National Grid’s U.S. Environmental Report
Fiscal Year 2006
Table of Contents

Leadership Message ................................................................. 3

Company Profile ........................................................................ 4

Framework for Responsible Business ....................................... 6

Programs Promoting Energy Efficiency and Conservation .......... 7

Site Remediation ..................................................................... 9

Pollution Prevention ............................................................... 13

Environmental Stewardship ...................................................... 15

Compliance Audit Program and Legal Notices .......................... 16

Verification Statement of the Certified Environmental Auditor ... 19

For More Information ............................................................. 21
Leadership Message

Respect and care for the environment are central to how we operate at National Grid. We always seek to minimize our impact on the environment and, whenever possible, we go above and beyond what is mandated by local, state or federal regulations. We make sure that our employees have the necessary environmental skills, knowledge and resources to minimize our impact on the environment, and we require our contractors to demonstrate the same level of commitment to the environment as our employees.

In this report, you will see examples of our commitment to the environment in the areas of environmental stewardship, site remediation, pollution prevention and promotion of energy efficiency programs.

At National Grid, we do not just react to environmental situations, but work to safeguard the environment for our children and our children’s children. For example, it is that commitment to future generations that prompted us to team with the University of New Hampshire to study global climate change and map out a strategy for reducing our impact on climate change.

With that concern for the future, our board of directors has endorsed a long-term climate change initiative that dramatically reduces our global climate change emissions from both our electricity and gas operations well into the 21st century. To realize that goal, we are working to decrease emissions from our high voltage switching equipment and our gas mains.

Finally, at National Grid we strive to build mutual understanding and respect through open communication with our employees and all of our stakeholders – investors, customers, regulators and neighbors. Your input is important to us. We welcome your feedback on this report and encourage your suggestions. Please do not hesitate to contact our Environmental Department, whose contact information is at the end of this report, to let us know how we can do an even better job.

Sincerely,

Cheryl LaFleur
Acting CEO
Company Profile

National Grid, a wholly owned subsidiary of National Grid plc, one of the world’s largest utilities, is focused on delivering energy safely, reliably, and efficiently.

In the United States, we are one of the 10 largest utilities by number of customers. We have the largest transmission and distribution network in the New England/New York region and are a leading distributor of natural gas in New York and Rhode Island.

In England and Wales, National Grid owns and operates the high voltage electricity transmission system, and the company delivers natural gas to millions of homes in Britain.

We conduct our business with respect for the environment and our communities and always strive to act in a sustainable manner as a business, in our social role, and in how we interact with the environment.

National Grid’s main business is as an energy delivery provider.

Under the various regulatory agreements, customers can choose their own energy supplier. Or they can buy their energy through National Grid; the company buys power on the open market for these customers.

### Awards for Energy Efficiency Programs

National Grid has received recognition for its energy efficiency programs by national and local organizations. Some of the awards it has received in fiscal year 2006 and more recently include the following:

**National**

U.S. Environmental Protection Agency (U.S. EPA) and U.S. Department of Energy ENERGY STAR® Awards in the following categories:
- Excellence in Energy Efficiency and Environmental Education awards for the Appliance and Lighting program – March 2007 (8th consecutive award)
- Excellence in Home Improvement for the Home Performance with ENERGY STAR program (MassSAVE) – March 2007
- ENERGY STAR Homes Outstanding Achievement Award – April 2006
- Excellence in ENERGY STAR Outreach – March 2006

**American Council for an Energy-Efficient Economy** – Exemplary Low Income programs – August 2005

**Edison Electric Institute** – Honorable Mention for Excellence in Advocacy in promoting energy efficiency – January 2006

**Regional**

**US EPA Region 1** (New England office) Environmental Merit Award – May 2006, May 2005

**State/Local**

**Rhode Island State Energy Office Certificate of Appreciation** – For invaluable services and cooperation – March 2006, July 2005

### National Grid plc/Fiscal highlights

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>2004*</th>
<th>2005**</th>
<th>2006**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating revenues ($m)</td>
<td>16,165</td>
<td>13,336</td>
<td>16,595</td>
</tr>
<tr>
<td>Unadjusted earnings per share (¢)</td>
<td>62.6</td>
<td>65.0</td>
<td>76.6</td>
</tr>
<tr>
<td>Ordinary dividends per share (¢)</td>
<td>35.4</td>
<td>42.4</td>
<td>46.7</td>
</tr>
<tr>
<td>Total assets ($m)</td>
<td>40,665</td>
<td>47,901</td>
<td>45,057</td>
</tr>
<tr>
<td>Total borrowings ($m)</td>
<td>23,026</td>
<td>24,837</td>
<td>22,814</td>
</tr>
</tbody>
</table>

*Note:* Financial results for all years are converted from the British pound at a constant 3/31/06 average income statement exchange rate (1.7896) and the balance sheet exchange rate (1.73805) respectively.

*values derived from UK GAAP
**values derived from IFRS*
National Grid U.S. Operating Companies

Electricity Transmission and Distribution
Our five U.S. electricity distribution companies serve approximately 3.3 million customers over a network of 72,000 miles of distribution line across 29,000 square miles in New York, Massachusetts, Rhode Island and New Hampshire.

