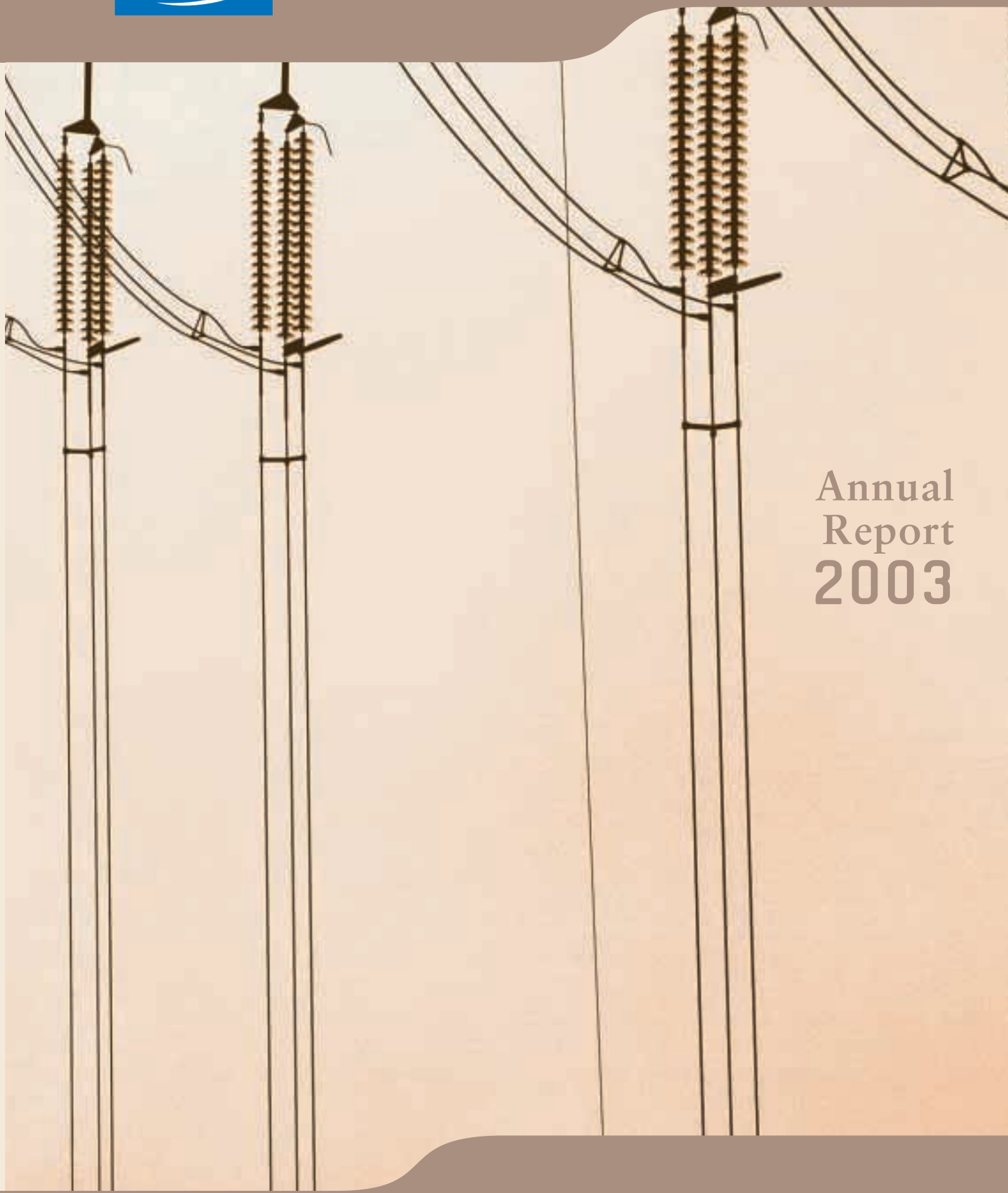
RTE

Gestionnaire
du Réseau de Transport d'Electricité



Annual Report 2003

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Background

RTE was founded on July 1, 2000, and is the electricity Transmission System Operator in France, operating, maintaining and developing the system. With a total of 100,000 kilometres of high voltage and extra high voltage circuits and 44 cross-border interconnections, the system is the largest in Europe.

