EDP ELECTRICIDADE DE PORTUGAL SA Form 20-F June 30, 2004 Table of Contents

As filed with the Securities and Exchange Commission on June 30, 2004

# SECURITIES AND EXCHANGE COMMISSION

Form 20-F

# ANNUAL REPORT PURSUANT TO SECTION 13 OF THE SECURITIES EXCHANGE ACT OF 1934,

for the fiscal year ended December 31, 2003

Commission File Number: 1-14648

# EDP Electricidade de Portugal, S.A.

(Exact name of registrant as specified in its charter)

EDP Electricity of Portugal (Translation of registrant s name into English)

Republic of Portugal (Jurisdiction of incorporation or organization)

Praça Marquês de Pombal, 12

1250-162 Lisbon, Portugal

(Address of principal executive offices)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Ordinary Shares, with nominal value 1 per share* American Depositary Shares (as evidenced by American	New York Stock Exchange
Depositary Receipts), each representing 10 Ordinary Shares	New York Stock Exchange
* Not for trading, but only in connection with the registration of Americ and Exchange Commission.	an Depositary Shares, pursuant to the requirements of the Securities
Securities registered or to be registered p	ursuant to Section 12(g) of the Act: None
Securities for which there is a reporting obligat	tion pursuant to Section 15(d) of the Act: None
Indicate the number of outstanding shares of each of the issuer s classes covered by this Annual Report:	of capital or common stock as of the close of the last full fiscal year
At December 31, 2003,	there were outstanding:
3,000,000,000 Ordinary Shares, w	vith nominal value of 1 per share
Indicate by check mark whether the registrant (1) has filed all reports req of 1934 during the preceding 12 months (or for such shorter period that the such filing requirements for the past 90 days: Yes x No "	
Indicate by check mark which financial statement item the registrant has	elected to follow: Item 17 " Item 18 x

#### TABLE OF CONTENTS

PART I		
Item 1.	Identity of Directors, Senior Management and Advisers	
Item 2.	Offer Statistics and Expected Timetable	3
Item 3.	<u>Key Information</u>	3
	SELECTED FINANCIAL DATA	3
	EXCHANGE RATES	
	CAPITALIZATION AND INDEBTEDNESS	
	REASONS FOR THE OFFER AND USE OF PROCEEDS	-
	RISK FACTORS	-
Item 4.	Information on the Company	13
10111 4.	HISTORY AND BUSINESS OVERVIEW	13
	Iberian Energy	15
	Telecommunications	16
	Information Technology	10
	Group capital expenditures and investments	16
	International Investments	20
	STRATEGY THE DEPLAN ELECTRICITY MADVET	20
	THE IBERIAN ELECTRICITY MARKET	25
	PORTUGAL	25
	Electricity System Overview	25
	<u>Generation</u>	29
	<u>Transmission</u>	39
	<u>Distribution</u>	41
	<u>Tariffs</u>	46
	Competition	47
	<u>SPAIN</u>	48
	<u>History and Overview</u>	48
	<u>Generation</u>	50
	<u>Distribution and Supply</u>	54
	Other Activities	55
	BRAZIL	56
	<u>Overview</u>	56
	<u>Generation</u>	59
	<u>Distribution</u>	60
	TELECOMMUNICATIONS	63
	OTHER INVESTMENTS AND INTERNATIONAL ACTIVITIES	67
	SUBSIDIARIES, AFFILIATES AND ASSOCIATED COMPANIES	68
	REGULATION	68
	The Iberian Electricity Market	68
	Portugal	70
	<u>Spain</u>	76
	EU Legislation	80
	Brazil	84
	Telecommunications	88
Item 5.	Operating and Financial Review and Prospects	91
item 5.	OVERVIEW	91
	CRITICAL ACCOUNTING POLICIES	95
	RESULTS OF OPERATIONS	99
	2003 COMPARED WITH 2002	100
	2002 COMPARED WITH 2001	110
	LIQUIDITY AND CAPITAL RESOURCES  TABLILAD DISCLOSURE OF CONTRACTIVAL ORLIGATIONS	110
	TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS  DENISIONS AND DENIEFITS	117
	PENSIONS AND BENEFITS	118

1

	INFLATION	118
	PORTUGUESE GAAP COMPARED WITH U.S. GAAP	118
	IMPACT OF RECENTLY ISSUED U.S. ACCOUNTING STANDARDS	121
Item 6.	<u>Directors, Senior Management and Employees</u>	122
	BOARD OF DIRECTORS	122
	SENIOR MANAGEMENT	127
	COMPENSATION OF DIRECTORS AND SENIOR MANAGEMENT	130
	SHARE OWNERSHIP	131
	<u>EMPLOYEES</u>	132
	EMPLOYEE BENEFITS	133
Item 7.	Major Shareholders and Related Party Transactions	133
	MAJOR SHAREHOLDERS	133
	RELATED PARTY TRANSACTIONS  INTERPORTS OF EXPERTS AND COUNTY	134
I4 0	INTERESTS OF EXPERTS AND COUNSEL	134
Item 8.	Financial Information	134
	CONSOLIDATED STATEMENTS OTHER FINANCIAL INFORMATION	134 135
	OTHER FINANCIAL INFORMATION Legal Proceedings	135
	Dividends and Dividend Policy	135
	SIGNIFICANT CHANGES	135
Item 9.	The Offer and Listing	135
item 7.	TRADING MARKETS	135
	MARKET PRICE INFORMATION	136
	THE PORTUGUESE SECURITIES MARKET	136
	TRADING BY US IN OUR SECURITIES	140
	PLAN OF DISTRIBUTION	140
	SELLING SHAREHOLDERS	140
	DILUTION	140
	EXPENSES OF THE ISSUE	140
Item 10.	Additional Information	141
	SHARE CAPITAL	141
	ARTICLES OF ASSOCIATION	141
	NYSE CORPORATE GOVERNANCE STANDARDS	147
	MATERIAL CONTRACTS	149
	EXCHANGE CONTROLS	150
	PORTUGUESE TAXATION	150
	UNITED STATES TAXATION	152
	DIVIDENDS AND PAYING AGENTS	154
	STATEMENT BY EXPERTS  DOCUMENTS ON DISPLAY	154
	DOCUMENTS ON DISPLAY SUPERINARY INFORMATION	154
T4 1 1	SUBSIDIARY INFORMATION  Outside the sense of Outside the Discharge About Monket Birk	155
Item 11.	Quantitative and Qualitative Disclosures About Market Risk	155
Item 12.	<u>Description of Securities Other Than Equity Securities</u> GLOSSARY OF TERMS	158 159
PART II	OLOSSART OF TERMS	139
Item 13.	Defaults, Dividend Arrearages and Delinquencies	161
Item 14.	Material Modifications to the Rights of Security Holders and Use of Proceeds	161
Item 15.	Controls and Procedures	161
Item 16.	[Reserved]	161
Item 16A.	Audit Committee Financial Expert	161
Item 16B.	Code of Ethics	161
Item 16C.	Principal Accountant Fees and Services	162
Item 16D.	Exemptions from the Listing Standards for Audit Committees	162
Item 16E.	Purchases of Equity Securities by the Issuer and Affiliated Purchasers	162
PART III		
Item 17.	Financial Statements	162
Item 18.	Financial Statements	162
Item 19	<u>Exhibits</u>	163

2

#### **Defined terms**

In this annual report, EDP refers to EDP Electricidade de Portugal, S.A. and the terms we, us and our refer to EDP and, as applicable, its direct and indirect subsidiaries as a group. Unless we specify otherwise or the context otherwise requires, references to US\$, \$ and U.S. dollars are to United States dollars, references to escudo(s) or PTE are to Portuguese escudos, references to real or reais are to Brazilian reais, references to or GBP are to British Pounds Sterling and references to or euro are to the euro, the single European currency established pursuant to the European Economic and Monetary Union, or EMU. We have explained a number of terms related to the electricity industry in the Glossary of Terms included in this annual report.

#### Forward-looking statements

This annual report and the documents incorporated by reference in this annual report contain forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995 with respect to our financial condition, results of operations, business strategies, operating efficiencies, competitive positions, growth opportunities for existing services, plans and objectives of management, markets for stock and other matters. Statements in this annual report that are not historical facts are forward-looking statements for the purpose of the safe harbor provided by Section 21E of the Exchange Act and Section 27A of the Securities Act.

These forward-looking statements, including, among others, those relating to our future business prospects, revenues and income, wherever they may occur in this annual report, the documents incorporated by reference in this annual report and the exhibits to this annual report, are necessarily estimates reflecting the best judgment of our senior management and involve a number of risks and uncertainties that could cause actual results to differ materially from those suggested by the forward-looking statements. As a consequence, you should consider these forward-looking statements in light of various important factors, including those set forth in this annual report. Important factors that could cause actual results to differ materially from estimates or projections contained in the forward-looking statements include, without limitation:

the effect of, and changes in, regulation and government policy in countries in which we operate;

the effect of, and changes in, macroeconomic, social and political conditions in countries in which we operate;

the effects of competition, including competition that may arise in connection with the development of an Iberian electricity market;

our ability to reduce costs;

hydrological conditions and the variability of fuel costs;

anticipated trends in our business, including trends in demand for electricity;

our success in developing our telecommunications business;

our success in new businesses, such as gas;

future capital expenditures and investments;

the timely development and acceptance of our new services;

the effect of technological changes in electricity, telecommunications and information technology; and our success at managing the risks of the foregoing.

1

#### **Table of Contents**

We undertake no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after the date of this annual report or to reflect the occurrence of unanticipated events.

#### Presentation of financial information

Unless we indicate otherwise, we have prepared the financial information contained in this annual report in accordance with generally accepted accounting principles in Portugal, or Portuguese GAAP, which differs in significant respects from generally accepted accounting principles in the United States, or U.S. GAAP. We describe these differences in Item 5. Operating and Financial Review and Prospects Portuguese GAAP Compared with U.S. GAAP and in note 39 to our consolidated financial statements. Unless we indicate otherwise, any reference in this annual report to our consolidated financial statements is to the consolidated financial statements, including the related notes, included in this annual report.

Beginning in 2002 (for fiscal year 2001 and thereafter), we published our consolidated financial statements in euros. Unless we indicate otherwise, we have translated amounts stated in U.S. dollars from euros at an assumed rate solely for convenience. By including these currency translations in this annual report, we are not representing that the euro amounts actually represent the U.S. dollar amounts shown or could be converted into U.S. dollars at the rate indicated. Unless we indicate otherwise, we have translated the U.S. dollar amounts from euros at the noon buying rate in The City of New York for cable transfers in foreign currencies as announced by the Federal Reserve Bank of New York for customs purposes (the Noon Buying Rate) on June 24, 2004 of \$1.217 per 1.00. That rate may differ from the actual rates used in the preparation of our consolidated financial statements included in Item 18 and U.S. dollar amounts used in this annual report may differ from the actual U.S. dollar amounts that were translated into euros in the preparation of our consolidated financial statements. For information regarding recent rates of exchange between euros and U.S. dollars, see Item 3. Key Information Exchange Rates. In addition, for convenience only and except where we specify otherwise, we have translated certain reais figures into euro at the fixed rate of exchange between the real and euro of 3.776 reais = 1.00. The rate of exchange between reais and euros represents the euro equivalent of the U.S. dollar/real fixed rate of exchange, calculated by translating reais into U.S. dollars using the Noon Buying Rate on June 24, 2004 of 3.103 reais = \$1.00 and then translating U.S. dollars into euros using the rate of exchange between U.S. dollars and euros of \$1.217 = 1.00, which was the applicable Noon Buying Rate on June 24, 2004. By including convenience currency translations in this annual report, we are not representing that the reais amounts actually represent the euro amounts shown or could be converted into euros a

Prior to January 1, 2001, our reporting currency was Portuguese escudos. For convenience and to facilitate a comparison, all escudo-denominated financial data for periods prior to January 1, 2001 included in this annual report have been restated from escudos to euros at the fixed rate of exchange as of January 1, 1999 of PTE 200.482 = 1.00. Where escudo-denominated amounts for periods prior to January 1, 2001 have been rounded, the restated euro amounts have been calculated by converting the rounded escudo-denominated amounts into euros. The comparative balances for prior years now reported in euros depict the same trends as would have been presented had we continued to report such amounts in Portuguese escudos. Other financial data for periods prior to January 1, 1999 may not be comparable to that of other companies reporting in euros if those companies had restated from a reporting currency other than Portuguese escudos.

2

#### Table of Contents

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Item 1. Identity of Directors, Senior Management and Advisers

Not applicable.

Item 2. Offer Statistics and Expected Timetable

Not applicable.

Item 3. Key Information

#### SELECTED FINANCIAL DATA

You should read the following in conjunction with Item 5. Operating and Financial Review and Prospects and our consolidated financial statements and other financial data, including the related notes, found elsewhere in this annual report.

The summary financial data below has been extracted from our audited consolidated financial statements for each of the five years ended December 31, 2003 and as of December 31, 1999, 2000, 2001, 2002 and 2003 and the related notes, which appear elsewhere in this annual report. The audited consolidated financial statements have been prepared in accordance with Portuguese GAAP, which differ in certain significant respects from U.S. GAAP. See Item 5. Operating and Financial Review and Prospects Portuguese GAAP compared with U.S. GAAP and note 39 to our consolidated financial statements for a discussion of the principal differences between Portuguese GAAP and U.S. GAAP with respect to our audited consolidated financial statements.

In 1999, we selected a new firm of independent public accountants to audit our consolidated financial statements based on a solicitation of bids to a number of firms, including our previous firm of independent public accountants. Our consolidated financial statements from 1999 through 2003 were audited by PricewaterhouseCoopers, Lda. Fiscal years prior to 1999 were audited by Ernst & Young.