Electricity Distribution Facts
- 1.6 million electricity customers in 669 New York communities
- 1.2 million customers in 168 Massachusetts communities
- 478,000 customers in 38 Rhode Island communities
- 41,000 customers in 21 New Hampshire communities
- 12,000 customers on the island community of Nantucket

National Grid owns and operates approximately 6,000 miles of transmission lines in upstate New York and 3,000 miles of transmission lines in New England. We also operate converter facilities and approximately 140 miles of High Voltage Direct Current (HVDC) transmission lines as part of a New England-Hydro Quebec interconnection.

Natural Gas Distribution
National Grid delivers natural gas to more than 569,000 customers in 216 communities in central and eastern New York. With the acquisition of the Rhode Island assets of New England Gas in the summer of 2006, National Grid also delivers natural gas to approximately 245,000 customers in 33 communities in Rhode Island. The company maintains more than 8,600 miles of main and distribution pipe across a 4,500 square mile service territory in New York and 3,100 miles of pipe across a 956-square-mile service territory in Rhode Island.

Telecommunications Services
National Grid supports the telecommunications industry with infrastructure and turnkey services and provides dark fiber optic capacity and related services to business, telephone companies and wireless providers.

Ceres Welcomes National Grid
Citing the company’s commitment to social and environmental improvements, the Ceres Board of Directors has approved National Grid into the Ceres network of companies. National Grid is one of the first New England utilities to join Ceres, a leading coalition of investors, environmental groups and other public interest groups working with companies to address sustainability challenges such as global climate change. Ceres has more than 70 companies in its company network, including 18 Fortune 500 companies.

“From energy efficiency to the company’s active participation and dialog related to greenhouse gas regulations, National Grid has shown a strong commitment to environmental and social issues,” said Mindy S. Lubber, president of Ceres. “We look forward to working with National Grid to further integrate sustainable practices into its business strategies.”
Framework for Responsible Business

Sustainable Growth, Profits with Responsibility, Investing in the Future
Responsibility – to our customers, to our shareholders, to our employees and to the environment – is a key component of how we do business every day at National Grid. We are guided by the Framework for Responsible Business, which was created with input from more than 4,000 employees and stakeholders, including customers, regulators, investors and the media. The Framework sets out our vision and the values that guide us, such as our dedication to protecting the environment for future generations, as we seek to grow our business and deliver long-term shareholder value. You can find the complete Framework for Responsible Business at www.nationalgridus.com.

Key Components of Our Environmental Policy
We are committed to the protection and enhancement of the environment, always seeking new ways to minimize the environmental impacts of our past, present, and future activities. We believe that everyone is responsible for good environmental performance as we incorporate environmental considerations into all our business activities.

The basic tenets of our environmental policy include the following:
- National Grid meets and, where appropriate, exceeds the requirements of environmental legislation, policies, charters and other commitments to which we subscribe.
- We prevent pollution, including the releases of oil and hazardous materials, wherever we can.
- We minimize and properly manage the waste we generate through recycling whenever economically feasible.
- We provide visible leadership that promotes good environmental performance.
- We help protect the environment for future generations by making our contribution to minimizing climate change.

You can find the complete Environmental Policy at www.nationalgridus.com.

Leadership, Management Systems and Training

Leadership
National Grid’s environmental group sets environmental goals and works to keep the company in compliance with corporate environmental policies and regulatory requirements.

The department, led by Joe Kwasnik, vice president of Environmental, consists of 40 full-time professionals, including scientists and engineers who investigate contaminated sites and manage remediation. Other engineers and scientists assist our transmission and distribution organizations in monitoring environmental requirements associated with line construction, maintenance and operations. Six Forestry Department professionals oversee the protection of plant and animal life within our rights-of-way.

Management Systems
We adhere to the international consensus standard for Environmental Management Systems, ISO 14001, which we adopted in 2000. (Visit www.nationalgridus.com for a description of the ISO 14001 standard.) Adhering to this standard helps us manage compliance assurance and environmental performance.
Training

Selected National Grid employees receive classroom training in the company’s Environmental Policy, Environmental Management Systems and environmental and operating procedures. All employees are encouraged to watch refresher training videotapes each year.

Network, the employee magazine that is published six times a year, regularly publishes articles on environmental issues. The Facilitator, the quarterly newsletter for employees, focuses on environmental topics. Best practices for environmental protection and other environmental messages are conveyed through InfoNet, the intranet site for National Grid employees in the U.S.

Programs Promoting Energy Efficiency and Conservation

Efficiency and Conservation

Electricity customers of National Grid have a broad selection of programs to aid them in becoming more efficient in their use of electricity. In addition to conserving energy, these programs save customers money and reduce the emissions that are byproducts of energy production.

More than half of our 1.7 million New England customers have taken advantage of these programs since 1987. Our residential programs reached over 300,000 homeowners and tenants, and our business programs have served an average of 3,000 businesses each year for the period from 1998 through 2005.

New York state energy efficiency programs are funded through a surcharge on customer bills called the System Benefit Charge. It funds the New York State Energy Research and Development Authority, known as NYSERDA, which has responsibility for delivering energy efficiency programs, research and development on conservation, energy efficiency and renewable energy programs.

One of the many programs in which National Grid participates through NYSERDA is the EmPower New York program, which is a home energy-saving program for low-income utility customers. The program is important not only for its energy savings, but also for delivering health and safety benefits.