RTE is a public service company, ensuring the efficient operation, security and safety of the power system. It provides free and equitable access to all system users and, to do this, stands as an independent company in the EDF Group, with its own management and fully unbundled accounts.

RTE is located in a central position, at the hub of the European electricity market.

> Europe's leading network - 8,000 employees

A public service company at the hub of the electricity market

Message from the CEO

2003 was a year which consolidated the position of RTE as a company providing a quality public service and highlighted the focal role it plays in the heart of the European electricity market.

The major blackouts which struck power systems in North America and Europe were reminders of the importance of the electricity supply, as a reliable uninterrupted supply which is the very basis of the public service.

In France, **the critical period of the heatwave** highlighted the role played by RTE in the delicate management of the balance between increased demand for electricity and limited generation capacity affected by both dry weather and high temperatures. Again, RTE has a key responsibility to warn and inform the public authorities, and March 13, 2004, RTE presented a forecast review on developments in power supply and demand for three different timelines: 2006, 2010 and 2015.

At the same time, we were working with the distribution system operators, preparing **the second phase in the opening up of the French electricity market,** which will see more than two million customers being offered the freedom to choose their own power supplier, as of July 1, 2004. While they are not directly connected to the transmission grid, their choices will obviously have an impact on our management.

For our customers, the power transmission system users, we made further progress, providing them with quality service, facilitating access to the French and European market and contributing to smooth exchange flows. In 2003, we gained ISO 9001 V2000 quality certification for the full range of RTE activities.

2003 featured a major innovation with the establishment of the Balancing Mechanism; this means we can now call on all the effective means needed to maintain the balance between supply and demand, and can gain from the competition between EDF and the other suppliers with power reserves. This system is the final stage in the construction which began with the founding of RTE, followed by the implementation of balance responsible entities in 2000 and then, in late 2001, the establishment of the Powernext electricity exchange which continued to expand and recorded a three-fold increase in transactions in 2003.

RTE has also built on relationships with the other European Transmission System Operators to optimise interconnections and secure supply. RTE concluded an agreement on mutual back-up and assistance with National Grid Transco, the British TSO, with guarantees on power reserves.

In parallel, RTE has upgraded the system for allocating daily export capacity, so as to have more equitable distribution and avoid any unused capacities being blocked.

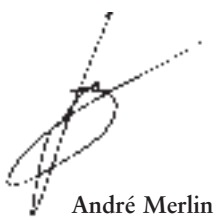
RTE industrial facilities have been developed further, with the commissioning of 400 kV lines (Tavel-Tricastin and Chevalet-Gavrelle) and of 225 kV connections to enhance the security of critical zones including the southern Var region, greater Bordeaux and the region of Saint Etienne. In line with our commitments, these extensions have meant that circuits over at least the same distance have been removed.
These projects require substantial investments for both preparation and consultation, but it was essential to complete them in order to deal with the upward trend in power consumption.

Extremes in weather in 2003 strained the power system to its limits. There was an increase in the number of cases of electric arcs between lines and nearby trees or plants, with a negative impact on the quality of supply. RTE has taken measures for better management of trees and plants, and with the information system continuing to be upgraded and modernised, more accurate records will be available on the state of facilities.
This industrial approach, providing the country with the tools needed to secure power supplies, is being conducted in the spirit of public service and environmental responsibility, which can also be seen in the general application of ISO 14001 certification covering all RTE.

RTE teams acted efficiently, using their skills and expertise in a rapidly changing context and in crisis situations and I would like to take this opportunity to thank them. Certification processes foster team work and have been a key element in the modernisation of our management, which has gained in efficiency with the reorganisation of the transmission facility operation areas. 80% of our training programs have been redesigned and this, too, has contributed to the modernisation process which will continue and will, inter alia, help improve safety on the job as this is an area where we and our service providers have not reached the levels required of our company.

