. This means delivering a reliable service not just when the weather is making headlines – as it did in the UK and US over the winter of 2009/10 – but all the time. To achieve this, we have been investing in our infrastructure over recent years and are proud that our Transmission and Electricity Distribution & Generation businesses successfully met all of their regulatory reliability targets for the relevant regulatory period this year.

### Shaping the regulatory framework for the future

In the UK, as we work to ensure continued security of supply, the significant investment needed to connect new sources of energy combined with the requirement to extensively upgrade ageing infrastructure, brings with it the need for regulation to adapt. We are feeding in to Ofgem's review of energy network regulation (RPI-X@20). This is analysing the current framework in order to determine how best to regulate energy network companies to enable them to meet the challenges and opportunities of delivering a sustainable, low carbon economy.

In the US, as our long-term rate plans expire, we are focusing on filing rate cases to: fully recover the cost of running our business; ensure recovery of future investment; and secure and earn acceptable returns. We are also seeking to introduce features such as timely recovery of non-controllable costs; tracking of capital investment to reduce the time lag between spending capital and receiving income; and decoupling – so that our revenue is not linked directly to our customers' energy usage (allowing us to enhance our energy conservation programmes without impacting on our revenue).



### Common operating model

If we are to meet the demands of the future, including ensuring appropriate regulatory funding for our operations, we must have in place a suitable and efficient operating model. As we work to create value through our complementary businesses, we have been seeking to increasingly align our processes and operate to common principles, standards and policies. In Gas Distribution, through collaborative events involving people from across emergency, maintenance, repair and construction, we have developed a plan that will drive operational performance improvements through redesigning our processes and replacing our ageing computer technology. In Transmission, our common operating model project is developing a plan to prepare us for the challenges and opportunities between now and 2020.

# Shaping the regulatory and operating structure

If we are to maintain energy security while moving to a low carbon economy, coordination between industry and government is essential. Regulatory frameworks, planning regimes, and our own operating structure, need to become more transparent as well as being redefined and realigned to resolve today's challenges for tomorrow's world effectively.

## Engineering our Future

National Grid's Engineering our Future report was commissioned to provide an assessment of attitudes towards engineering among young people and identify how we can encourage the next generation of engineers. Key findings included that young people often struggle to visualise what professional engineers do, and teachers are often unable to explain engineering.

As a result, in the UK, we have bolstered our existing employee volunteering in local schools through Imagineering and School Power – a new programme of activities to enrich the teaching of energy, forces and materials. We are also working with the Royal Academy of Engineering to create a new residential work experience offering and programmes for engagement with teachers and career advisers.

In the US, we have launched Engineering Pipeline – a six year development programme that creates a recruitment pathway to inspire promising students to pursue an education and career in engineering. We are also maintaining our school engagement programmes through our partnership with Junior Achievement where we have approximately 150 employees volunteering each year to teach business courses, leadership development programmes and introduce students to engineering.



### Innovative learning

As we strive to create the future of learning, we are exploring new and innovative ways to impart knowledge and skills. Our 3D virtual learning facilities are already enhancing the learning experience of our employees allowing them to step into a real world environment by interacting virtually with our network, plant and components. Through showcasing this technology, we are generating interest and increasing the potential pool of new talent to the Company.



### Learning and development

Investing in training and development is vital to ensuring our employees have the right skills both now and into the future.

In the US, we are standardising and improving the quality of technical training. As a result of operational changes, best practice implementation and new hiring, we increased the overall amount of training by approximately 30% in 2009/10.

In the UK, Ofsted's inspection in January 2010 saw our apprenticeship scheme retain a grade 1 rating – the highest available. The scheme maintains a retention rate of more than 90% since 2004. The excellence and innovation of our training was separately recognised by the Learning and Skills Improvement Service with the award of Beacon status. We continue to work to expand and develop our programmes based on the needs of the business. In 2009, we launched a new construction engineer training programme that combines academic and on-the-job training through a scheme lasting five years.



### Leadership

As National Grid continues to grow and evolve, it is critical that we have a talented and diverse population of leaders. These leaders will play an important role in leading the change required to deliver the low carbon and energy security requirements of the future.

In order to provide our leaders with the support they need to be effective, we launched a global development programme in May 2009 – foundations of leadership. Approximately 740 employees have already started on the course. The 15 month programme focuses on providing participants with business fundamentals and leadership skills.

# Skills for today and the future

Looking ahead to 2020 and beyond, a challenge exists in guaranteeing the right skills and expertise to manage our future networks. We need to create the next generation of jobs and get people interested in science and technology, as well as foster the talent of our existing workforce, including through embracing inclusion and diversity, giving them every opportunity to reach their full potential.