3

		Year ended December 31,				
	1999	2000	2000 2001 2	2002	2003	2003
	Euro	Euro	Euro	Euro	Euro(1)	US\$ <sup>(1)</sup>
	(in r	nillions, exc	ept per ordi	nary share a	nd per ADS d	lata)
Statement of income:						
Amounts in accordance with Portuguese GAAP						
Electricity sales	2,966	3,676	5,201	5,876	6,296	7,663
Other sales <sup>(2)</sup>	38	61	98	112	160	195
Services <sup>(3)</sup>	68	110	351	398	521	634
Total revenues	3,072	3,846	5,650	6,387	6,978	8,492
Raw materials and consumables	901	1,731	3,080	3,687	3,921	4,772
Personnel costs	463	439	592	625	647	787
Depreciation and amortization	616	614	665	740	846	1,029
Supplies and services	287	369	651	675	633	770
Own work capitalized <sup>(4)</sup>	(214)	(229)	(233)	(242)	(236)	(287)
Concession and power-generation rental costs <sup>(5)</sup>	129	133	149	158	176	214
Hydrological correction <sup>(6)</sup>	(60)	(35)	0	0	0	0
Other operating expenses, net	43	102	73	95	86	105
Total operating costs and expenses	2,166	3,122	4,977	5,738	6072	7,389
Operating income	906	724	674	649	906	1,102
Net interest expense <sup>(7)</sup>	140	175	205	223	359	437
Other non-operating income (expenses), net	56	(289)	(126)	(139)	(14)	(18)
Income before income taxes	822	838	594	287	532	648
Provision for income taxes (net of deferred taxes)	(308)	(313)	(203)	(172)	(196)	(238)
Minority interest	0	23	60	220	44	54
Net income	514	549	451	335	381	464
Net income from operations per ordinary share <sup>(8)</sup>	0.30	0.24	0.22	0.22	0.30	0.37
Net income from operations per ADS	3.02	2.41	2.25	2.16	3.02	3.68
Basic and diluted net income per ordinary share <sup>(8)</sup>	0.17	0.18	0.15	0.11	0.13	0.15
Basic and diluted net income per ADS <sup>(8)</sup>	1.72	1.83	1.50	1.12	1.27	1.55
Dividends per ordinary share <sup>(9)(10)</sup>	0.14	0.14	0.11	0.09	0.09	0.11
Dividends per ADS <sup>(9)(10)</sup>	1.40	1.40	1.13	0.90	0.90	1.10
Amounts in accordance with U.S. GAAP <sup>(12)</sup>						
Net income	644	405	519	300	498	606
Basic and diluted net income per ordinary share <sup>(9)</sup>	0.21	0.14	0.17	0.10	0.17	0.20
Basic and diluted net income per ADS <sup>(9)</sup>	2.14	1.35	1.74	1.00	1.67	2.03
Cash flow data:						
Amounts in accordance with Portuguese GAAP						
Net cash from operating activities	985	1,122	1,221	898	1,774	2,158
Net cash used in investing activities	1,294	914	1,243	1,141	529	644
Net cash used in (from) financing activities	(385)	482	96	297	(1,119)	(1,361)

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	1999 Euro	2000 Euro	2001 Euro	2002 Euro <sup>(1)</sup>	2003 Euro <sup>(1)</sup>	2003 US\$ <sup>(1)</sup>
	Euro ——	Euro	Euro	Euro	Euro	US\$
	(in m	illions, excep	ot per ordina	ary share an	d per ADS d	ata)
Balance sheet data (at period end):						
Amounts in accordance with Portuguese GAAP						
Cash and cash equivalents	16	58	34	214	287	350
Other current assets	707	1,162	1,496	1,863	1,919	2,336
Total current assets	723	1,220	1,530	2,077	2,207	2,685
Fixed assets, net <sup>(11)</sup>	10,477	9,540	9,844	11,204	11,652	14,180
Other assets	2,510	4,128	4,860	4,844	4,792	5,832
Total assets	13,710	14,887	16,233	18,125	18,651	22,698
Short-term debt and current portion of long-term debt	598	1,807	1,744	1,887	1,579	1,922
Other current liabilities	621	890	1,286	1,631	1,711	2,083
Total current liabilities	1,219	2,697	3,030	3,518	3,290	4,004
Long-term debt, less current portion	3,770	3,205	4,055	6,107	5,914	7,197
Hydro account <sup>(13)</sup>	339	366	388	324	0	0
Other long-term liabilities	2,319	2,377	2,423	2,616	3,525	4,290
Total liabilities	7,648	8,645	9,896	12,566	12,729	15,491
Minority interest	2	37	241	65	236	288
Hydro account <sup>(13)</sup>	0	0	0	0	388	472
Shareholders equity	6,060	6,205	6,097	5,494	5,298	6,448
Amounts in accordance with U.S. GAAP <sup>(12)</sup>						
Fixed assets, net <sup>(11)</sup>	8,750	5,316	5,929	6,602	7,172	8,729
Total assets	12,940	14,010	15,455	16,922	17,730	21,577
Total current liabilities	1,238	2,714	3,052	2,551	3,280	3,991
Total long-term liabilities	7,415	6,776	7,721	10,420	10,892	13,255
Total liabilities	8,653	9,489	10,773	12,970	14,172	17,247
Shareholders equity	4,287	4,483	4,441	3,886	3,497	4,256

<sup>(1)</sup> For 1999 and 2000, escudos are translated into euro at the fixed rate of exchange established at the commencement of the third stage of European Monetary Union on January 1, 1999 by the European Council of Ministers between the euro and escudo of PTE 200.482 = 1.00. For 2003, euros are translated into U.S. dollars at the rate of exchange of \$1.217 = 1.00, which was the U.S. Federal Reserve Bank of New York noon buying rate on June 24, 2004.

<sup>(2)</sup> Consists of sales of steam, ash, information technology products and sundry materials.

<sup>(3)</sup> Consists of electricity-related services, services to information technology systems, telecommunications, engineering, laboratory services, training, medical assistance, consulting, multi-utility services and other services.

Our consolidated income statements present expenses in accordance with their nature rather than their function. Therefore, costs incurred by us for self-constructed assets are capitalized as part of fixed assets and included as a reduction of total expenses under Own work capitalized when the related costs have been included in the relevant expense items.

<sup>(5)</sup> Substantially all of these amounts relate to rent expenses paid to municipalities for the right to distribute electricity in the relevant municipal areas.

<sup>(6)</sup> As required by government regulation, we record charges and credits to operating income, depending on hydrological conditions in a given year, to smooth the effect on our earnings and customer prices that result from changes in hydrological conditions. The difference between the economic costs of generating electricity and the economic reference costs based on an average hydrological year are included in this item. The imputed interest on the accumulated balance of the hydro account and other adjustments are included in Other non-operating expenses (income). In 2003 and for the following years, net gains and losses arising from the hydrological account are being charged to other non-operating income (expenses). In this respect, in 2003 we booked a 19.4 million income item, or US\$ 23.6 million, under this profit and loss account caption. Additionally, in 2001 we recorded a 47.5 million income item. We did not record such an item in 2002.

<sup>(7)</sup> Includes interest and related expenses and interest and related income. See Item 5. Operating and Financial Review and Prospects 2003 compared with 2002 Other expenses (income).

Basic and diluted earnings per ordinary share are based on our historical average number of ordinary shares outstanding after giving effect to a 5 for 1 stock split and our average number of ordinary shares outstanding after giving effect to the 5 for 1 stock split plus the effect of the exercise of employee stock options, respectively. Basic and diluted earnings per ADS are based upon basic and diluted

- earnings per ordinary share multiplied by 10 as each ADS is equivalent to 10 ordinary shares on a post-split basis.
- (9) Based on 3,000,000,000 ordinary shares issued and outstanding.
- Dividends per ordinary share in US\$, translated at the prevailing rate of exchange at the date of payment between the U.S dollar and the escudo for 1999, amount to US\$ 0.13 in 1999, US\$ 0.12 in 2000, US\$ 0.10 in 2001, US\$ 0.11 in 2002 and US\$ 0.11 in 2003 and dividends per ordinary share in euro, translated at the fixed rate of exchange between the euro and the escudo for 1999, amount to 0.14 in 1999, 0.14 in 2000, 0.11 in 2001, 0.09 in 2002 and 0.09 in 2003.
- (11) Substantially all of these assets are subject to reversion to the Republic or the municipalities. See Item 4. Information on the Company Regulation Reversionary assets.
- U.S. GAAP amounts for 1999, 2000 and 2001 are not comparable to 2002 and 2003 due to the implementation of SFAS 142.
- (13) Commencing with 2003, the hydrological correction account is no longer presented in our consolidated balance sheet as a liability.

5

#### EXCHANGE RATES

Effective January 1, 1999, Portugal and 11 other member countries of the European Union, or EU, adopted the euro as their common currency. The euro was traded on currency exchanges and was available for non-cash transactions during the transition period between January 1, 1999 and December 31, 2001. During this transition period, the national currencies remained legal tender in the participating countries as denominations of the euro, and public and private parties paid for goods and services using either the euro or the participating countries existing currencies. On January 1, 2002, the euro entered into cash circulation. Between January 1, 2002 and February 28, 2002 both the euro and the escudo were in circulation in Portugal. From March 1, 2002, the euro became the sole circulating currency in Portugal. As of January 1, 2002, we ceased to use the escudo.

The vast majority of our revenues, assets, expenses and liabilities have historically been denominated in escudos, and we prepared and published our consolidated financial statements in escudos through the 2000 fiscal year. Beginning in 2002 (for fiscal year 2001 and thereafter), our consolidated financial statements have been published in euros. A portion of our revenues and expenses and certain liabilities are nonetheless denominated in non-euro currencies outside the euro zone and fluctuations in the exchange rates of those currencies in relation to the euro will therefore affect our results of operations. To learn more about the effect of exchange rates on our results of operations, you should read. Item 5. Operating and Financial Review and Prospects. Exchange rate fluctuations will also affect the U.S. dollar price of the ADSs and the U.S. dollar equivalent of the euro price of our ordinary shares, the principal market of which is the Euronext Lisbon Stock Exchange. In addition, any cash dividends are paid by us in euro, and, as a result, exchange rate fluctuations will affect the U.S. dollar amounts received by holders of ADSs on conversion of those dividends by the depositary.

The following table shows, for the periods and dates indicated, information concerning the exchange rate between the U.S. dollar and the euro. These rates are provided solely for your convenience. We do not represent that the escudo could have been, or that the euro could be, converted into U.S. dollars at these rates or at any other rate.

The column of averages in the table below shows the averages of the relevant exchange rates on the last business day of each month during the relevant period. The high and low columns show the highest and lowest exchange rates, respectively, on any business day during the relevant period.

#### U.S. dollar per euro(1)

Year ended December 31,	End of Period	Average
1999	1.01	1.06
2000	0.94	0.92
2001	0.89	0.89
2002	1.05	0.95
2003	1.26	1.13

#### U.S. dollar per euro(1)

Period	High	Low
	·	
2003		
December	1.26	1.20
2004		
January	1.29	1.24

February	1.28	1.24
March	1.24	1.21
April	1.24	1.18
May	1.23	1.18

<sup>(1)</sup> Euro amounts are based on the U.S. Federal Reserve Bank of New York noon buying rate.

Our ordinary shares are quoted in euro on the Euronext Lisbon Stock Exchange. Our ADSs are quoted in U.S. dollars and traded on the New York Stock Exchange. On June 24, 2004, the exchange rate between the euro and the U.S. dollar was \$1.217 = 1.00.

# CAPITALIZATION AND INDEBTEDNESS Not applicable. REASONS FOR THE OFFER AND USE OF PROCEEDS Not applicable. RISK FACTORS In addition to the other information included and incorporated by reference in this annual report, you should carefully consider the following factors. There may be additional risks that we do not currently know of or that we currently deem immaterial based on information currently available to us. Our business, financial condition or results of operations could be materially adversely affected by any of these risks, resulting in a decline in the trading price of our ordinary shares or ADSs.

#### RISKS RELATED TO OUR CORE ELECTRICITY BUSINESS

The competition we face in the generation and supply of electricity is increasing, affecting our electricity sales and operating margins.

The increase in competition from the Portuguese and Spanish implementation of EU directives intended to create a competitive electricity market may materially and adversely affect our results of operations and financial condition.

In Portugal, while we currently face limited competition from independent power producers in generation, we expect that this competition will increase as the industry further liberalizes. Portuguese law requires that contracts for the construction of future power plants in Portugal in the Binding Sector be awarded through competitive tender processes, in which we expect to participate. In a competitive tender process, we may lose opportunities to generate electricity in the Binding Sector in Portugal.

The Portuguese regulatory structure now allows for competition in the supply of electricity, which could adversely affect our sales of electricity. In particular, as more electricity consumers qualify to participate in the market-based Non-Binding Sector in Portugal, more electricity will be sold in the competitive markets where prices may be lower than existing tariffs. Prior to 2002, consumers of electricity were eligible to participate in the Non-Binding Sector as Qualifying Consumers based on minimum annual consumption thresholds set by regulation, which declined annually over the 1999-2001 period. Pursuant to EU directives, the threshold was 20 GWh for 2000 and 9 GWh for 2001. From January 1, 2002 to February 26, 2004, all electricity consumers other than low voltage consumers, which are generally residential and small commercial users, were treated as Qualifying Consumers automatically upon notification to the Portuguese regulatory authority. From February 26, 2004, the eligibility threshold was lowered to extend to special lower voltage consumers. As of the end of February 2004, there were approximately

50,000 consumers eligible to be Qualifying Consumers, which represented approximately 53% of total demand in mainland Portugal in volume terms.

In Spain, the electricity market has been completely liberalized since January 1, 2003. Accordingly, regardless of the type of consumer, voltage or consumption required, every customer can choose its electricity supplier and how the electricity is supplied. In other words, the consumer can choose between a local distributor paying the regulated tariff fixed by the Spanish government, or enter into a contract with a supplier and pay the price agreed by both parties. Despite the complete liberalization of the Spanish market, the majority of consumers have not changed their supplier. Until now, this liberalization has mainly produced effects among medium- and high-voltage consumers. Although fixed rate tariffs are expected to predominate, at least in the short and medium term, among Spanish electricity consumers, especially low voltage consumers, there could be a more pronounced move to contractually-agreed tariffs in the future and these tariffs could be lower than regulated tariffs.

#### **Table of Contents**

In the context of liberalization of the electricity market within the EU, at the end of 2001 the Portuguese and Spanish governments entered into a cooperation protocol which sets forth the main principles for the creation of an Iberian electricity market free competition, transparency, objectiveness and efficiency. The stated intent of the cooperation protocol is to guarantee for Portuguese and Spanish consumers access to electricity distribution and to create interconnections with third countries on equal conditions applicable to Portugal and Spain. In addition, it is intended that the production of electricity by producers in Portugal and Spain be subject to similar regulatory environments that allow producers in one country to execute bilateral agreements for electricity distribution to consumers in the other country. The cooperation protocol also calls for the creation of an Iberian common electricity pool.

During the Figueira da Foz summit of November 8, 2003, the Portuguese and Spanish governments executed a memorandum of understanding that set the timetable for the creation of an Iberian electricity market. On January 20, 2004, the same governments entered into a more detailed agreement known as the international agreement, which was approved by the Portuguese Parliament and ratified by the President of the Republic of Portugal on April 20, 2004. This agreement creates a single Iberian electricity market designated as MIBEL, as part of the process of integration of the electricity markets of both countries. The MIBEL will be limited in the short-term by a lack of high-voltage power lines linking Spain and Portugal, but is expected to be fully operational by 2006.

The scope of increased competition and any adverse effects on our operating results and market share resulting from the full liberalization of the European electricity markets, and in particular the Portuguese and Spanish electricity markets, will depend on a variety of factors that cannot be assessed with precision and that are beyond our control. Accordingly, we cannot anticipate the risks and advantages that may arise from this market liberalization. When further implemented, the organizational model and resulting competition may materially and adversely affect our results of operations and financial condition.

Our core electricity operating results are affected by laws and regulations, including regulations regarding the prices we may charge for electricity.

As an electricity public service, we operate in a highly regulated environment. An independent regulator appointed by the Portuguese government, the *Entidade Reguladora dos Serviços Energéticos*, referred to as ERSE or the regulator, regulates the electricity industry through, among other things, a tariff code that defines the prices we may charge for electricity services in the Binding Sector. In attempting to achieve an appropriate balance between, on the one hand, the interests of electricity customers in affordable electricity and, on the other hand, our need and the needs of other participants in the electricity sector to generate adequate profit, the regulator may take actions that adversely impact our profitability.