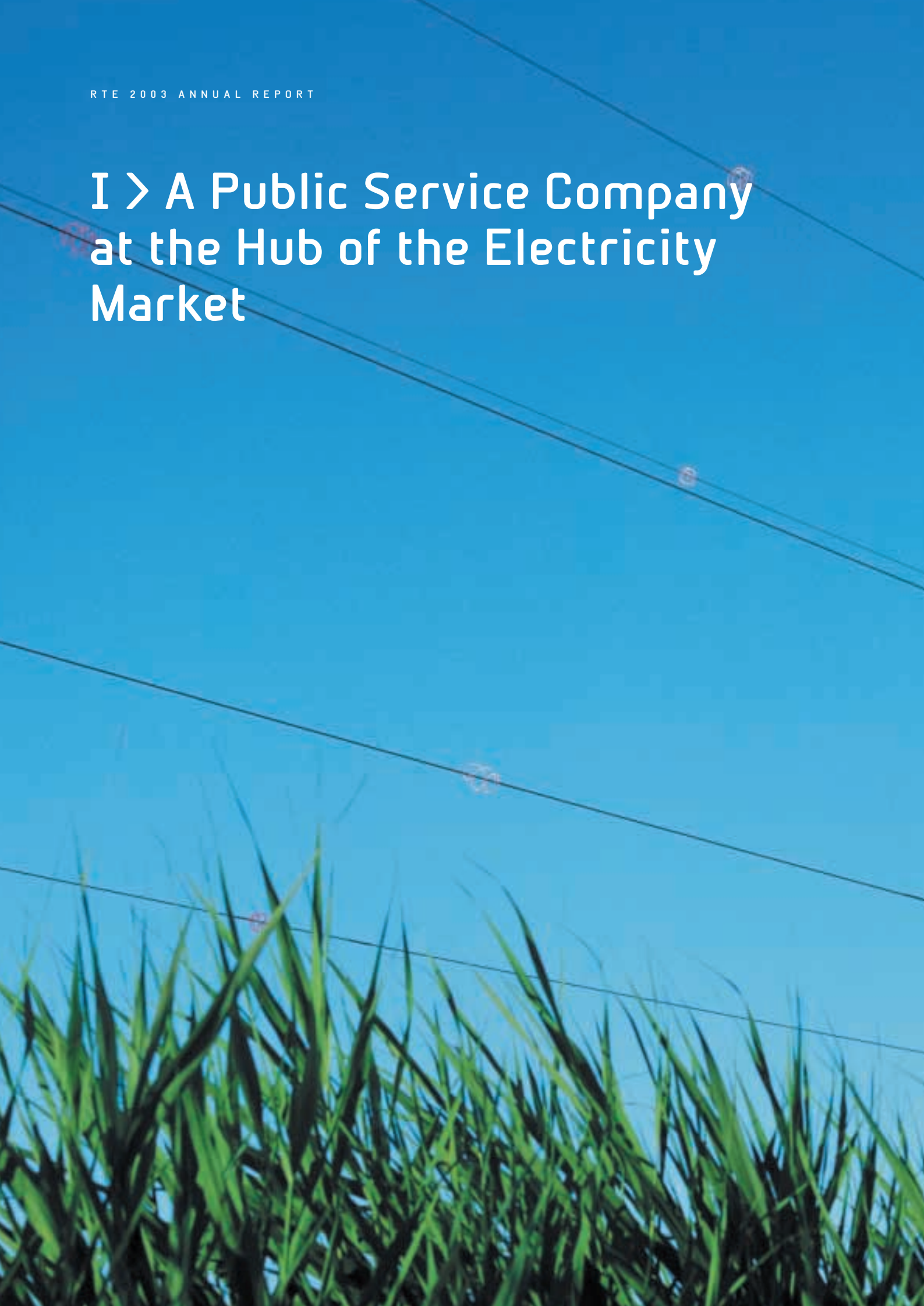
2003 was a busy year and ended with excellent financial results which came with the significant increase in consumption (+3.9%) and improved productivity (+5%), in particular thanks to the efficiency of our procurement policy. RTE turnover went from €3,657 million in 2002 to €4,035 million in 2003; net income went from €105 million to €276 million, producing a 7.1% return on capital invested which was above our original forecast. These fine results meant RTE was able to reduce debt by €470 million, i.e. a reduction of almost 10% of our debt over three years.