For example, one National Grid customer, a single-mother of six in Camillus, learned through an EmPower New York home performance energy audit that her furnace was emitting extremely high levels of carbon monoxide, posing a severe risk to her family. EmPower New York staff worked with the Onondaga County Social Services that authorized an emergency furnace replacement through the Home Energy Assistance Program (HEAP). After the furnace was installed, EmPower New York contractors inspected the furnace and completed other money-saving home-performance measures on the home, including attic insulation, exchange of an old, inefficient refrigerator for a new ENERGY STAR® model, and conversion of the electric clothes dryer to natural gas. As a result, the family is able to save about $400 a year in utility costs and live in a much safer home.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission</td>
<td>130</td>
<td>184</td>
<td>189</td>
<td>126</td>
</tr>
<tr>
<td>Investment Recovery</td>
<td>18</td>
<td>18</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Distribution</td>
<td>6,703</td>
<td>6,600</td>
<td>5,846</td>
<td>5,454</td>
</tr>
<tr>
<td>T&amp;D Technical Services</td>
<td>–</td>
<td>1,100</td>
<td>1,122</td>
<td>1,306</td>
</tr>
<tr>
<td>Totals</td>
<td>6,851</td>
<td>7,902</td>
<td>7,173</td>
<td>6,902</td>
</tr>
</tbody>
</table>

For Residential Customers

**ENERGY STAR® Appliances, Equipment, and Lighting**

National Grid is an active ENERGY STAR® partner, offering consumer rebates and contributing substantially to this important national program. Appliances and home electronics that bear the ENERGY STAR® label use 10 to 50 percent less energy than standard models. National Grid also provides incentives for ENERGY STAR heating and air conditioning equipment and promotes Quality Installation Verification.

If every household changed just one traditional light to an ENERGY STAR light, the United States would save $720 million in energy costs each year. Visit www.myenergystar.com now to take the Change A Light Pledge.

**ENERGY STAR® Homes**

In National Grid’s service territory, 10 percent of the new housing market is now building to ENERGY STAR® standards, which are 30 percent more energy efficient than current building codes.

The ENERGY STAR® Homes program provides additional assistance to low income or subsidized housing developments and works closely with Community Action Programs and low income energy efficiency advocates, Community Development Corporations, Habitat for Humanity, and the state and federal government to support sustainable, energy efficient, affordable housing in our service territory.

<table>
<thead>
<tr>
<th>Energy Efficiency Results – Reducing Consumption and Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>In 2005, National Grid New England reduced summer demand by 23.1 megawatts, and reduced annual electricity consumption by about 268,784 megawatt-hours.</td>
</tr>
<tr>
<td><strong>268,784 Megawatts-Hours of Electricity Equivalents =</strong></td>
</tr>
<tr>
<td>Reduction in Consumption of Coal</td>
</tr>
<tr>
<td>Reduction in Consumption of Oil</td>
</tr>
<tr>
<td>Reduction in CO₂ Emissions</td>
</tr>
</tbody>
</table>

**Home Energy Audit and Energy Improvement Rebates**

Residential customers can get valuable information about energy efficiency (www.nationalgridus.com/knowhow) through our Home Energy Services programs. Customers can also receive a free evaluation of their home’s heating and water heating systems, insulation, air infiltration, and appliances. The programs vary by state and offer incentives that cover as much as half the cost of allowable measures. Rebates are also available to replace inefficient refrigerators.

Multi-family building owners can also take advantage of these services. In 2005, more than 22,000 National Grid customers participated in these programs.

Our Appliance Management Program offers special services for low-income customers. Customers participating in the program save on average $130 per year on their electric bills and benefit from increased comfort and safety. Over 4,600 customers participated in this program in 2005.

**For Commercial, Industrial and Municipal Customers**

**Design 2000plus**

Technical assistance and financial incentives in Design 2000plus encourage the use of high-performance design features and efficient electrical equipment in new construction, renovation, and remodeling projects.

**Energy Initiative**

Customers can adopt environmentally responsible practices that will reduce their energy bills while improving their facility’s overall efficiency.

**Small Business Service Program**

Small business customers – with less than 200 kilowatts of demand – can save hundreds of dollars annually by reducing their energy use by up to 30 percent.
Site Remediation

Beginning in the mid 1800s, manufactured gas became a common source of fuel in Massachusetts, Rhode Island and New York. Manufactured Gas Plants (MGP), sometimes referred to as "gasworks" or "town gas," converted coal and/or oil into gas that was piped into homes and businesses, where it was used for lighting, cooking and heating. In addition to creating gas, MGP created by-products such as tar and emulsions. Most of these MGP closed by the 1950s, and virtually all were gone by the early 1960s. National Grid is working to remediate residuals from former MGP sites according to state and federal regulations, under the direction of the U.S. Environmental Protection Agency, Massachusetts Department of Environmental Protection, New York State Department of Environmental Conservation and Rhode Island Department of Environmental Management. Here are the stories of three former MGP that National Grid has remediated, transforming them into safe and beautiful facilities.