In real terms, adjusted for inflation, very high, high and medium voltage tariffs, generally applied to industrial customers, have declined by an average of 3.4% per year over the period 1999 to 2004. The tariffs for low voltage customers have also declined in real terms by an average of approximately 3.1% per year over the same period. For 2004, in nominal terms, tariffs for all voltage levels increased, on average, by 2.1% from the 2003 levels. Although the nominal final tariff charged to consumers increased, on average, across all voltage levels in 2004 by 2.1% from the 2003 levels, the component of the final tariff charged by EDP Distribuição, or EDPD, our distribution company, decreased for the second regulatory period, covering the years 2002-2004, from the tariff charged in the first regulatory period, covering the years 1999-2001. During the first regulatory period, the annual decrease in the tariff charged by EDPD was calculated on the basis of the Portuguese consumer price index, or CPI, less approximately 5%. During the second regulatory period, the figure subtracted from CPI, referred to as the efficiency factor, increased to approximately 7%. The net tariffs to be charged by EDPD in 2004 are lower than in 2003, which could adversely affect our profitability in 2004.

In addition, the Portuguese government has implemented selected measures to encourage the development of various forms of electricity production, including auto production (entities generating electricity for their own use that may sell surplus electricity to the national

transmission grid), cogeneration, small hydroelectric production (under 10 MVA installed capacity) and production using renewable sources. These alternative producers compete with us in the supply of electricity in the Binding Sector.

8

The current and future legislation contemplating the early termination of the PPAs could eventually adversely affect our revenues.

Following to the Resolution of the Council of Ministers no. 63/2003 of April 28, 2003, relating to the promotion of liberalization of the electricity and gas markets in furtherance of the organizational structure of the Iberian Electricity Market, the Portuguese government has enacted Decree law no. 185/2003 of August 20, 2003, which contemplates the early termination of the existing power purchase agreements, or PPAs, in accordance with the conditions to be set out in a separate decree law not yet enacted. In addition, EU Directive no. 2003/54/EC of June 26, 2003 designates July 2004 as the final date for implementation of the electricity single buyer system. Although Decree law no. 185/2003 of August 20, 2003 states that operators will be adequately compensated for the loss of the economic benefit of the PPAs, the amount of and the criteria for determining the compensation have not yet been defined and our generation revenues could otherwise be adversely affected if our generation companies do not sufficiently replace electricity purchases on the same terms as previously made by REN-Rede Eléctrica Nacional, S.A. or REN. In addition, our operating margins may be adversely affected by new costs that are currently compensated through PPAs.

If our concessions from the Portuguese government and municipalities were terminated, we could lose control over our fixed assets.

Most of our revenues currently come from the generation and distribution of electricity. We conduct these activities pursuant to concessions and licenses granted by the Portuguese government and various municipalities. These concessions and licenses are granted for fixed periods ranging in most cases from 20 to 75 years, but are subject to early termination under specified circumstances. The expiration or termination of concessions or licenses would have an adverse effect on our operating revenues. Upon expiration of licenses or termination of concessions, the fixed assets associated with licenses or concessions will in general revert to the Portuguese government or a municipality, as appropriate. Although specified amounts would be paid to us with respect to these assets, the loss of these assets may adversely affect our operations.

Our operational cash flow is affected by variable hydrological conditions.

Hydroelectric plants, which are powered by water, account for approximately 54% of our generation capacity in mainland Portugal. Our hydroelectric generation in Portugal is dependent on the amount and location of rainfall and river flows from Spain, all of which vary widely from year to year. Consequently, there is a high degree of variation in levels of hydroelectric production.

In years of less favorable hydrological conditions, we generate less hydroelectricity and must rely more heavily on thermal production to meet demand for electricity. Thermal generation, which is fired by coal, fuel oil, natural gas or a combination of fuels, is more expensive in terms of variable costs than hydroelectric generation. Our total variable production costs and costs of purchased electricity in a very dry year can vary from those in a very wet year by approximately 200 million. These increased costs in a dry year could have an adverse impact on our operational cash flow.

Our electricity business is subject to numerous environmental regulations that could affect our results of operations and financial condition.

Our electricity business is subject to extensive environmental regulations. These include regulations under Portuguese law, laws adopted to implement EU regulations and directives and international agreements on the environment. Environmental regulations affecting our business primarily relate to air emissions, water pollution, waste disposal and electromagnetic fields. The principal waste products of fossil-fueled electricity generation are sulfur dioxide, or  $SO_2$ , nitrogen oxides, or  $NO_3$ , carbon dioxide, or  $CO_2$ , and particulate matters such as dust and ash.

A primary focus of environmental regulation applicable to our business is to reduce these emissions.

We incur significant costs to comply with environmental regulations requiring us to implement preventive or remediation measures. Environmental regulatory measures may take such forms as emission limits, taxes or

9

#### **Table of Contents**

required remediation measures, and may influence our policies in ways that affect our business decisions and strategy, such as by discouraging our use of certain fuels.

We have made capital expenditures to minimize the impact of our operations on the environment, including measures to comply with applicable law and expect to make approximately 40 million of such capital expenditures in 2004. Major expenditures so far include capital expenditures to limit  $SO_2$  and  $NO_X$  emissions in generation and to install underground cables in our distribution network. In October 2002 we initiated the use of fuel with a 1% sulfur content in order to comply with environmental regulations requiring us to reduce the level of sulfur in the fuel oil we consume, and as a result we have incurred higher fuel costs. Under the EU Directive relating to the emission of pollutants from Large Combustion Plants, Portuguese environmental authorities are currently creating a plan, called the National Emissions Reduction Plan, to reduce  $SO_2$  and  $NO_X$  emissions. This plan is expected to be formally approved during the second half of 2004. Additionally, with regard to  $CO_2$  emissions, new proposals defining green house gas emission reduction measures were put forward for public comment in 2003, and are expected to be implemented in Portugal in 2004. Although we expect to be in timely compliance with these new requirements, such requirements could necessitate additional licenses or the acquisition of emission rights and result in higher electricity costs.

#### RISKS RELATED TO OUR OTHER BUSINESSES

Our involvement in Brazil and in other international activities subjects us to particular risks that could affect our profitability.

Although we have not recently made significant additional investments in our Brazilian electricity business, we have significant investments in electricity-related projects in Brazil and other international investments. Our investments in Brazil and in other countries present a different or greater risk profile than that of our electricity business in Portugal and Spain. Given the size of our operations in Brazil relative to that of our other international investments, these risks are particularly relevant to our Brazilian operations where, for example, we have experienced adverse currency fluctuations and an uncertain regulatory regime. Risks associated with our investments in Brazil and other international investments include, but are not limited to:

economic volatility;
exchange rate fluctuations and exchange controls;
strong inflationary pressures;
government involvement in the domestic economy;
political uncertainty; and
unanticipated changes in regulatory or legal regimes

There can be no assurance that we will successfully manage our operations in Brazil and other international operations.

Exchange rate instability and, in particular, fluctuations in the value of the Brazilian real against the value of the U.S. dollar may result in uncertainty in the Brazilian economy, which may affect the results of our Brazilian operations. As a result of inflationary pressures, the Brazilian currency has been devalued periodically over the last four decades. Throughout this period, the Brazilian government has implemented various economic plans and utilized a number of exchange rate policies. During 2002, the exchange rate depreciated 52.2% against the U.S. dollar, while during 2003 it appreciated 18.2% against the U.S. dollar. In addition, we are exposed to translation risk when the accounts of our Brazilian businesses, denominated in Brazilian reais, are translated into our consolidated accounts, denominated in euro. We cannot predict movements in Brazil s currency, and, since long-term Brazilian currency hedges are not available, a major devaluation of the real might adversely affect our results of operations.

10

Regulatory, hydrological and infrastructure conditions in Brazil may adversely affect our Brazilian operations.

We hold interests in Brazilian distribution companies and have invested in Brazilian generation projects. In the past, our distribution activities in Brazil were adversely affected by regulatory, hydrological and infrastructure conditions in Brazil. Our generation projects in Brazil were also adversely affected by these conditions. These conditions could have a similar adverse effect on our Brazilian generation and distribution operations in the future.

Delays by the Brazilian energy regulatory authorities in developing a regulatory structure that encourages new generation have led to, and might in the future contribute to, shortages of electricity to meet demand in some regions of Brazil. Additionally, drought conditions in Brazil have limited and might also in the future limit the supply of electricity available for our distribution companies in Brazil. A lack of capacity in the electricity transmission system has limited and might also in the future limit the ability of generation plants operating in geographical areas with abundant rainfall to transmit generated electricity to distribution companies operating in areas experiencing drought conditions. Sales by these distribution businesses have been and might in the future be affected by these conditions that limit the supply of electricity available for distribution.

As a result of a shortage of electricity and lack of transmission capacity, the Brazilian federal government implemented an electricity-rationing plan in June 2001. Although the rationing program ended on February 28, 2002, its implementation had an adverse effect not only on electricity consumption, which decreased significantly during the period the program was in effect, but on consumption habits in affected areas. As a result, we anticipate that a recovery in consumption to pre-rationing levels may take some time. The lower demand from consumers has affected and will continue to affect demand for electricity from our distribution businesses in Brazil. While the period up to and during the rationing period was characterized by electricity shortages, the post-rationing period was characterized by surplus electricity as a result of decreased consumption combined with abundant rainfall after a long drought. Consequently, in 2002 and 2003 our Brazilian operations could only dispose of surplus electricity at depressed prices.

In 2004, laws regarding the New Model for the Brazilian electric utility sector were approved. As the regulations for the New Model have not yet been implemented, there is a risk that the new regulations may not be favorable for us. In addition, the New Model contemplates significant control by the Brazilian government, creating uncertainty regarding competition and further investments in the private sector.

Tariffs of distribution companies in Brazil currently consist of two components: non-manageable costs and manageable costs. The main purpose of this split is the maintenance of an adjusted tariff for inflation and the sharing of efficiency gains with consumers. The aim of distribution tariffs is to pass non-manageable costs through and to index manageable costs to inflation. Although it is expected that the New Model will maintain the pass-through of non-manageable costs, there might be delays in readjustment of the tariffs in the event of large macro-economic fluctuations (e.g., inflation and exchange rates). There can be no assurance that regulations implementing the New Model will fully mitigate the risk of delayed tariff adjustments.

Due to problems with natural gas supply to the Northeast region of Brazil, the Brazilian regulator decided to reduce the capacity of all thermal plants in that region that can be used for energy trading. It is unlikely that there will be an increase in the natural gas supply in the Northeast in the short term. This constraint represents a risk for all thermal plants in the region, as it reduces the revenue potential of such plants.

We face new risks and uncertainties related to our new non-electricity businesses.

We have limited experience operating a large-scale telecommunications business and limited experience in gas. In entering and operating these business areas we face managerial, commercial, technological and other risks, as well as regulatory regimes, including fees and licensing requirements and operating restrictions, that are different from the ones we have faced in the past. If we fail to manage these risks and operate these businesses effectively, our ability to develop successfully and achieve profitability in these business areas would be affected. In 2003, our telecommunications businesses had a loss before taxes of 148.7 million.

11

#### **Table of Contents**

We intend to develop an Iberian gas business as complimentary to and strategically aligned with our electricity business. Please see Item 4. Information on the Company Strategy Iberian energy Developing an Iberian gas business for more information on our gas strategy. Increased involvement in the gas industry will expose us to new risks including demanding governmental and environmental industry regulation and economic risks relating to the fluctuations in the price of energy, currencies and time-lags between purchase and sale prices. There can be no assurance that we will successfully manage the development of our gas business, and a failure to do so could have an adverse effect on the profitability of our consolidated results of operations.

We face increasing competition from various types of providers in our telecommunications business.

The telecommunications sector is highly competitive within Portugal and across the EU, and we expect competition to remain vigorous and increase in the future.

In the fixed line telephone area, we compete for market share primarily with Portugal Telecom, or PT, which historically held a monopoly on fixed line services in Portugal and continues to hold a dominant position in this market. We also face competition from other fixed line operators in Portugal.

Our fixed line telephone business also faces strong indirect competition from cellular telephone service providers, particularly those in the voice segment. Mobile subscriptions have already overtaken the number of fixed line connections in Portugal and we expect this growth to continue.

We also face significant competition from numerous existing operators in the Internet and data services areas, both of which we have targeted, and we expect that new competitors will emerge as these markets continue to evolve.

#### **OTHER RISKS**

The value of our ordinary shares or ADSs may be adversely affected by future sales of substantial amounts of ordinary shares by the Portuguese government or the perception that such sales could occur.

The Portuguese government may sell all or a portion of its shareholding in us at any time through formal privatization stages, either through a public offering or by direct sales of our shares to third parties. Sales of substantial amounts of our ordinary shares by the Portuguese government, or the perception that such sales could occur, could adversely affect the market price of our ordinary shares and ADSs and could adversely affect our ability to raise capital through subsequent offerings of equity.

Restrictions on the exercise of voting rights, as well as special rights granted to the Portuguese government, may impede an unauthorized change in control and may limit our shareholders ability to influence company policy.

Under our Articles of Association, no holder of ordinary shares, except the Republic of Portugal and equivalent entities, may exercise voting rights that represent more than 5% of our voting share capital. In addition, specific notification requirements are triggered under our Articles of Association when shareholders purchase 5% of our ordinary shares and under the Portuguese Securities Code, or Cod.VM, when purchases or sales of our ordinary shares cause shareholders to own or cease to own specified percentages of our voting rights. The Portuguese government enacted Decree law no. 49/2004 of March 10, 2004, which revoked the former law requiring approval of the Portuguese Ministry of Finance for a person to be able to acquire more than 10% of our ordinary shares

In connection with the offering by the Portuguese government of our ordinary shares in October 2000, and pursuant to Article 13 of Decree law no. 141/2000 of July 15, 2000, known as the Privatization Decree Law, special rights were granted to the Portuguese government. The government will have these rights so long as it is an EDP shareholder. These rights provide that, without the favorable vote of the government, no resolution can be adopted at our general meeting of shareholders relating to:

amendments to our by-laws, including share capital increases, mergers, spin-offs or winding-up;

12

#### **Table of Contents**

authorization for us to enter into group/partnership or subordination agreements; or

waivers of, or limitations on, our shareholders rights of first refusal to subscribe to share capital increases.

The Privatization Decree Law also entitles the Portuguese government to appoint one member of our board of directors whenever the government votes against the list of directors presented for election at our general meeting of shareholders.

Item 4. Information on the Company

#### HISTORY AND BUSINESS OVERVIEW

#### HISTORY

We are the largest generator and distributor of electricity in Portugal. In addition, we own 30% of REN, the sole transmitter of electricity in Portugal, and we have significant electricity operations in Spain and Brazil. Our principal executive offices are located at Praça Marquês de Pombal, 12, 1250-162 Lisbon, Portugal. Our telephone number at this location is +351-21-001-2500.

We were incorporated in 1976 under the name EDP Electricidade de Portugal, E.P., as a result of the nationalization and merger of the principal Portuguese companies in the electricity sector in mainland Portugal. Following the sale by the Republic of Portugal in October 2000 of 20% of our outstanding ordinary shares, after a four-phase privatization process that started in 1997, we are approximately 26.1% owned, directly or indirectly, by the Republic of Portugal and an additional 4.84% of our shares are held by Caixa Geral de Depósitos, S.A., a state-owned bank. Other significant shareholders include BCP Banco Comercial Português S.A., or BCP (5.05%), Iberdrola, S.A. (5%) and, indirectly, Brisa Autoestradas de Portugal S.A., or Brisa (2%).