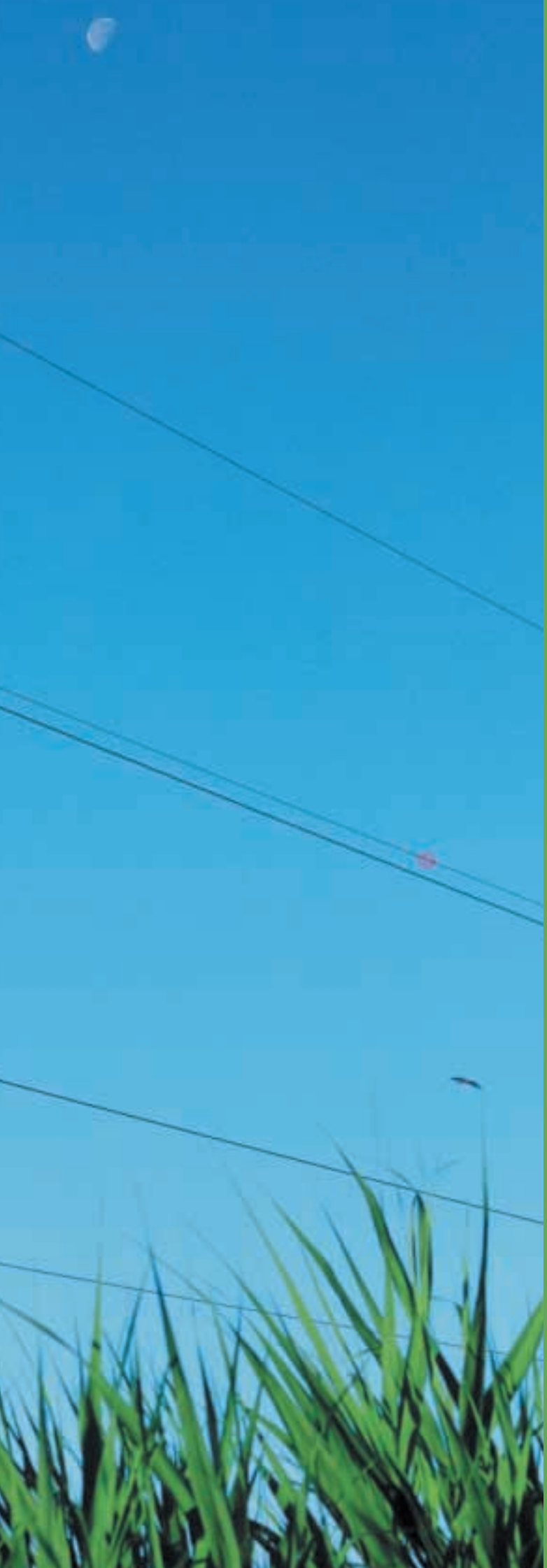
RTE is ready for the major challenges in 2004 as set by European law: the opening up of the French market to 70%, promoting smoother cross-border transactions, and these have already been well established through ETSO initiatives (ETSO being the Association of European Transmission System Operators, of which I am President), plus the legal separation from the rest of the EDF Group, once France's parliament rules on this. A new RTE corporate plan will be launched in 2004, flowing on from the previous one and designed to consolidate the role of RTE, a public service company, at the hub of the European electricity market.



André Merlin
Chief Executive Officer, RTE

I > A Public Service Company at the Hub of the Electricity Market



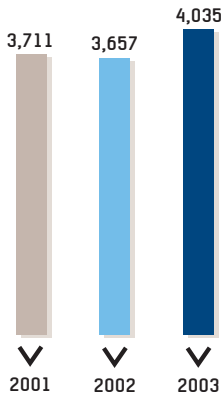


The extreme weather conditions and major blackouts which marked 2003 in many countries were vivid reminders of the extent to which electricity is a product of vital importance and a service to the community. They highlighted the central role of the public service utility played by Transmission System Operators such as RTE, ensuring continuous supply and guaranteeing free access to the transmission system. The company rallied its forces to carry out the mission in an increasingly complex environment where electricity markets are opening up to competition.