Hudson Water Street Property
The city’s waterfront park in Hudson, N.Y., along the Hudson River, is now almost twice as large as it was three years ago. Lush green grass, trees, paved walkways, park benches and antique-style street lamps are now situated on a new section of the park that had been the site of a former Manufactured Gas Plant (MGP). Work to remediate and decontaminate the site and turn it into parkland was completed, under budget and ahead of schedule, by April 2006. National Grid began the cleanup, in cooperation with the New York State Department of Environmental Conservation, in late March 2004. The Hudson plant was owned and operated from 1853 to 1949 by a predecessor company to Niagara Mohawk. The facility originally had three large above-ground storage tanks, which had long since been taken down when work began on the cleanup. But contaminants from the production of the gas and from the tanks had seeped into the soil and the water by the site. National Grid’s remediation of the site included shoring up excavation areas by installing sheetpile walls, installing permanent sheetpiling in the sediment in the small bay area of the Hudson River that was part of the site, and permanently encapsulating and sealing contaminated sediment up to 16 feet deep in a portion of the bay. More than 12,000 cubic yards of soil from the site, as well as up to 5,000 cubic yards of sediment from the bay area, were removed and taken to facilities where it was treated and the hazardous substances neutralized.

When the cleanup of the Manufactured Gas Plant was completed, National Grid planted the grass and trees, built the paved walkways, installed the antique streetlights, and shored up the small inlet with an attractive stone barrier wall to prevent erosion. The addition at the northern end of the city’s park has added almost two acres of attractive public space for residents to enjoy.
Site Remediation (continued)

Arlington High School
Peirce Fields Are Revived

The Grove Street site in Arlington, Mass., has had a long industrial history, dating back to the late 1800s. The site, which includes the Arlington High School Peirce Fields, the Arlington Department of Public Works (DPW) facility, and a KeySpan gas regulation station, in years past had been the location of a chrome manufacturing facility, a manufactured gas plant (MGP), a sawmill and the town DPW garage. The chrome works and the MGP both employed industrial processes that yielded both useful products and residuals, or waste.

Since 1996, National Grid, KeySpan, Honeywell International and the Town of Arlington have worked together to assess potential residual contamination and to implement a plan to clean up the Grove Street site. The assessment activities included the collection of hundreds of soil, sediment, groundwater and surface water samples, the analysis and evaluation of the data, and extensive calculations to assess the potential risks posed by the detected contaminants.

In 2000, the parties completed a study to evaluate technically and economically feasible remediation alternatives for the site that would be protective of human health and the environment. The final remedy selected by the parties included limited soil removal and off-site disposal, construction of a series of engineered caps, in-situ groundwater treatment and relocation of certain site utilities into clean areas. In addition, National Grid and the other parties agreed to replace a 700-foot culvert that transects the site, line several 40-inch sewer pipes and reconstruct the playing field complex, including a football field, baseball field, softball field, basketball courts, practice soccer field and children’s play area. National Grid has contributed slightly more than 45 percent of the cost of the project.

The design for the site remediation was completed between 2001 and 2003, and National Grid and the other participants worked with town officials to develop plans to handle traffic, address public relations issues during construction and relocate sporting events during construction. National Grid officials attended several town meetings as well as hosted numerous public meetings, including one with the students at Arlington High School.

Remediation construction activities began in spring 2004 and were substantially completed in 2005. The field reconstruction was officially completed in the summer of 2006 when the grassed fields were turned back over to the town for active use.

The remediation and reconstruction activities were the result of a cooperative effort between National Grid, KeySpan, Honeywell, the Town of Arlington and the local residents. It could not have been successfully completed without everyone’s significant efforts. The result is a beautiful and safe new field complex.
Vitale Site Remediation in Beverly

During the 1940s and 1950s, approximately 300,000 cubic yards of sand and gravel were mined from the Vitale quarry in Beverly, Mass., for use in construction projects. From the 1950s to the 1970s, the owners of the Vitale site filled in the mined-out pit with fly ash generated by the nearby Salem Harbor power plant then owned by National Grid predecessor company New England Power.

Over the years, a brook that ran through the site, called Airport Brook, eroded approximately 40,000 cubic yards of fly ash from the landfill. The eroded fly ash was carried downstream and deposited within the stream banks and adjacent wetlands, as well as a portion of Wenham Lake, located a half-mile downstream of the Vitale site. Wenham Lake is the drinking water supply for the neighboring communities. The fly ash reduced the health of the wetlands and its ability to support a diversity of wildlife. In addition, the fly ash deposited in Airport Brook, caused periodic flooding of nearby Route 97.

Erosion at the Vitale site also resulted in areas of instability. Over the years, Airport Brook eroded a 30-foot deep channel through the fly ash at the site. This area was highly unstable. Other slopes around the fly ash landfill were also unstable and showed evidence of erosion.

Although the Vitale site was abandoned by the former owners and is now owned by the city of Beverly, National Grid agreed to address the situation, as its predecessor company was the owner of the power plant at the time the fly ash was generated and placed at the Vitale site.

Because of National Grid’s voluntary remediation, city soccer fields and a small building with restroom facilities and storage space will soon be on the site. We have planted grass for the recreation fields, have replanted 16 acres of wetlands in and around the location and will monitor the site for the next five years.

National Grid began the project by hiring consultants to complete a comprehensive exploration and testing program that delineated the horizontal and vertical limits of the fly ash, determined the environmental impact of the ash on the groundwater, surface water and wetlands in the area, and assessed the risk of the fly ash to wildlife and humans in the vicinity of the site.
The study found that none of the compounds associated with fly ash have been detected in surface water in the lake at concentrations greater than one-tenth of the current federal drinking water standards.