13

The following chart shows our current structure and a list of the primary companies and investments within the EDP Group. For a more detailed listing and description, please see Subsidiaries, Affiliates and Associated Companies and note 9 to our consolidated financial statements.

#### **BUSINESS OVERVIEW**

#### **Iberian Energy**

Electricity

Historically, electricity has been our core business. We underwent a restructuring in 1994, at which time we formed subsidiaries to operate in the areas of electricity generation, transmission and distribution. Following the government s purchase from us of a 70% interest in REN in 2000, our two principal electricity subsidiaries were our electrical generation company, CPPE, and our distribution company, EDPD, which was formed in early 2000 by the merger of our four wholly-owned distribution companies. These two wholly-owned subsidiaries, together with REN, carried out electricity generation, transmission and distribution activities in Portugal. On March 29, 2001, we announced the creation of EDP Gestão da Produção de Energia, or EDP Produção, a subsidiary that began operations in July 2001 and now holds most of our Portuguese energy production-related units as part of measures we are implementing to boost efficiency.

As the largest producer and distributor of electricity in Portugal, we currently hold the leading position in the Portuguese market. In 2003, we accounted for approximately 82% of the installed generation capacity in the Public Electricity System and 99% of the distribution in the Public Electricity System. REN, in which we hold a 30% equity interest, accounted for 100% of the transmission in the Public Electricity System. Our 2003 operating revenues amounted to 6,977.5 million (US\$ 8,491.6 million), approximately 90% of which represented electricity sales, yielding operating income of 905.7 million (US\$ 1,102.3 million). As of December 31, 2003, our total assets were 18,650.7 million (US\$ 22,697.9 million), and shareholders equity was 5,298.0 million (US\$ 6,447.7 million).

The following table shows our revenues by activity and geography:

	Year	Year ended December 31,		
	2001	2002	2003	
	(ı	nillions of EU	(R)	
Energy <sup>(1)</sup>				
Portugal	4,599	5,001	5,038	
Spain	0	324	675	
Brazil	691	669	1,008	
Telecommunications				
Portugal	126	187	161	
Spain	62	134	170	
Information Technology	189	224	186	
Adjustments <sup>(2)</sup>	(16)	(151)	(261)	
Total	5,650	6,387	6,978	

<sup>(1)</sup> Consists of electricity in Portugal and Brazil and electricity and gas in Spain.

<sup>(2)</sup> Revenue figures for each year have been adjusted to include revenues from services and to exclude intercompany transactions.

In Portugal, we create power for consumption in both the Public Electricity System and the Independent Electricity System. In 2003, our generating facilities in Portugal had a total installed capacity of 7,940 MW. In the transmission function, REN operates the national grid for transmission of electricity throughout mainland Portugal on an exclusive basis pursuant to Portuguese law. REN also manages the system dispatch and the interconnections with Spain. In our distribution function, EDPD carries out Portugal s local electricity distribution almost exclusively. EDPD provided more than 5.7 million customers with 38,916 GWh of electricity in 2003.

We expect regional markets for electricity to develop in Europe as an initial stage in the development of an integrated and liberalized electricity market with the EU. For geographical and regulatory reasons, we anticipate that an Iberian electricity market will be the regional market for our core electricity business in the near future. Accordingly, we consider our core electricity business to include our operations in the Portuguese and Spanish electricity markets. In a process that took place during 2001 and 2002, we expanded our energy operations with the

15

#### **Table of Contents**

acquisition of a 40% interest in Hidroeléctrica del Cantábrico S.A., or Hidrocantábrico, a Spanish electricity and gas utility company. Hidrocantábrico operates electricity generation plants and distributes and supplies electricity and gas in the Iberian Peninsula, mainly in the Asturias and Basque regions in Spain. Beginning in June 2002, we have consolidated on a proportional basis 40% of Hidrocantábrico.

Gas

We also have investments, notably in gas utilities, which we regard as complementary to our core electricity business.

Since July 2000, we have held a 14.27% ownership interest in GALP, SGPS, S.A. or GALP, a holding company with interests in GDP Gás de Portugal, SGPS, S.A., or GDP, and Transgás Sociedade Portuguesa de Gás Natural, S.A., or Transgás, companies that transport and supply natural gas throughout Portugal, and Petrogal, a company involved in oil refining and distribution and the production of petroleum products.

In April 2003, the Portuguese government announced recommendations concerning the reorganization of the Portuguese energy sector, in the context of which we may become a major participant in the Iberian combined gas and electricity sector. This announcement included recommendations that Portuguese gas and electricity activities be combined and developed by us in order to strengthen our position in the competitive Iberian market. In connection with the Portuguese energy sector reorganization, in March 2004 we entered into an agreement to purchase, together with Eni, S.p.A., or Eni, and REN, the entire share capital of GDP. The agreement is subject to specified conditions including the approval of the relevant competition authorities. For more information on this transaction, please see Strategy Iberian Energy. In addition, in November 2003 we entered into agreements to purchase interests in Portgás Sociedade de Distribuição de Gás, S.A., or Portgás, and Setgás Sociedade de Produção e Distribuição de Gás, S.A., or Setgás, two of the major regional gas distribution companies in Portugal. For more information on these transactions, please see Strategy Iberian energy Developing an Iberian gas business.

Our interests in the gas sector in Spain are held through our 40%-owned subsidiary Hidrocantábrico, which is the controlling shareholder in Naturcorp, the leading gas company in the Basque region of Spain. For more information on our participation in the Spanish gas sector, please see Spain-History and Overview.

#### **Telecommunications**

In 2000, taking into consideration our existing resources and expertise, we decided to pursue the telecommunications and information technology businesses.

Currently, ONI, SGPS, S.A., or ONI, our 56%-owned subsidiary and the holding company for our telecommunications businesses has the overall responsibility for strategic and financial matters relating to our telecommunications business segments. Pursuant to a recent reorganization, ONI s businesses are currently focused on two main areas: wireline Portugal and wireline Spain, which areas are discussed in more detail in Telecommunications.

#### **Information Technology**

We pursue the information technology business through our wholly owned subsidiary EDINFOR Sistemas Informáticos, S.A., or EDINFOR, which holds a 58% interest in ACE Holding SGPS, S.A., or ACE. ACE owns 100% of CASE Concepção e Arquitectura de Soluções Informáticas Estruturadas, S.A., or CASE. CASE provides consulting and information systems services to us and to third parties.

#### Group capital expenditures and investments

The following table sets forth our capital expenditures and investments for the years 2001 through 2003, divided into operating investment and financial investment. Operating investment generally refers to the development and acquisition of fixed assets and financial investment generally refers to the acquisition of equity interests in companies.

16

	Year	Year ended December 31		
	2001	2002	2003	
	(thousands of EUR)			
OPERATING INVESTMENT:				
Energy:				
Portugal:				
Generation: Thermal/Hydro	109,646	204,979	213,851	
Renewable: wind	6,574	11,397	38,533	
Renewable: biomass <sup>(1)</sup>	0,374	35,205	922	
Cogeneration	13,142	9,618	33	
Engineering and Operations and Maintenance <sup>(2)</sup>	2,371	15,264	7,809	
2. Inginiversing und experiments und 1. Australia.				
Total Generation	131,733	276,463	261,147	
Distribution: <sup>(3)</sup>		_,,,,,,		
Investment, net of subsidies	181,938	241,551	263,056	
IT Systems (transfer from EDINFOR to EDPD)	0	80,547	11,974	
Subsidies in kind (assets)	69,533	54,095	61,039	
Subsidies in cash	78,490	56,853	59,714	
Total Distribution	329.961	122 046	205 792	
Total Distribution Supply <sup>(4)</sup>	980	433,046 8,337	395,783 6,218	
Total technical costs	462,674	717,846	663,148	
Financial costs capitalized	15,867	15,361	24,005	
Total Dominal	470.541	722 200	697 153	
Total Portugal  Spain:	478,541	733,208	687,152	
Hidrocantábrico <sup>(5)</sup>	0	84,775	70,528	
Thurocantableo		<del></del>	70,320	
Total Spain	0	84,775	70,528	
Total Energy Portugal and Spain	478,541	817,983	757,680	
Brazil:				
Generation	40,836	55,600	58,676	
Distribution:				
Bandeirante	47,226	25,413	39,392	
Escelsa	0	16,208	18,639	
Enersul	0	25,152	16,184	
EDP Brazil	1,608	261	415	
Total Brazil	89,670	122,634	133,307	
Telecommunications <sup>(6)</sup> and Information Technology:				
Telecommunications	239,019	311,962	28,564	
Information Technology	70,977	41,833	58,784	
Total Telecommunications and Information Technology	309,996	353,795	87,348	
Other:				
Other Operating Investment <sup>(7)</sup>	29,530	45,362	24,939	
TOTAL OPERATING INVESTMENT	907,737	1,339,773	1,003,274	
FINANCIAL INVESTMENT:				
Energy:				
Portugal:				

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Acquisition of additional 10% shareholding in Turbogás	0	20,986	0
Spain:	v	20,500	v
Acquisition of Naturcorp by Hidrocantábrico <sup>(8)</sup>	0	0	100,235
Acquisition of Hidrocantábrico by EDP <sup>(9)</sup>	262,388	520,591	0
Brazil:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Acquisition of share capital of IVEN (Escelsa/Enersul)	209,011	0	0
Total Energy	471,399	541,577	100,235
Telecommunications:			
Acquisition of Comunitel by ONI	69,554	0	0
Total Telecommunications	69,554	0	0
Other:			
Subscription to BCP rights issue and capital increase	0	30,636	40,599
Acquisition of Escelsa notes <sup>(10)</sup>	0	379,964	0
Other financial investments	12,328	15,718	40,926
Total Other	12,328	426,318	81,525
TOTAL FINANCIAL INVESTMENT	553,281	967,896	181,760
TOTAL CAPITAL EXPENDITURES AND INVESTMENTS	1,461,018	2,307,669	1,185,034

<sup>(1)</sup> Renewable biomass investment in 2002 includes 35.2 million relating to an internal transfer of the Mortágua biomass power plant, from EDP, S.A. to EDP Produção Bioeléctrica. As such, this does not affect our cash flow in 2002.

#### **Table of Contents**

- (2) In 2001, expenditures in engineering and O&M includes the expenditures made by Tergen, HidrOeM and EDP Produção, which companies were created in 2001.
- (3) Distribution includes capital expenditures of EDPD.
- (4) Supply comprises the capital expenditures of EDP Energia, our company operating in the liberalized market.
- (5) Investments represent 40% of Hidrocantábrico s operational investments.
- (6) Investments for telecommunications include primarily infrastructure.
- Other Operating Investment includes investments by the EDP Group in installations and equipment at the holding company level, investments by our real estate companies and investments by our support services companies.
- (8) Investment represents 40% of Hidrocantábrico s financial investments in the acquisition of Naturcorp.
- <sup>(9</sup> Total investment in the acquisition of 40% of Hidrocantábrico amounts to 782.9 million, of which 262.4 million was invested in 2001.)
- (10) In 2002 we acquired certain notes issued by Escelsa. For more information on this transaction please see Item 11. Quantitative and Qualitative Disclosures About Market Risk.

Total capital expenditures and investments of 2,307.7 million in 2002. This decrease was primarily due to lower financial investments in 2003 compared to 2002. In 2002, we finalized the acquisition of our 40% stake in Hidrocantábrico in the amount of 782.9 million, of which 262.4 million was paid in 2001 and 520.6 million in 2002. In addition, in 2002 we also acquired part of Escelsa's notes issued in U.S. dollars for the total amount of 380 million. Having reduced the exchange rate risk relating to U.S. dollar debt of our Brazilian subsidiaries, we did not enter into any further debt acquisition programs in 2003. The decrease in total capital expenditures and investments from 2002 to 2003 was also due to a lower level of operational investments in 2003. In Portugal, we made lower operating investments in our distribution business in 2003, reflecting the internal transfer from EDINFOR to EDPD of a commercial and administrative IT system in 2002, and overall investments in generation were lower as a result of the internal transfer in 2002, from EDP to EDP Produção Bioeléctrica, of the investment made in 1999 related to the Mortágua biomass power plant, which does not represent a cash outflow, but was included in our 2002 capital expenditures and investments. Additionally, we had lower expenditures in telecommunications in 2003, as a result of the divestment of our UMTS business.

We expect total operational investments in 2004 to be approximately 1,200 million, concentrated mainly in generation and distribution.

The capital expenditures set forth above have not been adjusted to reflect the fact that certain expenditures represent transfers between businesses within the EDP group of assets that had previously been accounted for by the transferors as their own capital expenditures. The capital expenditures above have also not been adjusted for divestments of certain financial investments. Adjusting for these transactions would result in the following:

	Year ended December 31,		
	2001	2002	2003
	(thousands of EUR)		
Total Capital Expenditures and Investments:	1,461,018	2,307,669	1,185,034
Internal Transfers:			
IT Systems (from EDINFOR to EDPD)		(80,547)	(11,974)
Mortágua Biomass Power Plant (from EDP, S.A. to EDP Produção Bioeléctrica)		(35,180)	
Divestments:			
ESSEL	(77,800)		
Redal		(26,905)	
Optep (Optimus)		(315,000)	
Iberdrola			(400,102)
Total Internal Transfers and Divestments	(77,800)	(457,632)	(412,076)
AP CITATOR SIDE IN THE COLUMN ASSESSMENT OF TH	1 202 210	1.050.027	772.050
Adjusted Total Capital Expenditures and Investments	1,383,218	1,850,037	772,958

In recent years, a significant part of our capital expenditures on electricity projects in mainland Portugal has been in distribution. Since EDPD is required by law to connect all customers who wish to be supplied by the Public Electricity System, a large part of capital expenditures is spent in connecting new customers, improving network efficiency and developing the network (installing new cables and lines) to accommodate the growth in consumption. In addition, we are required to meet government standards for meter control, which requires us to make further investments in new meters. Our investment in distribution in Portugal in 2003 totaled 395.8 million compared with 433.0 million in 2002 and 330.0 million in 2001, and mainly consisted of recurring capital expenditures necessary for the operation, improvement and expansion of our distribution network in Portugal, including expansion to accommodate growth in consumption and maintenance. In keeping with our strategic goal of reducing

18

### **Table of Contents**

recurring capital expenditures in our core electricity business, capital expenditures in distribution declined between 1998 and 2000 due to lower costs in materials and services and a reduced allocation of these costs to capital expenditures. Between 2000 and 2003, EDPD s capital expenditures increased due to higher investments in the distribution network pursuant to our public commitment to improve the quality of service by reducing the equivalent interruption time in the distribution of electricity. In 2002, the increase in EDPD capital expenditures also reflects the internal transfer from EDINFOR to EDPD of 80.5 million worth of assets that relate to non-recurring investments made in a commercial and administrative IT system based on the SAP platform. In 2003, EDPD capital expenditures also included 12.0 million related to the transfer of this IT system. As such, this transfer did not affect our cash flow in 2002 and 2003.

Under current regulations in Portugal, we receive contributions directly from customers for a portion of our capital expenditures for new connections to the transmission and distribution networks. The total amount of contributions from customers in 2003 was approximately million compared with approximately 111 million in 2002.