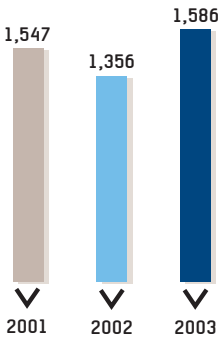
Key Figures

RTE Financial Performance[1]

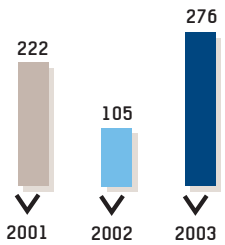
Turnover
(in millions of euros)



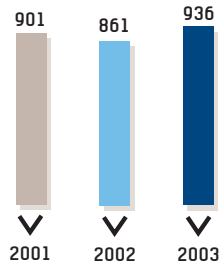
Operating profit before depreciation, amortisation & other expenses
(in millions of euros)



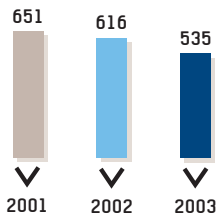
Net income
(in millions of euros)



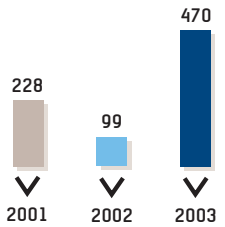
Cash flow from operations
(in millions of euros)



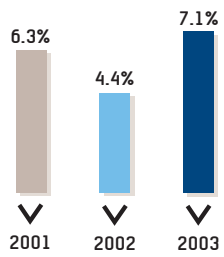
Investments
(in millions of euros)



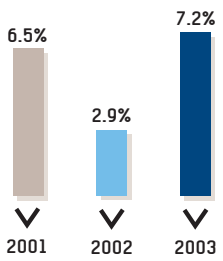
Debt reduction
(in millions of euros)



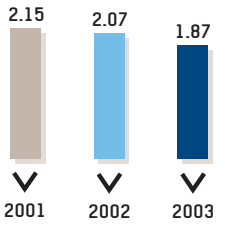
Return on capital employed (ROCE)



Return on equity (ROE)



Debt/Equity ratio (Gearing)



[1] The 2001 and 2002 figures have been corrected, according to IAS-IFRS standards, to produce like-for-like comparisons with the figures for fiscal 2003.

RTE Customers (Figures at year-end 2003)

Industrial Sites
› **580 sites** connected to the transmission system

Producers
› **355 generation sites** of the 4 leading power producers in France (EDF, CNR, SNET & SHEM)
› **133 production sites** (cogeneration, municipal waste processing plants and other renewable energy facilities), most belonging to the four leading industrial groups.

Distributors
› **21 local distribution companies** (LDC)
› **EDF**, distribution system operator

Intermediaries (traders & supply companies)
› **73 companies**

RTE System: Technical Specifications (year-end 2003)

	400 kV	225 kV	150 kV	90 kV	63 kV	Total
Lines of Towers-length (km)	13,150	21,238	1,124	12,757	29,252	**77,521**
Circuits Overhead-length (km)	20,964	25,346	1,148	15,073	33,739	**96,270**
Underground-length (km)	2	910	1	344	1,874	**3,131**
Total circuits	**20,966**	**26,256**	**1,149**	**15,417**	**35,613**	**99,401**
Substations (number)	125	505	27	534	1,250	**2,441**
Transformers (number)	264	1,164	45	39	35	**1,547**
(Power MVA)	119,671	106,630	1,823	1,552	942	**230,618**

Human Resources at Year-End 2003

8,164 employees
› 1,358 women (17%)
› 6,806 men (83%)

Breakdown per Activity:
› Operational: 7%
› Supervisory: 54%
› Executives: 39%

2003 Panorama

Development of the Electricity Market

Players

In 2003, energy block trading between balance responsible entities on the French market continued to expand. In comparison with 2002, base load energy block notification agreements increased in volume by more than 20% and in number by more than 11%; the number of balance responsible providers increased by 7%.

The number of export transactions also increased (up 29% on 2002), while the number of import transactions remained steady. To promote more transactions, RTE and the other European TSOs adapted the methods used for allocating exchange capacities on the interconnections with Italy in June 2003, and with Germany, Switzerland and Spain on November 1.