An extensive public input process was initiated by National Grid to keep the local community informed on the progress of the studies, and on our plans to address the fly ash. In addition, a Technical Advisory Group was formed to provide input to National Grid during the environmental assessment and subsequent remedial design. The Technical Advisory Group included members of local public interest groups, environmental consultants, lawyers, the water supply board, state environmental regulators, the mayor and City Council of Beverly, the Board of Selectmen of Wenham, and other interested parties.

National Grid has performed the following tasks to restore wetlands and stabilize the fly ash:

- Re-routing a 1,200-ft length of Airport Brook at the Vitale site to its historic alignment and infilling the “canyon.”
- Flattening and stabilizing the slopes of the existing 15-acre fly ash landfill.
- Removing fly ash from the banks of Airport Brook, the adjacent wetlands, and the exposed reservoir bottom during seasonal low lake levels. Excavated fly ash was hauled to the Vitale site where it was spread and compacted.
- Restoring 16 acres of wetlands where fly ash was removed. Restoration included installation of extensive plantings and wildlife habitat features such as coir rolls, root wads, basking logs, brush piles and boulder piles.
- Placing geotextile and soil cover materials over the stabilized fly ash landfill and hydroseeding the surface.

With extensive excavation and over 52,000 plantings, ten types of wetland habitat were replaced or recreated at Vitale.
Pollution Prevention

Sulfur Hexafluoride (SF₆) Program
Reduction of sulfur hexafluoride (SF₆) emissions is a priority for National Grid. SF₆ is a non-toxic, non-flammable gas that has superior cooling, insulating and arc quenching capabilities in high voltage electrical equipment. When SF₆ escapes into the atmosphere it becomes a greenhouse gas with global warming potential that is 23,900 times greater than CO₂ over a 100-year period. Almost 80 percent of all the SF₆ produced today is used by the power industry. National Grid is working to reduce its SF₆ emissions through aggressive monitoring of leaking equipment and through replacement of first-generation Gas Insulated Substations (GIS) with equipment that has lower leakage rates.

National Grid’s New England operations joined the U.S. Environmental Protection Agency’s voluntary SF₆ Emissions Reduction Partnership in December 2003. Our New York operation enrolled in 1999, and was one of the first participants in the program that tracks and reports releases of SF₆ on an annual basis. We have a goal of 57 percent reduction in SF₆ emissions from 2000 levels by 2008.

In fiscal year 2006 we invested approximately $15 million on improvements to Brayton Point in Somerset, Mass., including replacing an old 345 kilovolt Gas Insulated Substation with a new state-of-the-art facility that contains 3,300 fewer pounds of SF₆ and will prevent about 2,000 pounds of SF₆ from leaking into the atmosphere each year compared with the older equipment it replaces. Also targeted for replacement is a 115 kilovolt Gas Insulated Substation in Golden Hills, Saugus, Massachusetts. The new substation is expected to reduce the amount of SF₆ leakage.

Climate Change Initiative
Climate change initiatives are a priority for National Grid. The board of directors recently endorsed a climate change strategy that aims to achieve a target of 60 percent reduction from 1990 levels by 2050 of global climate change emissions resulting from company operations. In order to achieve that goal, National Grid is working to reduce releases of natural gas (methane) from its gas mains and reduce sulfur hexafluoride emissions from its high voltage switching equipment. The company also plans to shift to a 100-percent renewable source of electricity at the Westborough facility by 2010.

Distribution and Transmission Line Reconductoring and Upgrade
National Grid has improved its efficiency by reconductoring and upgrading its distribution and transmission lines. The work the company has done since 2002 has resulted in an estimated reduction of 36,396 tons of carbon dioxide (CO₂) associated with the avoided generation each year.

Sulfur Hexafluoride (SF₆) Reduction Program
SF₆ emissions have been reduced by 37% compared to emissions in 2000, which is the year established with the U.S. Environmental Protection Agency as our baseline for measurement.

Note: SF₆ emissions in 2000 were 19,660 lbs.

SF₆ Losses (pounds)
Reports the amount of Sulfur Hexafluoride lost from electric substation equipment. Total SF₆ in use in FY2006 was 139,322 pounds.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>12,856 lbs</td>
<td>12,828 lbs</td>
<td>12,471 lbs</td>
<td>11,880 lbs</td>
</tr>
</tbody>
</table>

Recently completed work at the Ward Hill substation included installation of the latest in GIS equipment.
Pollution Prevention (continued)

| Estimated Annual Incremental Emissions Avoided Due to Reconductor/Upgrade Projects (tons) |
|---------------------------------|--------|------|------|------|
| Year                            | 2002   | 2003 | 2004 | 2005 |
| Miles of New Line               | 167    | 132  | 63   | 44   |
| CO₂ Emissions Avoided (tons)    | 14,451 | 12,321 | 6,093 | 3,531 |

Note: Emissions avoided vary based on geographical area and size of line replaced.