During 2003, we invested 261.1 million in generation in Portugal, compared with 276.5 million in 2002 and 131.7 million in 2001. The higher capital expenditures in 2003 and 2002 compared to 2001 were primarily a result of expenses incurred due to the start of construction of the first two 392 MW units of the TER CCGT plant and of the two 94 MW units of the Venda Nova hydroelectric plant. We expect a similar level of operational investment in generation in Portugal in 2004.

In Portugal, we expect to focus future distribution capital expenditures on connecting new clients and improving the quality of the electricity service through a more efficient network. We expect to concentrate future generation capital expenditures on the development of new hydroelectric projects and in the construction of the new TER CCGT power plant. Future capital expenditures in generation may also include special projects such as co-generation and wind power generation opportunities. While the actual amount of our future investments will depend on factors that cannot be currently foreseen, we expect to incur recurring capital expenditures of approximately 700 million annually in the aggregate in our core electricity generation and distribution businesses in Portugal during this period.

In Spain, apart from the capital expenditure of 250.6 million (100% of Hidrocantábrico s investment) for the acquisition of Hidrocantábrico s 62% stake in Naturcorp, we incurred additional capital expenditures of 176.3 million (100% of Hidrocantábrico s investment) during 2003 on generation, electricity distribution and on special regime generation projects. Hidrocantábrico s 2003 operational investments decreased compared to 2002, due to lower investments in generation and electricity distribution activities. Investments in generation decreased due to the completion of the Castejón CCGT plant in September 2002. As for electricity distribution activity, fewer investments were made in expansion outside Asturias (northern region of Spain). Investment in special regime generation increased in 2003 with the construction of the P.E. del Cantábrico (65 MW), the P.E. Arlanzón (34 MW) and the P.E. Albacete (124 MW) wind farms.

In line with our strategic objectives of building our fixed line telecommunications and our international activities, we also may incur additional capital expenditures in connection with these activities and other strategic investments as well as non-recurring capital expenditures such as for information technology. With respect to investments in Brazil, we currently expect to fund any future capital expenditures with cash flow generated by local operations and or by reais-denominated debt.

We made capital expenditures related to environmental matters in 2003 and 2002 of approximately 15 million. We expect these capital expenditures to amount to approximately 40 million in 2004, of which 20 million will be related to new investments in emissions abatement equipment in the Sines power plant, in order to adapt the facility to the new environmental regulations relating to SO<sub>2</sub> and NO<sub>2</sub> emissions.

Over the next three years, we expect to incur capital expenditures of approximately 3.25 billion, more than 75% of which will be dedicated to the expansion of electricity generation facilities in Portugal and Spain, including renewable energy facilities, and the improvement of the quality of our electricity distribution network in Portugal.

### **Table of Contents**

We believe that cash generated from operations and existing credit facilities is sufficient to meet present working capital needs. We currently expect that our planned capital expenditures and investments will be financed from internally generated funds, existing credit facilities and customer contributions, which may be complemented with medium or long term debt financing and equity financing as additional capital expenditure and financial investment requirements develop. To learn more about our sources of funds and how the availability of those sources could be affected, see Item 5. Operating and Financial Review and Prospects Liquidity and Capital Resources.

#### **International Investments**

Apart from Spain, we have made a number of international investments in the electricity and water sectors in Brazil, Cape Verde, Guatemala and Macau. We have actively sought opportunities outside of Portugal in which we could capitalize on our existing strengths. In 2003 and in 2004 to date, we have not initiated any new international investment projects. In accordance with our strategy of shareholder value creation, we have divested in non-strategic holdings in Chile and Morocco. We have also reorganized our shareholding in CEM Companhia de Electricidade de Macau, or CEM. As a result, China Power International Holding, a Chinese electricity company, has acquired a 6% interest in CEM and our stake in CEM has decreased slightly, from 21.78% to 21.19%. For more information on CEM and this transaction, please see Other Investments and International Activities.

#### **STRATEGY**

Our principal strategic objective is the creation of shareholder value through the achievement of sustained real earnings growth and our primary strategic focus is on energy activities in the Iberian Peninsula. Accordingly, we have redefined our concept of our domestic market to include the Iberian Peninsula and are positioning ourselves for the Iberian electricity market that will develop in the future. In this context, we acquired operating control of Hidrocantábrico in 2001, the fourth largest electricity operator in Spain, which, in turn, acquired Naturcorp, the second largest gas operator in Spain, in 2003.

While expanding into the Spanish gas and electricity sectors, we are also strengthening our core electricity business in Portugal. During recent years, we have been making considerable efforts to optimize and restructure our Portuguese generation and distribution activities in preparation for the full liberalization of electricity supply in Portugal and the expected integration of the Portuguese and Spanish electricity markets. In connection with these efforts, we are taking steps to improve the quality of service through cost-conscious investment in technical and commercial infrastructure, particularly in the areas of electricity distribution and sales, and further restructure our human resources, primarily in our distribution business. In this regard, we have had and continue to have programs in place that are aimed at reducing our headcount and we intend to expand our sales and customer service human resource capabilities. We are also increasing our electricity generation capacity through modernization of existing facilities and selective development of new facilities, in each case mindful of environmental requirements and concerns.

Outside of our Iberian energy activities, we have also sought to focus on our core business through divestiture of non-strategic financial investments, as demonstrated by our sale in 2003 of our 3% stake in the Spanish electricity company Iberdrola, and to selectively pursue other business activities that are complementary to our energy activities. These other business activities include selectively pursuing international opportunities in electricity, developing our telecommunications business in Portugal and Spain, and restructuring our information technology business.

### **IBERIAN ENERGY**

Our primary strategic focus is the Iberian energy market. We are the leading electricity company in Portugal. We also intend to develop activities in the Portuguese gas sector by translating our financial investment in GALP into a controlling stake in GDP. In Spain, we exercise operating control over Hidrocantábrico and maintain a successful partnership with Hidrocantábrico s other shareholders: Energie-Baden-Württemberg AG, or En BW, a German utility company, and Cajastur Caja de Ahorros de Asturias, a Spanish savings bank, or Cajastur. Hidrocantábrico acquired a 62% stake of Naturcorp in March 2003 and currently has a 56.8% stake in Naturcorp after Gas Natural exchanged its 50% interest in Gas de Euskadi, a subsidiary of Naturcorp, for a direct interest in Naturcorp.

20

### **Table of Contents**

In the Iberian energy market our strategic objectives are:

preserving the value of our Portuguese electricity business in light of the liberalization of the Portuguese electricity market and the creation of an integrated Iberian market;

growing our electricity Iberian platform through Hidrocantábrico; and

developing an Iberian gas business by leveraging our existing assets.

### Preserving the value of our Portuguese electricity business

In our Portuguese electricity business, we face increasing competition arising from the liberalization of the electricity market in Portugal, in the Iberian Peninsula and throughout the EU. In July 2004, the entire Portuguese electricity market is expected to be liberalized, meaning that all customers will be free to choose their electricity supplier. Competition in electricity supply will also increase as the newly created Iberian electricity market comes into operation. Additionally, we face increasing pressure on the operating margins of our electricity distribution business in Portugal due to regulation of electricity tariffs in the Public Electricity System.

In response to these challenges, we plan to:

continue efforts to enhance earnings and maintain our leading market share of generation and distribution in the liberalized and growing Portuguese electricity market, while also capitalizing on growth opportunities created by increasing liberalization within the EU, particularly in the Iberian electricity market; and

continue our program to increase the efficiency of our Portuguese electricity operations, reduce related costs with the goal of achieving international best practice standards, and minimize the impact of tariff reductions in the current regulatory period on operating margins of our electricity distribution business.

In pursuing these objectives, we intend to:

pursue effective marketing to both new and existing customers, particularly those that benefit, or will benefit, from competitive alternatives in the Non-Binding Sector (where we are present through our subsidiary EDP Energia);

continue to provide high quality and cost-effective services to the Binding Sector and the Non-Binding Sector;

further centralize our corporate structure, as we have done with the merger of our four distribution companies into EDPD and the centralization of most of our generation companies in EDP Produção;

continue to centralize and improve the efficiency of our administrative activities, such as accounting, and procurement, with the aim of achieving cost savings in supplies of goods and services and personnel reduction, to which end we created EDP Valor, a company that integrates some of our service companies by consolidating resources and centralizing purchasing activities;

identify opportunities to achieve future reductions in overhead expenses through the continued implementation of the Efficiency Program started in the beginning of 2002, in connection with which we have agreed with the Portuguese electricity regulator on an appropriate tariff mechanism that can facilitate further efficiency improvements through personnel reduction at EDPD; and

21

### **Table of Contents**

continue to monitor the level of recurring capital expenditures in our Portuguese electricity business.

### Growing our Iberian electricity platform

In light of the intended integration of the Spanish and Portuguese electricity sectors, we have expanded the definition of our domestic market to embrace the entire Iberian Peninsula. Following our acquisition of a 40% interest in Hidrocantábrico at the end of 2001, we became the first Iberian company to own significant generation and distribution assets as well as a meaningful customer base in both Portugal and Spain two EU countries with among the highest electricity consumption growth rates in the European Union.

To grow our Iberian electricity platform, we intend to:

position ourselves to benefit from the creation of an Iberian electricity market and pursue growth opportunities in Spain by leveraging on our investment in Hidrocantábrico;

grow our customer base by capitalizing on the fully liberalized electricity market in Spain;

take advantage of a combined electricity and gas service offering in Spain through the activities of both Hidrocantábrico and Naturcorp and in Portugal through the activities of EDP and GDP; and

increase generation capacity through the construction of a new CCGT power plant, the development of renewable energy generation projects, primarily through the construction or acquisition of new wind farms, and the increase of capacity in existing plants to cope with strong consumption growth.

### Developing an Iberian gas business

We view the gas business as being highly complementary to electricity and of great strategic attractiveness. Both Portugal and Spain have gas and electricity consumption growth rates above the EU average. Each country requires new capacity to be gradually added and CCGT plants, fired by gas, are considered to be an advantageous option to meet the Iberian electricity system expansion requirements because of their lower investment costs required per MW, greater efficiency, lower operating and maintenance costs and lower emission levels compared to other thermal generation plants. Since new gas-fired generation capacity is expected to be added to the Iberian electricity system, power generators, which are already among the largest gas consumers in the Iberian Peninsula, are and will continue to be the facilitators of the development and sustainability of the gas business in the Iberian Peninsula, although their competitive position will increasingly depend on gas prices and the flexibility of gas contracts. The natural gas market is characterized by the existence of long-term contracts. For electricity generators, long-term contracts in the natural gas market are usually indexed to the price of oil, are of a take-or-pay nature and restrict the final destination of contracted gas. Since gas represents a substantial portion of gas-fired power plants total costs, access to flexible and competitive gas contracts is of paramount importance to increase the efficiency of CCGT power plants.

There are two main reasons for us to develop an integrated Iberian gas business:

to increase the competitiveness and efficiency of our gas-fired power plants. By being involved in both gas distribution and electricity generation we expect to be able to mitigate the risk presented by variable gas prices while increasing the flexibility of gas sourcing and placing; and

to capture synergies from distributing both gas and electricity to final consumers, leveraging on our existing electricity client base and on the sharing of infrastructure and system costs.

In April 2003, the Portuguese government announced recommendations concerning the reorganization of the energy sector, as a result of which we have the opportunity to become a major participant in the Iberian combined electricity and gas sector. According to the government s recommendations, gas and electricity in Portugal should be combined and developed by us in order to take advantage of the synergies and flexibility that will result from integrated management of these activities.

22

In the context of the reorganization of the Portuguese energy sector, in March 2004 we entered into an agreement to purchase, together with Eni and REN, the entire share capital of GDP, which operates in the Portuguese gas sector and owns assets for the transport and distribution of gas. The completion of the agreement and related transactions is subject to specified conditions, including approval of the relevant competition authorities. Pursuant to this agreement, initially we, Eni and REN will hold 33.34%, 33.33% and 33.33%, respectively, of GDP s share capital, although REN will only participate in GDP on a temporary basis. The agreement provides that the cost of the stake of each buyer will be 400 million. In connection with the purchase agreement, we also entered into a shareholders agreement with Eni and REN that provides rules for the temporary governance of GDP (until the exit of REN) and the mechanism by which REN will exchange its stake in GDP for GDP s high pressure gas network assets. Following the exit of REN, we and Eni will own 51% and 49% of GDP, respectively. Accordingly, we also entered into a shareholders agreement with Eni that will govern the management of GDP following the exit of REN and includes the terms of collaboration between Eni and us and the exit clauses in the case of a deadlock event that cannot be resolved. In the case of a deadlock, we will have a call option over Eni s stake in GDP. If we do not exercise this call option within the time specified in the agreement, Eni will have a call option over our stake in GDP. As we intend to leverage our stake in GALP to acquire our position in GDP and focus on the gas business rather than oil-related activities, we also agreed with Parpública Participações Públicas, S.G.P.S., S.A., or Parpública, on a mechanism for us to exit the share capital of GALP. Pursuant to this agreement, Parpública has a call option to acquire our 14.27% stake in GALP for 456.7 million and we have a put option to sell our stake in GALP to Parpública on the same terms. Parpública s call option may be exercised from March 31, 2004 until one year after acquisition of the GDP shares by EDP, Eni and REN. Our put option may be exercised during the 3-month period after the expiration of the period for the exercise of Parpública s call option.

We have also entered into agreements to acquire stakes in the two main Portuguese regional gas distribution companies: Portgás and Setgás. Portgás has the concession to distribute gas in the districts of Porto, Braga and Viana do Castelo. We have entered into a call option agreement with GALP, GDP and GDP Distribuição, SGPS, S.A. to acquire a 46.265% shareholding in Portgás. We may exercise this option for 18 months from November 2003 by paying 86,400,000, subject to adjustments for variations in share capital and shareholder loans. At the same time, we entered into a call option agreement with CGD to acquire all of the shares of NQF Projectos de Telecomunicações e Energia, S.A., or NQF, which owns 12.9% of Portgás. Under the same agreement, we have granted to CGD a put option pursuant to which CGD may sell the NQF shares to us. The put option may be exercised at any time between June 15, 2004 and September 15, 2004 at an agreed price of 64,942,880.57. NQF also owns 10.1% of Setgás, which has the concession to distribute gas in the district of Setubal. Completion of the transactions involving Portgás and Setgás are subject, among other things, to approval by competition authorities, for which application has been made.

Our current interest in the gas sector in Spain consists of our 40% holding in Hidrocantábrico, which controls Naturcorp, with more than 500,000 customers and approximately 10% of Spain s regulated revenues for gas distribution, or 8% of GWh of gas distributed. For more information on our participation in the Spanish gas sector, please see Spain History and Overview.

### INTERNATIONAL ACTIVITIES

Although our core business has historically been electricity in Portugal, it has evolved to include the Iberian energy market. However, international opportunities arise in the electricity business and related businesses through which we believe we can achieve attractive returns. In international investments, we have looked particularly toward Brazil, where we believe we can play an active role in managing the electricity operations in which we are involved and where potential returns may be attractive. During the first half of 2003, we reassessed our Brazil strategy and are undertaking the following initiatives with the goal of rationalizing our Brazilian operations by making them more self-sustaining and independently managed:

corporate restructuring: integration of all activities in Brazil under our subsidiary, EDP Brazil, which will consolidate not only financial results but also planning and strategic control;

capital restructuring: assessment of the capital structure of EDP Brazil and its subsidiaries;

23

### **Table of Contents**

corporate governance: harmonization and alignment of the corporate governance structures and procedures of EDP Brazil s subsidiaries, with a view toward improving the efficiency and transparency of governance and the decision-making process;

strategic positioning: introduction of the necessary adjustments to our existing investments with the aim at obtaining greater added value for shareholders and the establishment of strategic platforms for the development of future businesses; and

generation of synergies: ensuring that EDP Brazil is worth more than the sum of its parts, thus providing adequate remuneration of capital employed, through initiatives such as the re-launch of an efficiency program and analysis of the feasibility of shared services.