Number of Current Contracts (December 31, 2003)

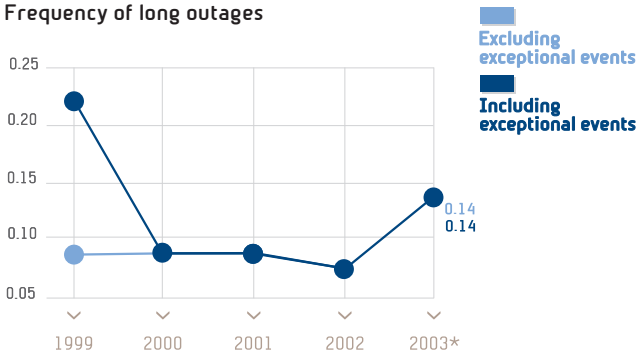
	2002	2003
Access to International Connections		
Contracts under rules on access to the public transmission grid	93	105
Import transactions	299	299
Export transactions	637	824
Balance Responsible System		
Balance responsible entities	68	73
Energy block notification agreements	999	1,118
Volume of energy traded between balance responsible entities (in billions of kWh)	110	133

Interconnector Trading Volumes Under Contract

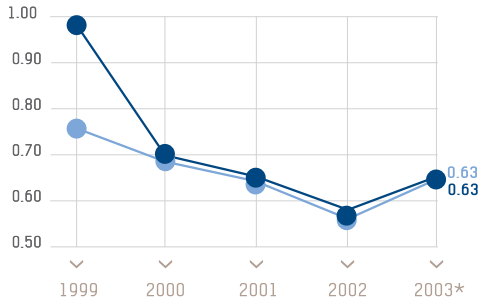
The combined volume of import and export volumes increased by 5.5 billion kWh in 2003, compared to 2002, yet fell short of the record traded under contract in 2001. Import volumes under contract went down in the first quarter of 2003, then went up sharply until December, compared to the same periods in 2002, showing an overall increase of 52% for the full year.
The slump in export transactions seen in 2002 continued in 2003, with an overall drop of 3%. The situation was different from one country to another: there were substantial increases in export volumes under contract with Germany and Belgium, and clear decreases with the UK, Spain and Switzerland.

Billions of kWh	2000	2001	2002	2003
Imports	11.8	25.9	15.9	24.3
Exports	80.8	93.7	91.9	89.0
Total	**92.6**	**119.6**	**107.8**	**113.3**

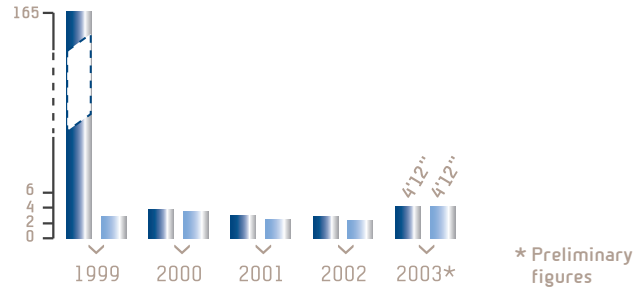
Frequency of long outages



Frequency of short outages



Equivalent outage time (minutes/seconds)



Quality of Supply

The main indicators of quality of power supply to RTE customers are the frequency of long outages, the frequency of short outages and the equivalent outage time.

The frequency of outages is calculated as the number of outages recorded at RTE customer supply points, for both industrial clients and distributors, expressed as a ratio to the number of sites and points supplied.

Equivalent outage time is measured as the amount of electrical power not supplied to RTE customers because of long outages on the transmission system, in relation to the annual average power transmitted to customers.

Calculations of these indicators, which do not include exceptional events (e.g. the storms in 1999 and the floods in September 2002 in south-eastern France) can be used to assess the structural growth of business over a number of years.

In 2003, **the frequency of short outages** remained at the same level as in previous years. However, **indicators for long outages** showed a deterioration in the quality of supply, mainly in January, July/August and November/December when 7 incidents were responsible for more than 40% of total undistributed energy and 15% of long outages in 2003.