Environmental Merit Award
National Grid received an “Environmental Merit Award for Pollution Prevention” (graphic at left) from the Narragansett Bay Commission in June 2006 for its efforts to reduce contaminant concentrations in vehicle wash effluent at its Providence facility. The vehicle wash effluent, following treatment, discharges to the municipal sewer system. The Narragansett Bay Commission regulates sewer use in and around Providence. National Grid installed additional treatment components at its Providence facility in an effort to reduce effluent contaminant concentrations in 2004 and 2005. National Grid installed filtration components that use Adsorb-It/Z geotextile fabric and granular activated carbon. Since these components were installed, the concentration of oil and grease has been reduced by 75 percent, lead concentrations are 78 percent lower and zinc concentrations have decreased 67 percent. National Grid was the sole winner of this award in Rhode Island.

Chairman’s Environmental Award
An enterprising team from National Grid’s Gas Operations won the company’s Chairman’s Environmental Award in 2005 for finding a way to reduce the amount of material that goes to a landfill following excavation work needed to install or replace gas pipes. Brian O’Keefe, Gary Stevens and Dave Zielinski, all from National Grid’s Eastern Division in New York, investigated a number of options, including a material handling machine that can separate excavated material into two categories: reusable fill material and scrap material. During the unit’s first year of operation, approximately 70 percent of the excavated materials in Albany and Schenectady, N.Y., were recycled, eliminating the need to send some 16,000 tons of waste to a landfill.

Regional Greenhouse Gas Initiative
National Grid is part of a cooperative effort by northeastern and mid-Atlantic states reducing carbon dioxide (CO₂) emissions from large power generation facilities. The group, known as the Regional Greenhouse Gas Initiative (RGGI), recently issued a model rule aimed at capping and ultimately reducing CO₂ emissions from fossil-fired power plants within the Northeast. Although National Grid does not own and operate fossil-fired plants, it has chosen to become involved in this initiative because the program will impact the cost of electricity to its customers and therefore the company wants to ensure that its customers are treated fairly in the Regional Greenhouse Gas Initiative process. Beginning in 2009, all fossil-fired power plants in the seven states that produce 25 megawatts or more of electricity will be required to cap their emissions of CO₂ and, beginning on January 1, 2015, reduce their emissions overall by 10 percent through 2019.
Greenhouse Gas Reporting
National Grid continues to be involved in a program that recognizes utilities for demonstrating a commitment to voluntary approaches to reduce or capture emissions of greenhouse gases. The program is known as the Department of Energy’s Energy Information System Voluntary Reporting of Greenhouse Gases program.

Underground Storage Tanks
National Grid began removing its 91 underground petroleum storage tanks, and conducting soil remediation when needed, in 2004. As of March 2, 2007, only one tank, in Westborough, Mass., containing heating and generator oil, remained. It was to be removed as weather permitted, and was expected to be gone by the end of the spring of 2007. In some cases, National Grid replaced the tanks with above ground storage tanks.

With the installation of the new above ground tanks, National Grid is establishing new storage guidelines for maintenance, training, inspections and tank performance monitoring. A website also is being developed to help educate affected employees on performance regulations and requirements.

Environmental Stewardship

Massachusetts Audubon Society Honors National Grid
National Grid’s work with the Massachusetts Audubon Society at Broad Meadow Brook Conservation Center and Wildlife Sanctuary in Worcester, Mass., is ongoing. In fiscal year 2006, the Massachusetts Audubon Society honored National Grid for installing three informational kiosks at the site. National Grid’s vegetation management of the site has recently enhanced the butterfly and bluebird population, said sanctuary director Deb Cary.

The nature sanctuary, tucked away amid a former farm and parcels of land cobbled together over the years, wouldn’t be the size it is without National Grid, which in 1990 combined approximately 100 acres of its right-of-way to the property. The 400-acre tract of woods, fields, streams and marshland is home to 75 species of butterflies, countless varieties of birds, small animals, shrubs and flowers.

Integrated Vegetation Management Standards
National Grid has practiced Integrated Vegetation Management on its rights-of-way for many years. Integrated Vegetation Management consists of a series of standards for the care and maintenance of trees, shrubs and other woody plants that will promote sustainable plant communities that are compatible with the intended use of the site. The program also is designed to discourage incompatible plants that may pose concerns, including safety, security, access, fire hazard, electric service reliability, emergency restoration, visibility, line-of-sight requirements, regulatory compliance, environmental or other concerns.

Integrated Vegetation Management was adopted as a national standard for utility companies recently by ANSI, the American National Standards Institute. ANSI’s guidelines, called ANSI A300 standards, were developed in part based on National Grid’s Integrated Vegetation Management program. In developing the standard, ANSI staff consulted with professors at the State University of New York’s College of Environmental Science and Forestry, who have partnered with National Grid on its Integrated Vegetation Management program.
The goal of National Grid’s Environmental Compliance Audit Program is to provide independent verification and assurance to management that the company’s operations are performed in accordance with applicable environmental statutes and regulations, conform to internal environmental policies and procedures, and determine if environmental management systems are in place to ensure continued conformance. During fiscal year 2006, risk-based audits focused on various company sites and assets, such as service centers, substations, and transmission line rights-of-way. The Environmental Compliance Audit Program included three management system audits and 20 compliance audits in fiscal year 2006, covering company operations at 84 sites during those audits.

The process used for the audits was consistent with state-of-the-art environmental auditing protocols and the best professional judgment of the environmental audit team.