We regularly review our international investments and may change their focus over time consistent with our strategic objectives. In this regard, we continuously monitor our investment portfolio in order to capitalize on our ability to efficiently manage electricity operations through significant influence or control. For a more detailed discussion of our international activities, you should read Brazil and Other International Activities and Strategic Investments.

#### **TELECOMMUNICATIONS**

Our telecommunications activities are conducted through ONI, our telecommunications subsidiary comprised of various business units. ONI is a fixed line telecommunications operator primarily focused on corporate clients and provides voice and data services in Portugal and Spain.

We plan to build on our existing operations in order to achieve a competitive role in the corporate fixed line telecommunications sector in Portugal and Spain, which we regard as attractive markets of suitable size and high growth potential. We based our decision to enter and develop this business on our ability to capitalize on our existing infrastructure, including access to an extensive fiber optic backbone, to leverage our existing resources, including a large base of customers and suppliers, and to use our existing telecommunications operations as a platform for expanded activities.

Although our plans and strategy continue to evolve and adapt to trends in the telecommunications sector, we currently anticipate emphasizing the following business areas:

fixed line operations, using ONI s fixed line voice and data operations as a platform; and

Internet access services, building on ONI s Internet service provider activities.

We also have allied and expect to ally ourselves with other partners who may bring resources and synergies to facilitate our efforts to develop a presence in each of these business areas. For a more detailed discussion of our telecommunications activities, please see Telecommunications.

### INFORMATION TECHNOLOGY

We are involved in the information technology market mainly through EDINFOR. During the second half of 2003, and following a decision to allow participation of a strategic partner in EDINFOR s share capital, we have been implementing several initiatives that will facilitate the success of a future partnership. Such initiatives include the improvement of the relationship with the EDP Group, the increase of sales outside the EDP Group and the winding up and/or merger of 17 companies of the EDINFOR group. In 2004, we hope to find a strategic partner for EDINFOR that will bring to EDINFOR technological expertise. In any partnership eventually entered into, we would seek to ensure that our core information technology systems continue to be run by EDINFOR. With such a partnership in place, we expect to be better able to focus on our core business, while maintaining the availability and security of key systems, and enhancing EDINFOR s growth potential.

### **Table of Contents**

#### DEVELOPING OF COMPLEMENTARY BUSINESS ACTIVITIES/OTHER UTILITIES

Consistent with our strategy, we are selectively evaluating opportunities that are complementary to our core businesses and that may enable us to achieve cost savings along the chain of activities from us to the consumer and that management expects can generate additional shareholder value.

The acquisition of an interest in Affinis has provided us with the opportunity to become involved in additional commercial activities related to the supply of electricity and gas, such as the provision and servicing of appliances and the installation of utility infrastructure in homes and businesses. For more information on our complementary business activities you should read Subsidiaries, Affiliates and Associated Companies below.

### THE IBERIAN ELECTRICITY MARKET

In November 2001, the Portuguese and Spanish governments signed a Protocol for Cooperation between the Spanish and Portuguese governments for the creation of the Iberian Electricity Market , or the Protocol, in which they undertook to create an Iberian electricity market based on the principles of free and fair competition, transparency, objectivity and efficiency. In particular, the Protocol was intended to guarantee Portuguese and Spanish consumers better access to domestic and foreign electricity networks and give Iberian electricity operators the freedom to contract with consumers and to engage in distribution activities in a common Iberian electricity pool. The Iberian Electricity Market, or MIBEL, was expected to come into force by January 2003, but has been delayed due to a change in the Portuguese government and the need for harmonization of the Spanish tariff structure. A revised timeframe was agreed to in November 2003 and further implementation details were agreed to in January 2004. For more information on MIBEL, see Regulation Iberian Electricity Market.

### **PORTUGAL**

# **ELECTRICITY SYSTEM OVERVIEW**

### **Portuguese Electricity System**

Since 1997, Portugal had an electricity market structure pursuant to the legislation enacted by the government that introduced the National Electricity System. The chart below illustrates the structure of the National Electricity System.

### **Table of Contents**

Note: Operations that are 100%-owned by us are highlighted in bold.

- (1) We own 10% of Tejo Energia and 20% of Turbogás.
- (2) Began operations in early 1998.
- (3) As of April 2004, none existed.
- (4) At the end of January 2004, approximately 21,300 potential Qualifying Consumers, or Eligible Consumers, existed, of which 2,714 had become Qualifying Consumers and 2,028 were already in the Non-Binding Sector. Prior to February 2004, all consumers except low-voltage consumers were Eligible Consumers. Decree law no. 36/2004 of February 26, 2004 provides for the decrease of the eligibility threshold in mainland Portugal to include special low voltage consumers, which are those with subscribed demands above 41.4 KW and voltage levels below 1kV. In March 2004, the regulator published the regulations necessary to allow special low voltage consumers to change their supplier. We expect that in July 2004 all low voltage consumers will become eligible consumers. However, the rules and procedures necessary to the implementation have not yet been created.

26

### **Table of Contents**

The National Electricity System consists of the Public Electricity System, or the Binding Sector, and the Independent Electricity System. The Public Electricity System is responsible for ensuring the security of electricity supply within Portugal and is obligated to supply electricity to any consumer who requests it. Within the Independent Electricity System are the Non-Binding Sector and other independent producers (including auto producers). We and other generators can supply electricity to the Non-Binding Sector. The Non-Binding Sector is a market-based system that permits Qualifying Consumers to choose their electricity supplier. Over the past several years the minimum consumption level required to be a Qualifying Consumer has progressively declined and, as of February 26, 2004, Eligible Consumers, i.e., all consumers other than low voltage consumers that are not special low voltage consumers, automatically became Qualifying Consumers after communicating their intention to the regulator to be treated as such. For more information on the liberalization of electricity sales you should read Competition.

The National Electricity System is intended to improve transparency in the costs associated with the supply of electricity and to prepare for a more market-based and competitive electricity supply system in Portugal that continues to fulfill EU requirements.

### The Public Electricity System or Binding Sector

The Public Electricity System, or the Binding Sector, includes the binding generation in our generation company, CPPE, the transmission company, REN, in which we have a 30% stake, and our distribution company, EDPD. The Public Electricity System also includes two independent power producers: Tejo Energia s plant at Pego, in which we have a 10% stake, and the Turbogás plant at Tapada do Outeiro, in which we have a 20% stake. All plants in the Public Electricity System enter into PPAs with REN through which they commit to provide electricity exclusively to the Public Electricity System through REN, acting as the single buyer in the Binding Sector and operator of the national transmission grid. For more information on REN s activities, you should read Transmission below.

Power plants in the Binding Sector are each subject to binding licenses issued by the *Direcção Geral de Geologia e Energia*, or DGGE, which has succeeded the *Direcção Geral de Energia* (DGE), which are valid for a fixed term, ranging from a minimum of 15 years to a maximum of 75 years, but which are revoked upon termination of the related PPAs with REN. These licenses, together with PPAs, require each power plant in the Binding Sector to generate electricity exclusively for the Public Electricity System.

While REN s responsibilities relate primarily to the transmission of electricity and system dispatch, it is also responsible for working with DGGE to identify potential sites for the installation of new power plants and for the management of wholesale purchases of electricity and sales to distribution companies.

### The Independent Electricity System

The Independent Electricity System consists of two parts the Non-Binding Sector and the other independent producers, including renewable source producers, which include small hydroelectric producers (under 10 MW installed capacity), and cogenerators.

The Non-Binding Sector

At present, the only producers in the Non-Binding Sector are our three wholly-owned embedded hydroelectric generators, which are small hydroelectric plants with more than 10MW installed capacity that deliver all of the energy they produce directly to the distribution system, and CPPE s CCGT plant in Ribatejo. Although producers in the Non-Binding Sector are required to obtain licenses, they have no obligation to supply electricity to the Public Electricity System. These entities are free to contract directly with Qualifying Consumers. In 2003, the total number of Eligible Consumers in Portugal represented approximately 45% of total demand in mainland Portugal in volume terms. During 2003, 1,430 Eligible Consumers exercised their right to become Qualifying Consumers, of which 1,054 entered into contracts with EDP Energia and 376 entered into contracts with producers in the Spanish market. Of the 1,919 existing Qualifying Consumers at the end of 2003, 1,404 are customers of EDP Energia, representing approximately 7% of the electricity sold by us and 3% of our revenues in 2003. As of December 31,

### **Table of Contents**

2003, approximately 21,300 Eligible Consumers existed and 1,919 of these had opted to become Qualifying Consumers. By July 2004, all consumers are expected to be Eligible Consumers. We expect an increasing but limited impact on our revenues due to the progressive decrease in the eligibility threshold. Two of the three tariff components relating to distribution, representing approximately 90% of tariff revenue in 2003, are payable to EDPD by Eligible Consumers electing to become Qualifying Consumers. In addition, EDP Energia has the opportunity to gain Qualifying Consumers as its customers, in which case the third distribution tariff component would be payable to EDP Energia.

Producers in the Non-Binding Sector are able to use the national transmission grid and distribution system on an open-access basis to connect to Qualifying Consumers, which pay regulated transmission and distribution charges to REN for transmission and EDPD or other companies for distribution, respectively. Our hydroelectric plants in the Independent Electricity Systems deliver all of the electricity they produce directly to the distribution system without going through the national transmission grid. These plants pay regulated transmission charges to REN. Contractual relationships between producers and consumers in the Non-Binding Sector are freely negotiable between the parties.

### Other independent producers

The Portuguese government has implemented selected measures to encourage the development of various forms of electricity production, including auto producers (entities that generate electricity for their own use and may sell surplus electricity to REN), cogenerators, small hydroelectric producers and other producers using renewable sources. REN is currently required by law to purchase the excess electricity produced by these independent producers at a regulated price based on avoidable costs, defined as the costs REN avoids by receiving power from these producers rather than dispatching plants in the Binding Sector and/or investing in new plants to increase installed capacity, plus an environmental premium, referred to as the green tariff. For more information on our electricity sales, you should read Distribution below.

### Size and composition of Portugal s electricity market

During the period from 1999 through 2003, the total electricity supplied by EDPD (in both the Binding and Non-Binding Electricity Sectors) experienced an average growth rate of 4.7% per annum. In 2002, there was a reduction in the annual growth rate to 2.4% due to a slowdown in the economy. In 2003, the annual growth rate increased to 3.7%.

The primary factors that management believes have an impact on demand are the rate of gross domestic product growth, electricity connections to new households and changes in electricity consumption per capita. After the period from 1999 through 2001, during which consumption in the Public Electricity System experienced an average growth rate of 2.1% above growth in Portugal s gross domestic product, or GDP, there was a reduction to 0.7% above the growth rate in Portugal s GDP in the year 2002 due to a slowdown in the economy. The previous growth trend is expected to resume in the future, assuming that the Portuguese economy recovers from the slowdown that occurred in 2002. We anticipate that the Portuguese economy will recover and that overall consumption in the National Electricity System will increase at an average of 3.7% per year in 2004, 2005 and 2006. Residential consumption is assumed to increase each year over the same period by an average of 4.5%, services by an average of 2.8%, and industrial by an average of 2.9%.

Peak demand as a percentage of the total installed capacity, which is the sum of the total installed capacity of the Public Electricity System, or PES, and the total installed capacity of the Non-Binding System, has remained fairly constant in recent years, except in 2003 when it increased slightly due to an extremely cold winter and a decrease in installed capacity in the PES following the decommissioning of the Alto Mira power plant (132 MW). Our available capacity as a percentage of the total installed capacity has maintained a value of approximately 78% from 1999 through 2003. The ratio of peak demand to EDP s average available capacity indicates that EDP alone did not have sufficient available capacity to cover the total peak demand in 2001, 2002 and 2003. To address this, in early 2004, the first 392 MW unit of the TER CCGT plant began

operation. The second unit is expected to begin operation in October 2004, and the third in 2006. We are also building new hydroelectric generation capacity.

28

The following table sets forth the ratios of peak demand to installed capacity, EDP s available capacity to the installed capacity of the Public Electricity System and the Non-Binding System and peak demand to EDP s available capacity. Peak demand includes demand satisfied by generation from Other Independent Producers.

As of December 31,						
1999	2000	2001	2002	2003		
	(in MW.	except percei	ntages)	· · · · · · · · · · · · · · · · · · ·		
8,804	8,758	8,758	8,758	8,626		
255	255	255	255	647		
9,059	9,013	9,013	9,013	9,273		
6,522	6,890	7,466	7,394	8,046		
72.0%	76.4%	82.8%	82.0%	86.8%		
6,808	6,765	6,801	6,841	6,695		
196	215	247	226	228		
77.3%	77.4%	78.2%	78.4%	74.7%		
93.1%	98.7%	105.9%	104.6%	116.2%		
	8,804 255 9,059 6,522 72.0% 6,808 196 77.3%	1999 2000 (in MW, 8,804 8,758 255 255  9,059 9,013  6,522 6,890 72.0% 76.4%  6,808 6,765 196 215  77.3% 77.4%	1999 2000 2001  (in MW, except percer  8,804 8,758 8,758 255 255 255  9,059 9,013 9,013  6,522 6,890 7,466 72.0% 76.4% 82.8%  6,808 6,765 6,801 196 215 247  77.3% 77.4% 78.2%	1999         2000         2001         2002           (in MW, except percentages)           8,804         8,758         8,758         8,758           255         255         255         255           9,059         9,013         9,013         9,013           6,522         6,890         7,466         7,394           72.0%         76.4%         82.8%         82.0%           6,808         6,765         6,801         6,841           196         215         247         226           77.3%         77.4%         78.2%         78.4%		

<sup>(1)</sup> Public Electricity System.

The Portuguese overall growth rate in demand for electricity is slightly higher than the rate reflected in the figures above due to the growth of auto production of electricity in certain industries. Auto producers supply their surplus electricity to REN, which displaces electricity generation in the Public Electricity System.

The term installed capacity in this report refers to the maximum capacity of a given generation facility under actual operating conditions. Maximum capacity of a hydroelectric facility is based on the gross electricity emission to the transmission network by the units of such facility, whereas maximum capacity of a thermal facility is based on the net electricity emission (net of own consumption) to the transmission network. In previous reports, installed capacity of a facility referred to the level of electricity emission to the transmission network based on the technical nominal specification of the units of such facility established by the manufacturer. Referring to installed capacity in terms of maximum capacity is preferable because in Portugal the PPAs remunerate electricity producers based on this concept and this concept is widely used by other electricity companies in Europe.

### GENERATION

Non-binding Electricity System, which consists of generation in the Independent Electricity System other than the other independent producers. All of the NBES hydroelectric plants with an installed capacity less than or equal to 10 MW became special regime producers in October 2002. Special regime generation generally consists of small or renewable energy facilities, from which the electricity system must acquire all electricity offered, at tariffs fixed according to the type of generation. Installed capacity of the Non-binding Electricity System in 2003 includes the first 392 MW unit of TER that was in testing at the end of the year.