The increase in **equivalent outage time** was due to outages with causes outside the transmission system, e.g. lightning, trees/plants and storms (approx. 60%), while breakdowns of transmission system facilities were responsible for the remaining 40%.

Cross-Border Connections

	270DC[2]	400 kV	225 kV	150 kV	90 kV	63 kV	Total
Circuits (number)	4	16	12	4	2	6	**44**

Commissioned in 2003

22 new substations including 12 delivery point substations

	400 kV	225 kV	90 kV	63 kV	Total
Substations (number)	0	4	6	12	**22**

619 km of new/replaced circuits

	400 kV	225 kV	90 kV	63 kV	Total
Length	130 km	193 km	44 km	252 km	619 km

[2] Direct current

RTE Organisation

RTE is a company on a human scale with a strong regional presence. RTE provides a public service, responding quickly and endeavouring to promote trade so that an increasingly open, competitive market develops, and has adopted a system of organisation and management methods designed to meet needs locally, through a rational and swift response.

Two Operational Divisions

RTE activity is organised around two major inter-dependent lines of business:

■ **The power system,** managing power flows on the network, user access to the transmission system and interconnections, the safety and security of the power system and contracting authority for network development projects.
■ **Transmission,** in charge of system management, system maintenance and the engineering of system development.

These activities are conducted by two operational divisions organised along similar lines.

The Power System Division covers:

■ The National Power Control Centre (CNES) managing flows on the 400 kV grid, plus real-time nation-wide balance of supply and demand and access to European networks.
■ The National Information Engineering Centre (CNII), in charge of the engineering of the RTE information system.
■ The Key Customers Department (SGC), in charge of relations with major RTE customers.
■ Seven Regional Power Control Units managing flows on the 225 kV, 90 kV and 63 kV grids, as well as grid access for customers in France and development of the regional network.

The Transmission Division covers:

■ The National Grid Engineering Centre (CNER) in charge of policies and methods for developing, operating and maintaining the network.
■ The purchasing department in charge of all RTE purchases.
■ Seven Regional Transmission Units dealing with the practical maintenance and operation of facilities, plus engineering projects related to network development.

Two Function-Based Divisions

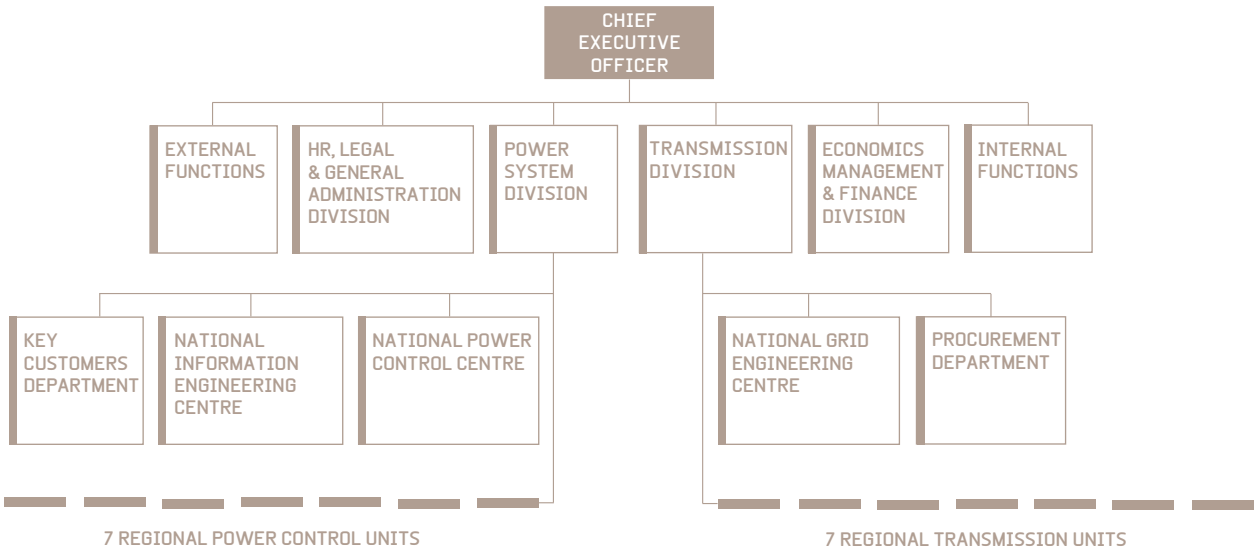
The Economics, Management & Finance Division draws up RTE economic and financial policy; it also includes accounting, management control and statistics.
The Human Resources, Legal & General Administration Division defines and coordinates RTE HR policies, ensuring quality management-workforce relations, incorporating legal considerations into corporate decision-making processes and providing operational legal support for the Units. The division controls centrally managed facilities and RTE real estate policy.