Exceptions to either external regulatory requirements or internal company procedures that address these environmental issues are noted within each audit report issued for the Audit Program. The audit team also presents management with recommendations to resolve each exception noted. These recommendations are made not only to generate corrective action to address the specific exception, but also request that management provide a resolution to prevent recurrence. For significant exceptions, which may have an impact beyond the operating area where the exception was initially noted, the request for preventive action may expand to cover all operating areas where similar issues may occur. By requesting comprehensive resolutions from management, which include both corrective and preventive measures, the Audit Program is used to strengthen National Grid’s compliance program efforts.

Examples of resolutions that not only corrected issues noted during the audits but also improved compliance programs to prevent future environmental issues are listed below.

- A Storm Water Pollution Prevention Plan template was developed by Environmental Licensing and Permitting for use on all future construction projects; this template was developed to meet all general permit requirements for National Grid operations.
- The type of soap used for vehicle washing operations was changed to ensure proper oil/water separator performance throughout the system.
- Company-wide communication to prevent excessive vehicle idling was implemented.
- Industrial wastewater discharge compliance program in New York was improved with a system-wide project to identify and analyze all wastewater generated from company-owned facilities.

As a final measure, the Audit Program requires tracking of all resolutions provided by management to ensure that each proposed resolution has been fully implemented. Documentation or other physical evidence is provided to the audit team to demonstrate completion of corrective and/or preventive actions, and follow-up site visits are scheduled, as necessary, to ensure improvements to the compliance program have been made.

The following environmental issues were reviewed in fiscal year 2006:

- Air Pollution Control;
- Asbestos Management;
- Comprehensive Environmental Response, Compensation, and Liability Act / Emergency Planning and Community Right-to-Know Act;
- Drinking Water Management;
- Hazardous Materials Transportation;
- PCB Management;
- Solid and Hazardous Waste Management;
- Spill Prevention and Control;
- Underground Injection Control;
- Underground Storage Tanks; and
- Water Pollution Control.
In addition to the internal company audits, the Audit Program also included four vendor audits in fiscal year 2006. These vendor audits were conducted to ensure wastes generated by company operations were being managed appropriately by company-approved treatment, storage, and disposal facilities throughout the country.

Legal Notices

National Grid takes its commitment to the environment very seriously and works to establish goals and guidelines that exceed environmental laws and regulations. When we are notified that we have not complied with regulations, we move quickly to remedy the situation.

National Grid maintains an executive committee that reviews all legal notices received from federal, state, or local regulatory agencies that allege failure of the company to comply with environmental statutory and regulatory requirements. This committee also reviews all corrective actions for appropriateness, timeliness and suitability for mitigating any recurrence. In addition, the committee sets strategic direction for optimal improvement of environmental activities within the company.

In fiscal year 2006, National Grid received nine notices of alleged violations related to its U.S. operations, down from 14 notices in fiscal year 2005 and 13 in fiscal year 2004. Since receipt of these notices, we have taken corrective actions that are designed to resolve the deficiencies noted by the regulatory agencies to the satisfaction of these agencies.

Summary of Notices

- Failure to submit a response action outcome within the deadline for site remediation work.
- Two notices for failure to provide documentation regarding disposal of asbestos and one notice for an error in providing air sampling results following an asbestos abatement project.
- Failure to submit a remedial action plan with the deadline for the remediation of a site and failure to submit a response action outcome within the deadline for a cleanup project.
- Failure to submit an implementation plan to remediate a site within the deadline.
- Notice for not conducting groundwater sampling after the removal of an underground storage tank.
- Deficiencies in hazardous waste management practices at one facility.

Goal Setting

National Grid continually evaluates and adopts environmentally responsible and sustainable practices and always strives to minimize our impact on the environment. Establishing environmental goals is one way in which we work to enhance our environmental performance.

Status of Fiscal Year 2006 Goals

For Fiscal Year 2006, National Grid set a series of goals for itself in the categories of Management Systems and Training, Compliance and Pollution Prevention, and Global Climate Change.

The company made progress toward these goals in all categories during Fiscal Year 2006. Key steps taken in meeting these goals include the following:

Management Systems and Training

- Integrated the Transmission and Distribution Environmental Management Systems into one system, ensuring consistency and providing time and cost savings.
Investigated and recommended incorporating other functions of National Grid into the EMS Registration, such as Property Assets and Legal compliance personnel.

Enhanced the environmental training program by making the environmental training videos state specific.

Provided environmental training to those employees who require it and environmental awareness information to others in the company.

**Compliance and Pollution Prevention**

- Revised distribution standards to include methods for sealing pad-mounted transformer foundation cutouts with concrete and conduits with foam. These changes should result in less environmental impact if oil is released.
- Continued removal of underground petroleum storage tanks, with only five remaining as of October 2006 (as of March 2007 only one tank remains to be removed).
- Spill Prevention Control and Countermeasure plans have been included in substation construction projects.
- Reviewed and implemented methods for reducing the amount of waste materials generated from operational activities.
- Completed a feasibility study on replacing or retrofilling all equipment containing more than 499 parts per million of PCBs. As a result, all known PCB transformers have been removed from the system or retrofilled with non-PCB oil.