<sup>(3)</sup> Provisional values from 1999 to 2001 take into account the restructuring of the Vila Cova plant in 1999.

As of December 31, 2003, our Portuguese electricity generation facilities consist of hydroelectric, thermal (coal, fuel oil, natural gas and gas oil), biomass, cogeneration and wind generation facilities, and had a total installed capacity of 7,939 MW (including one 392 MW unit of the new TER CCGT plant, which was in service by the end of 2003 for testing purposes and began commercial operations in early 2004), 7,052 MW of which was in the Public Electricity System and 888 MW of which was in the Independent Electricity System, and approximately 53% of which was represented by hydroelectric facilities, 28% by fuel oil/natural gas facilities, 15% by coal-fired facilities, 2% by gas oil facilities and 2% by wind-driven, biomass and cogeneration facilities. We do not own or operate any nuclear-powered facilities in Portugal.

29

### **Table of Contents**

Our installed capacity in the Public Electricity System of 7,052 MW represents approximately 82% of the total installed capacity in the Public Electricity System. The total installed capacity of the Public Electricity System decreased from 1999 to 2000 to a small degree as a result of the decommissioning of one unit at our Tapada do Outeiro plant. From 2000 to 2002, the installed capacity of the Public Electricity System remained constant. In 2003, another small decrease resulted from the decommissioning of the 132 MW Alto de Mira plant. Our smaller hydroelectric plants, wind generating facilities and cogeneration and biomass plants are part of the Independent Electricity System.

Since its creation in 1994, CPPE has operated all of our conventional thermal plants and approximately 92.6% of our hydroelectric plants. On March 29, 2001, we announced the incorporation of EDP Produção, a subsidiary that began operations in July 2001 and now operates most of our Portuguese energy production-related units, including CPPE, as part of measures we are implementing to boost efficiency. In 2003, CPPE accounted for approximately 96.3% of our electricity generation in Portugal. During the second half of 2003, we reorganized our generation business in preparation for the liberalization of the Iberian electricity market, which is expected to start operations during 2004. We are in the process of consolidating a number of generation companies formerly held by EDP Produção, which operate in the Independent Electricity System, into CPPE as part of the reorganization of our generation business.

EDP Energia was created to supply electricity to Qualifying Consumers and to conduct energy trading activities. The energy trading activities were subsequently transferred to EDP Produção.

EDP Produção also holds a variety of engineering and operations and maintenance, or O&M, companies, including EDP Produção EM Engenharia e Manutenção, S.A., a company which undertakes hydroelectric and thermal engineering projects and studies, project management, engineering and consulting.

Enernova (wind energy) and EDP Bioeléctrica (biomass plants) are now held directly by EDP outside of EDP Produção. Since 1996, Enernova has increased by six times its installed generation capacity, from 10 MW to 65 MW. New projects are in progress, some of which are under construction and others are in licensing development, which will add installed capacity of 280 MW by 2006, and 300 MW by 2008.

The following map sets forth the CPPE power plants in the Binding Sector as of December 31, 2003.

30

# CPPE POWER PLANTS

31

The generation capacity of CPPE plants in the Binding Sector is bound to the Public Electricity System under PPAs between CPPE and REN. Under the PPAs, CPPE is guaranteed a fixed revenue component (capacity charge) based on the contracted availability and installed capacity, regardless of the energy produced. The PPAs also allow CPPE to pass-through to the final tariff its total fuel consumption cost through a variable revenue component (energy charge) that is invoiced monthly to REN. Pursuant to the Portuguese government s policy for the reorganization of the energy sector, the PPAs are expected to be terminated as a step in the creation of an Iberian electricity market. For more information, please see Regulation Portugal.

The following table sets forth our total installed capacity by type of facility at year-end for the years 1999 through 2003.

		As of December 31,						
Type of facility	1999	2000	2001	2002	2003			
			(MW)					
Hydroelectric:								
CPPE plants	3,903	3,903	3,903	3,903	3,903			
Independent System hydroelectric plants	309	309	309	309	311			
Total hydroelectric	4,212	4,212	4,212	4,212	4,214			
Thermal <sup>(1)</sup>	3,327	3,281	3,281	3,281	3,149			
Wind	20	30	41	41	65			
Biomass	9	9	9	9	9			
Cogeneration	0	67	67	111	111			
CCGT (2)	0	0	0	0	392			
Total	7,568	7,599	7,610	7,654	7,939			

<sup>(1)</sup> On June 30, 2003, the PPA of the Alto de Mira plant expired and the plant was decommissioned.

Hydroelectric generation is dependent upon hydrological conditions. In years of less favorable hydrological conditions, less hydroelectricity is generated and the Public Electricity System must depend upon increased thermal production. In addition, in years of less favorable hydrological conditions, imports of electricity may increase. For purposes of forecast models, our estimated annual hydroelectric production based on current installed capacity in an average year is 10.6 TWh and can reach about 15 TWh in a wet year and may fall to less than 7 TWh in a dry year. Between 1993 and 2003, our actual hydroelectric production has ranged from a low of 6.9 TWh in 1999, a very dry year, to a high of 14.9 TWh in 2003, a record wet year.

<sup>(2)</sup> New plant, in testing at the end of 2003.

The following table summarizes our electricity production, excluding losses at our plants and our own consumption, by type of generating facility from 1999 through 2003, and also sets forth our hydroelectric capability factor for the same period.

	Year ended December 31,						
Type of facility	1999	2000	2001	2002	2003		
	(in GW	h, except hy	droelectric	capability fa	ctor)		
Hydroelectric:							
CPPE plants <sup>(1)</sup>	6,457	10,229	12,607	6,764	13,964		
Independent System hydroelectric plants	447	624	790	573	901		
Total hydroelectric	6,904	10,853	13,397	7,336	14,865		
Thermal:							
Coal	9,319	9,091	8,677	9,532	9,473		
Fuel oil and natural gas	7,596	4,631	5,583	7,848	3,120		
Gas oil	2	38	50	13	26		
Coal and fuel oil <sup>(2)</sup>	85	11	30	44	(1)		
Cogeneration	0	134	423	590	679		
CCGT <sup>(3)</sup>					203		
Total thermal	17,002	13,905	14,763	18,027	13,500		
Wind	53	70	90	113	128		
Biomass	2	5	18	37	38		
Total	23,961	24,833	28,269	25,513	28,532		
Hydroelectric capability factor <sup>(4)</sup>	0.68	1.08	1.19	0.75	1.33		

<sup>(1)</sup> Includes the following amounts of our own consumption for hydroelectric pumping, 491 GWh in 1999, 558 GWh in 2000, 485 GWh in 2001, 670 GWh in 2002 and 485 GWh in 2003.

The average availability for production of CPPE s plants remained stable from 1999 (93.0%) through 2003 (92.7%) for thermal plants, and increased slightly from 95.1% to 96.8% for hydroelectric plants during the same period. Forced outage is unplanned availability at a power plant caused by trips, critical repairs or other unexpected occurrences. Non-availability results from planned maintenance and forced outages. CPPE is reducing planned maintenance outages through more efficient maintenance techniques. CPPE s generating facilities have experienced very low rates of forced outage over the past five years. Management believes these low rates compare favorably with the European average. In the period 1999 through 2003, forced outages of CPPE s thermal plants has ranged between 2.1% and 2.8%. During the same period, forced outages of CPPE s hydroelectric plants ranged between 0.4% and 1.0%. In 2003, forced outages of CPPE s thermal plants was 2.1% and hydroelectric plants was 0.44%.

<sup>(2)</sup> Since the beginning of 1998, our existing plant at Tapada do Outeiro uses only fuel oil. Production in 2003 reflects the fact that our plant at Tapada do Outeiro generated an amount of electricity that was less than the plant s own consumption.

<sup>(3)</sup> One unit of this plant was in testing at the end of 2003.

<sup>(4)</sup> The hydroelectric coefficient varies based on the hydrological conditions in a given year. A hydroelectric capability factor of one corresponds to an average year, while a factor less than one corresponds to a dry year and a factor greater than one corresponds to a wet year.

The average availability factor is defined as the total number of hours per year that a power plant is available for production as a percentage of the total number of hours in that year. This factor reflects the mechanical availability, not the actual availability of capacity, which may vary due to hydrological conditions. The table below indicates for each type of CPPE generating facility the average capacity utilization and average availability factor indicators, comparable with other European utilities, each calculated in accordance with our computational method, for the indicated years:

	Average capacity utilization (1) Year ended December 31,					Ü	availability ded Decem			
Type of facility	1999	2000	2001	2002	2003	1999	2000	2001	2002	2003
Hydroelectric Thermal:	18.9%	29.8%	36.9%	19.8%	40.8%	95.1%	95.0%	94.8%	95.9%	96.8%
Coal <sup>(2)</sup>	89.3%	86.8%	83.1%	91.3%	90.7%	90.5%	89.2%	90.5%	94.0%	94.2%
Fuel oil and natural gas	50.6%	30.8%	37.2%	52.3%	20.8%	93.2%	94.6%	96.6%	93.7%	90.8%
Coal and fuel oil <sup>(3)</sup>	10.3%	2.8%	7.2%	10.8%	0.0%	98.6%	99.6%	98.9%	98.2%	94.9%
Gas oil <sup>(4)</sup>	0.1%	1.3%	1.7%	0.4%	1.2%	99.6%	99.4%	98.4%	99.1%	98.0%
Total weighted average thermal <sup>(5)</sup>	58.3%	47.8%	49.9%	60.7%	44.8%	93.0%	93.2%	94.6%	94.4%	92.7%

<sup>(1)</sup> The average capacity utilization is defined as actual production as a percentage of theoretical maximum production.

During the period from 1999 through 2003, CPPE has had operating and maintenance costs, excluding fuel and depreciation costs, below the limits contained in the relevant PPAs over that time period. Management expects to continue to maintain these costs below the PPA limits in 2004. However, we expect that during 2004 most of the PPAs may terminate, according to a decree law expected to be enacted, and compensation mechanisms for these terminations will be defined with the goal of maintaining the economic value of the terminated PPAs. On June 30, 2003, the PPA of our 132 MW Alto de Mira plant terminated on the scheduled expiration date. For more information on PPA terminations, please see Regulation Portugal.

Given that CPPE s power plants are in the Binding Sector, they are required to have binding licenses issued by DGGE. CPPE received the requisite binding licenses in June 1997, which were effective from January 1, 1995.

### **Hydroelectric plants**

As of December 31, 2003, we operated 25 hydroelectric generating facilities in the Binding System, with 63 total units and an aggregate installed capacity of 3,903 MW.

The average availability of the coal plants in 1999 was affected by the installation of low  $NO_X$  burners in each unit of the Sines plant, one per year, which required production from each unit to stop temporarily.

None, primarily due to minimal generation at our Tapada do Outeiro plant as a result of a wet year in 2003 and the fact that this is a peak load power plant.

<sup>(4)</sup> Increase in average capacity utilization was due to the need to use the fuel stock of the Alto de Mira power plant in the context of its decommissioning in 2003.

<sup>(5)</sup> Weighted average is based on total installed capacity of the thermal system.

Based on an independent revaluation of our assets in 1992, management estimates that the average remaining useful life of our dams is approximately 45 years. The table below sets out our hydroelectric plants, installed capacity as of December 31, 2003, the type of hydroelectric plant, the year of commencement of operation and the year in which the most recent major refurbishment, if any, was accomplished.

Hydroelectric plants	Installed capacity (MW)	River reservoir plant type	Year entered into service	Year of last major refurbishment
CPPE Plants:				
Alto Lindoso	630.0	Reservoir	1992	
Miranda	369.0	Run of river	1960/95	1970
Aguieira	336.0	Reservoir	1981	
Valeira	240.0	Run of river	1976	
Bemposta	240.0	Run of river	1964	1969
Pocinho	186.0	Run of river	1983	
Picote	195.0	Run of river	1958	1969
Carrapatelo	201.0	Run of river	1971	
Régua	180.0	Run of river	1973	
Torrão	140.0	Reservoir	1988	
Castelo de Bode <sup>(1)</sup>	159.0	Reservoir	1951	2003
Vilarinho Furnas	125.0	Reservoir	1972/87	
Vila Nova (Venda Nova/Paradela)	144.0	Reservoir	1951/56	1994
Fratel	132.0	Run of river	1974	1997
Crestuma-Lever	117.0	Run of river	1985	
Cabril	108.0	Reservoir	1954	1986
Alto Rabagão	68.0	Reservoir	1964	
Tabuaço	58.0	Reservoir	1965	
Caniçada	62.0	Reservoir	1954	1979
Bouçã	44.0	Reservoir	1955	1988
Salamonde	42.0	Reservoir	1953	1989
Pracana	41.0	Reservoir	1950/93	1993
Caldeirão	40.0	Reservoir	1994	
Touvedo	22.0	Reservoir	1993	
Raiva	24.0	Reservoir	1982	
Total	3,903.0			
Independent System Hydroelectric Plants:				
Hidrocenel <sup>(2)</sup>	107.6	Various	Various	
$HDN^{(3)}$	118.5	Various	Various	
EDP Energia <sup>(4)</sup>	84.9	Various	Various	
Total	311.0			
Total maximum capacity	4,214.0			

<sup>(1)</sup> We invested approximately 13 million in the modernization of the electricity generating turbines and other dam equipment at Castelo de Bode, which was completed at the end of 2003.

<sup>(2)</sup> Hidrocenel which operates 15 plants with capacities ranging from 0.1 MW to 24.4 MW and dates of entry into service from 1906 to 2003, is in the process of being merged into CPPE. This process is expected to be completed in 2004.

<sup>(3)</sup> HDN, which operates 13 plants with capacities ranging from 0.9 MW to 44.1 MW and dates of entry into service from 1922 to 1992, is in the process of being merged into CPPE. This process is expected to be completed in 2004.

<sup>(4)</sup> EDP Energia owns five plants with capacities ranging from 0.2 MW to 80.7 MW and dates of entry into service from 1927 to 1951.

### Thermal plants

CPPE operates all our conventional thermal power plants, with total installed capacity, as of December 31, 2003, of 3,148.5 MW and installed capacity per generating unit ranging from 16 MW to 298 MW. The following table sets forth, as of December 31, 2003, our conventional thermal plants by installed capacity, type of fuel, net efficiency at maximum output, number of units and year entered into service.

Thermal plants	Installed Capacity (MW)	Fuel	Net efficiency at maximum output	Number of units	Years entered into service
Sines	1,192.0	Coal	36.9	4	1985-89
Setúbal	946.4	Fuel oil	38.3	4	1979-83
Carregado I	473.8	Fuel oil	37.4	4	1968/1974
Carregado II <sup>(1)</sup>		Fuel oil /			
	236.4	Natural gas	37.6	2	1976
Tunes	197.0	Gas oil	28.4	4	1973/1982
Tapada do Outeiro (EDP facility) <sup>(2)</sup>					1959/ 1967
	46.9	Coal /fuel oil	29.4	1	(unit 3)
Barreiro	56.0	Fuel oil	34.3	2	1978
Total maximum capacity	3,148.5				

<sup>(1)</sup> These units began burning natural gas in 1997.