Internal & External Functions

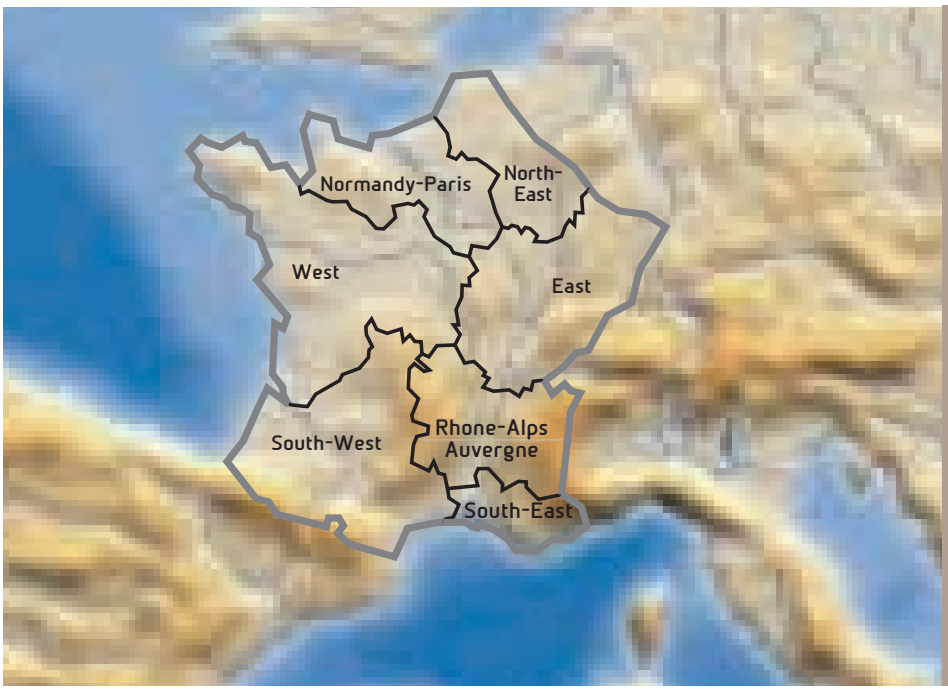
External Functions, covering the Communication & External Relations Delegation and the International Taskforce.
Internal Functions, covering the Quality, Safety, Environment Section, the Security-Confidentiality Section, the Market Control Section, the Audit Section and the Information Systems Department.

A System of Governance Based on Concerted Efforts

A number of committees chaired by André Merlin, Chief Executive Officer of RTE, are supported by representative working groups dealing with specific subjects and acting as intermediaries between RTE business lines and management.
The Executive Committee (COMEX) is the decision-making body and meets every week to deal with customer relations, management, corporate assets, economic and financial arrangements, the information system, communications and external relations.
The Strategic Orientation Committee (COS) meets twice a month to set policy and strategy guidelines for the company.
The Management Committee (CODIR) consists of the management team, central function managers and directors of national and regional units (System and Transmission) and meets once a month to report on the latest developments and initiate managerial changes in the field.
Procurement, development, maintenance and information systems are handled by specific national committees.



RÉGIONAL UNITS



EXECUTIVE COMMITTEE MEMBERS

André Merlin, Chief Executive Officer, RTE

Pierre Bornard, Director, Power System Division

Jean-Yves Broyelle, Director, Transmission Division

Alain Cavret, Director, Economics, Management & Finance Division

Gérard Dupiellet, Director, Human Resources, Legal & General Administration Division

François Hemmer, Adviser on Internal Affairs

Hervé Mignon, Head of Staff