**Global Climate Change**

- The Board of Directors endorsed a target of 60 percent reduction from 1990 levels by 2050 of global climate change emissions resulting from company operations. National Grid is working to reduce methane releases from gas mains and reduce sulfur hexafluoride emissions from high voltage switching equipment.
- Elected not to participate in the EPA's Climate Leaders Partnership or Performance Track Program at this time. However, the company decided to join the CERES network of companies and environmentally interested groups to address sustainability challenges, such as climate change.

**Fiscal Year 2007 Goals**

We will continue to seek out new programs and procedures to build on our environmentally sound practices, including:

**Global Climate Change**

- Reduce equivalent CO₂ from gas mains by 3,873 tons in calendar year 2006 through a program that includes replacing cast iron gas pipes and applying cathodic protection to unprotected steel gas mains in the New York gas system.
- Continue to participate in the Regional Greenhouse Gas Initiative to shape a CO₂ emissions trading system that will be fair to electric customers.

**Release Reporting**

- Evaluate New York spill reporting procedures in each of our divisions and make recommendations to improve the spill reporting process.

**Environmental Training**

- Offer detailed environmental training to all personnel who require environmental training.
- Offer environmental awareness training to employees who only need general awareness training.
- Complete DOT training for hazardous materials per 49 CFR 172 Subpart H for those employees who require it.
Verification Statement of the Certified Environmental Auditor

ESS Group, Inc. (ESS) was contracted by National Grid to provide an independent review and verification of National Grid’s US Environmental Report for Fiscal Year 2006 (the Report). Kendra S. Shea of ESS conducted this review under the direction and guidance of Julie T. Davies, a RABQSA Certified Environmental Auditor, with Kathleen F. Stone of ESS providing support and project management assistance.

Under Ms. Davies’ direction, an audit plan was created to verify that the statements made in the Report accurately reflect National Grid’s Fiscal Year 2006 environmental activities and accomplishments. Statements for verification were prioritized and selected by the audit team. Verification was accomplished using a combination of methods including National Grid employee interviews, records and systems reviews, and site visits.

After reviewing the information gathered through the verification process, I can state, with assurance, that the information presented in National Grid’s U.S. Environmental Report for Fiscal Year 2006 accurately reflects the Company’s:
- Environmental management systems
- Corporate environmental goals, and
- Accomplishments relating to environmental stewardship.

Julie T. Davies
RABQSA Certified Environmental Auditor

ESS Group, Inc. is a multidisciplinary environmental engineering and consulting firm located in Wellesley, Massachusetts and East Providence, Rhode Island. ESS has extensive experience related to environmental compliance and auditing in the US energy and industrial sectors.
Environmental and Sustainability Reporting

National Grid Scores Highest in Environmental and Sustainability Reporting Among World’s 30 Largest Utility Companies

National Grid was the highest scoring utility company in environmental and sustainability reporting among the world’s largest utilities for the second year in a row in 2006, according to the Roberts Environmental Center at Claremont McKenna College in Claremont, Calif. The center’s Pacific Sustainability Index (PSI) gave National Grid (both its U.S. and European operations) an A+ rating for 2006. The Pacific Sustainability Index considers such factors as environmental intent, environmental reporting, environmental performance, social intent, social reporting and social performance.

Benchmarking Our Performance

National Grid takes part in a number of ratings and benchmarks of our economic, environmental and social performance. These assessments are conducted by independent organizations. We believe we can better understand the impact we have on the environment, and make the changes required to improve our performance, if we receive valuable input from these outside organizations.

We are rated or benchmarked by the following organizations or indices:

- Dow Jones Sustainability Indices
- FTSE4Good
- FTSE ISS Corporate Governance Index
- oekom research AG
- Business in the Community (BITC)
- Ethibel
- Vigeo
- Carbon Disclosure Project

Copies of reports on National Grid by these organizations are available by going to: http://www.nationalgrid.com/corporate/Our+Responsibility/Benchmarking+our+performance/
For More Information

To provide comments/suggestions on this Environmental Performance Report, or for more information on National Grid's environmental programs in the United States, contact:

**Philip B. George**  
Principal Environmental Engineer  
National Grid  
300 Erie Boulevard West  
Syracuse, NY 13202  
Tel: 315/428-6685  
E-mail: philip.george@us.ngrid.com

or

**Joseph Kwasnik**  
Vice President – Environmental  
National Grid  
25 Research Drive  
Westborough, MA 01582  
Tel: 508/389-4290  
E-mail: joseph.kwasnik@us.ngrid.com

The web address for National Grid’s U.S. environmental pages is:  
www.nationalgridus.com/commitment/d2-1_environment.asp

To visit the website for any of our individual companies, go to  

For a progress report on how we are meeting the principles of our Framework for Responsible Business, please visit:  
www.nationalgrid.com/responsibility/goals-progress/fr-goals-progress.html

For additional information write to:  
National Grid  
Corporate Communications Department  
25 Research Drive  
Westborough, MA 01582  
E-mail: feedback@us.ngrid.com

**Photography:** National Grid employees and environmental sites were photographed by National Grid’s Randy Calkins. The cover and seasonal photographic images are by Patrick Pacheco Zephyr, Pelham, Mass. The photos for the Hudson remediation were taken by Bill Soukup, of Hudson Valley Aerial Photos, LLC.

**Energy and Utilities Company PSI Rankings:** data courtesy of Claremont McKenna College / Roberts Environmental Center.