There has been no significant change in average net efficiency of CPPE s thermal plants over the past five years. With continued proper maintenance of the thermal facilities, CPPE expects to maintain net efficiency at least at levels contracted in the PPAs.

### Other energy sources

In addition to our hydroelectric and thermal plants, we promote the use of renewable energy sources with other types of facilities. Enernova, our subsidiary specializing in this area, concentrated its initial investments in wind farms (due to greater technological advances made to date). Our first wind facility commenced operation in 1996. We now have five wind facilities with a combined installed capacity of 65 MW. In 2002, we created a new subsidiary for the biomass assets, EDP Produção Bioeléctrica, which owns the Mortágua biomass (forestry waste) power plant. This plant started operations in 1999 and has an installed capacity of 9 MW.

Fuel

CPPE uses a number of fossil fuels in the generation of electricity. The introduction of natural gas to Portugal is diversifying the sources of primary energy. For more information on our use of natural gas you should read Natural gas.

<sup>(2)</sup> This three-unit plant is scheduled to be progressively decommissioned until the end of 2004. The first unit of 50 MW was decommissioned on December 31, 1997. The second unit of 50 MW was decommissioned on December 31, 1999. From 2000 onward, only one 50 MW unit, currently burning fuel oil, is operational.

CPPE fuel consumption costs, including transportation, were 273.9 million in 2003 and 434.6 million in 2002, which represented approximately 41.2% and 52.8%, respectively, of CPPE s total operating expenses. The decrease in the total cost of fuel consumed from 2002 to 2003 resulted primarily from a decrease in the thermal production powered by fuel oil, due to increased hydroelectric production in 2003, which was a wet year.

36

The table below shows a breakdown of costs of fuel consumed by CPPE from 1999 through 2003.

**			~ -
Year	ended	December	31.

Type	1999	2000	2001	2002	2003
		(the	ousands of EU	R)	
Imported coal	116,823	128,902	142,810	148,773	130,531
Fuel oil <sup>(1)</sup>	109,371	146,721	193,867	259,816	117,716
Gas oil <sup>(2)</sup>	219	1,895	4,618	1,526	2,744
Natural gas	42,163	25,364	12,260	24,497	22,917
Total	268,578	302,882	353,555	434,612	273,908

<sup>(1)</sup> Includes consumption for the production of steam at the Barreiro power plant.

The following table sets forth the amounts of fuel purchased by CPPE in each of the last five years.

		Year en	ded Decen	iber 31,	
Туре		2000	2001	2002	2003
	(thous	ands of me	tric tons, ex	cept natur	al gas)
Imported coal	3,533	3,564	3,108	3,587	3,593
Fuel oil <sup>(1)</sup>	1,712	1,052	1,237	1,941	716
Gas oil	0	0	26	3	10
Natural gas <sup>(2)</sup>	376	142	60	150	131

<sup>(1)</sup> Includes purchases for the production of steam at the Barreiro plant.

Coal

As the Sines power plant is a base load, or continuous operation power plant, CPPE enters into supply contracts for more than one year for the major part of its consumption of coal. Pursuant to the PPAs, for purchases of coal, an annual Target Contract Quantity, or TCQ, is defined by REN based on the forecasts for coal consumption for a wet year. The TCQ is the basis for long-term supply and shipping contracts, which are negotiated by CPPE, subject to REN approval. In addition, CPPE makes spot-market purchases as necessary. In both 2003 and 2002, CPPE purchased 78% of its coal through long-term contracts and 22% of its coal on the spot market. In comparison, in 2002 and 2001, CPPE purchased 78% and 70%, respectively, of its coal through long-term contracts, and 22% and 30%, respectively, of its coal on the spot market.

The following table shows a breakdown of CPPE s coal purchases from 1999 to 2003 by geographic markets as a percentage of total purchases.

<sup>(2)</sup> Small amounts of gas oil are consumed by the gas oil plants for the operation of these plants in synchronous compensation mode for purposes of voltage regulation and a very small amount of generation.

<sup>(2)</sup> Measured in millions of cubic meters.

Year ended December 31,

Region	1999	2000	2001	2002	2003
South Africa	28.0%	38.0%	28.0%	28.9%	34.6%
United States	12.0%	10.0%	17.0%	3.2%	9.9%
Australia	17.0%	0.0%	13.0%	23.2%	18.6%
South America	43.0%	48.0%	27.0%	16.3%	32.9%
Southeast Asia	0.0%	4.0%	15.0%	16.9%	0.0%
Europe	0.0%	0.0%	0.0%	11.3%	4.0%
Total	100%	100%	100%	100%	100%

In 2003, the average cost of coal consumed was 36.7 per ton. In 2002 and 2001, the average cost of coal consumed for imported coal was 41.4 per ton and 43.8 per ton, respectively.

Fuel oil and gas oil

Fuel oil purchases by CPPE are made in the spot market and pursuant to contracts. CPPE purchases fuel oil from refineries in Europe, primarily in Portugal and northwestern Europe, and is remunerated through PPAs based on, among other things, costs of fuel oil indexed to the spot market.

The average cost of fuel oil consumed in 2003 was 164.76 per ton, compared with 143.25 and 141.22 in 2002 and 2001, respectively. The increase in 2003 was due to increases in market prices as a result of the conflict in Iraq and production control by OPEC members. To meet its objectives to improve air quality, CPPE has shifted its fuel oil purchases to lower sulfur fuel oil, which has increased the cost of consumed fuel oil. In 2003, the average sulfur content of fuel oil purchased by CPPE was approximately 0.9%, compared with 2.1% in 2002. To comply with an EU Directive, in October 2002 CPPE initiated the use of fuel with a 1% sulfur content. The use of lower sulfur fuel oil has increased, and will increase in the future, the average cost of fuel oil consumed.

CPPE maintains gas oil reserves as fuel for emergency gas turbine generators. Since gas oil is very expensive and economically inefficient, these reserves are used on a very limited basis. Consequently, small purchases of gas oil have been made by CPPE, as required by REN.

The increase in 2003 of the consumption of gas oil was due to higher production by the Alto de Mira plant prior to its decommissioning in order to exhaust its fuel inventory.

Natural gas

Since the introduction in 1997 of the import of natural gas from Algeria into Portugal by Transgás, CPPE has had access to natural gas as a source of primary energy. CPPE converted two units of Carregado into dual-fired (fuel oil and natural gas) in late 1997. In 2003, CPPE purchased 131 million cubic meters of natural gas for a total of 22.9 million compared to 150 million cubic meters of natural gas in 2002 for a total of 24.5 million. For more information on our activities related to natural gas you should read Other International activities and strategic investments.

### Planned new plants

In order to meet increased demand for electricity in Portugal, additional capacity is planned for the National Electricity System. The following table sets out planned new power facilities in Portugal.

	Type of			Target	
	••	Developing	Planned capacity	O	
Facility	generation	entity	(MW)	year	Status
Algueva <sup>(1)</sup>	Hydroelectric	EDIA/CPPE	240	2004	Under Construction

Venda Nova II	Hydroelectric	CPPE	192	2004	Under Construction
Baixo Sabor	Hydroelectric	CPPE	180	2010	Planning
Picote II	Hydroelectric	CPPE	236	2010	Planning
CCGT Ribatejo	CCGT	TER(2)	3x392	2004/2006	Under Construction

<sup>(1)</sup> EDIA Empresa de Desenvolvimento e Infra-estruturas de Alqueva, S.A. ( EDIA ) is a company wholly-owned by the Republic of Portugal that is developing a multi-purpose hydro scheme for irrigation and the production of electricity. CPPE will operate the Alqueva hydroelectric power plant.

### Capital expenditures

In 2003, we spent 261.1 million in capital expenditures in technical costs for our generation facilities, compared with 276.5 million in 2002 and 131.7 million in 2001. Our capital expenditures in the generation sector have been concentrated on the following activities: conducting preliminary studies for and building of hydroelectric plants, maintaining and upgrading existing power plants, investing in environmental projects such as the installation of emission reduction equipment and, in 2003, investing 142.4 million in the new TER CCGT

38

<sup>(2)</sup> TER CCGT will operate in the Non-Binding Sector. The first unit began commercial service in February 2004, the second unit is expected to begin service in October 2004 and the last one in March 2006. TER is in the process of being merged into CPPE.

(combined cycle gas turbine) power plant units 1 and 2, and 38.4 million in wind energy farms. At this stage, management expects that the TER CCGT plant will cost approximately 600 million, including all three units.

The following table sets forth our capital expenditures in technical costs from 1999 through 2003 on plants by type and status of generating plant.

Plant type and status		Year ended December 31,				
	1999	2000	2001	2002	2003	
		(thousands of EUR)				
Thermal/Hydro						
Public Electricity System						
Hydroelectric plants under construction	6,449	14,235	16,877	25,690	34,359	
Hydroelectric plants in operation	10,475	9,038	10,289	12,756	11,732	
Thermal plants in operation	25,199	17,623	14,764	16,261	20,340	
Plants under study	359	190	1,450	1,011	349	
Total CPPE	42,482	41,086	43,380	55,718	66,780	
Independent Electricity System						
Hydroelectric plants	11,457	7,913	4,964	4,137	3,849	
TER	0	3,571	58,535	142,946	142,350	
Wind	5,726	11,128	6,521	11,159	38,389	
Cogeneration facilities	37,654	25,439	13,083	9,602	255	
Biomass <sup>(1)</sup>	12,679	0	0	35,180	614	
Total Independent Electricity System	67,516	48,051	83,103	203,024	185,456	
Others <sup>(2)</sup>	0	0	0	0	312	
Non-specific investment <sup>(3)</sup>	4,070	4,969	5,250	17,721	8,599	
Total Generation	114,068	94,106	131,733	276,463	261,147	

<sup>(1)</sup> Investments in 2002 include 35.2 million related to an intra-group transfer of the Mortagua biomass power plant (built in 1999), to EDP Produção.

We currently expect that our planned capital expenditures and investments will be financed from internally generated funds, existing credit facilities and customer contributions, which may be complemented with medium- or long-term debt financing and equity financing as additional capital expenditure requirements develop, particularly as our plans evolve with respect to our telecommunications business. To learn more about our sources of funds and how the availability of those sources could be affected, see 
Item 5. Operating and Financial Review and Prospects Liquidity and Capital Resources.

### TRANSMISSION

<sup>(2)</sup> Other investments include studies and investment relating to our trading system.

<sup>(3)</sup> Non-specific investment refers to investments not directly related to our plants, such as administrative buildings, transportation equipment and implementation of new information systems.

The transmission system in mainland Portugal is owned and operated by REN, which is obligated by law to supply electricity within the National Electricity System. Electricity transmission in Portugal is the bulk transfer of electricity, at voltages between 150 kV and 400 kV, from generation or acquisition sites across a transmission system to areas of use via networks that are linked to each other to form an interconnected national transmission grid. As described above, the Portuguese government purchased a 70% interest in REN from us in late 2000. For more information on this purchase, you should read Item 5. Operating and Financial Review and Prospects Overview.

REN operates the national transmission grid on an exclusive basis pursuant to Portuguese law under a concession provided for by a 1995 decree law. The concession is valid for 50 years from September 2000, when the concession agreement was signed.

39

### **Table of Contents**

The Portuguese transmission system operates at a frequency of 50 Hz, which is in line with the majority of the European transmission systems. At year-end 2003, there were 47 substations operating on the national transmission grid, not including power plants. All of these substations are now fully automated and operated by remote control. Of REN s transmission lines at December 31, 2003, approximately 2,438 km were 150 kV lines, 2,704 km were 220 kV lines and 1,403 km were 400 kV lines. At the end of 2003, REN had five interconnections with Spain, three of which are 220 kV lines and two of which are 400 kV lines. Additionally, at the beginning of April 2004, a new 400 kV circuit of the interconnection line Alto-Lindoso-Cartelle was put into operation. Management understands that, within the context of creation of MIBEL, REN plans to establish two additional interconnections with Spain by 2006: Alqueva-Balboa, a 400 kV line scheduled for completion in 2004 and Douro Internacional-Aldeadavila, a 220 kV or 400 kV line scheduled for completion in 2006.

### Managing and controlling the power system

In addition to the construction and operation of the national transmission grid, REN is also responsible for central dispatch of all power plants with installed capacity of more than 10 MW. This includes scheduling generation to match, as closely as possible, the demand on the national transmission grid. As part of managing the national transmission grid, REN is also responsible for scheduling imports and exports with Spain.

As the sole holder of the concession for transmission, REN is required by law to develop and maintain an efficient, coordinated and economical system of electricity transmission and not to discriminate among competitors in the generation and distribution of electricity.

### Purchases of electricity

REN purchased 36,155 GWh of electricity in 2003 from all of the generators in the Binding Sector, consisting of CPPE s generating plant, the 600MW Tejo Energia plant at Pego and the Turbogás 3x330 MW combined cycle gas turbine plant at Tapada do Outeiro, through PPAs with each operator of any individual power plant within the Binding Sector that supplies electricity to the Public Electricity System.

REN enters into a PPA with each operator of any individual power plant within the Binding Sector that supplies electricity to the Public Electricity System. Under each PPA, the operator is obligated to sell to REN all the electricity produced by a particular plant, as well as to provide ancillary and special services, such as synchronous compensation, pumping and automatic generation control. The life span of a PPA is fixed according to the full technical useful life of the equipment and generally its remuneration scheme is based on a capacity charge. Under the PPAs, any extraordinary investments agreed upon with REN, in consultation with the regulator, can be reimbursed. These investments can be paid to the generator through a revision of the capacity charge. For more information on the regulation of PPAs, please see Regulation Portugal.

The existing site locations for power plants in the Public Electricity System are owned by or, in the case of hydroelectric plants, granted under a concession to, REN, which REN leases or makes available by sub-concession to the operators of the plants for the duration of the respective PPAs. REN is involved in selecting future site locations, which it will then lease to successful bidders.

The Turbogás plant at Tapada do Outeiro burns natural gas supplied by Transgás. REN has entered into an Energy Management Agreement, or EMA, with Transgás, which governs the use of natural gas in thermal plants and defines applicable prices. Transgás has the exclusive right to import gas to, and transport gas within, its concession area of Portugal for 35 years. However, in March 2003, the Portuguese government announced its view on the reorganization of the energy market, stating its intention to liberalize both the gas and electricity sectors. Within this goal, the government has stated its intention to transfer the high-pressure transportation network of gas to REN. To prepare for this transfer of

assets, at the end of 2003 REN, in accordance with the Resolution of the Council of Ministers no. 193-A/2003 of December 26, 2003, bought for 420.9 million the capital owned by the Portuguese State in GALP, which owns 100% of Transgás, which in turn owns the high-pressure network for the transportation of gas. As a result of this acquisition, REN owns 18.3% of GALP, which is expected to approximately equal the value of gas assets that will be transferred to REN. See Strategy Iberian energy Developing an Iberian gas business for more information on this transaction.

40

Apart from the power plants in the Public Electricity System, REN is also obligated to buy energy from auto producers, cogenerators, small hydroelectric producers and other renewable source energy plants operating under Portuguese law within the Independent Electricity System.

REN supplies energy to EDPD at a uniform Bulk Supply Tariff, which is calculated by averaging all the individual power costs contracted with the generators through the PPAs after incorporating transmission, system management and regulatory costs, together with other costs for the purchase of additional electricity. During the 1999-2001 regulatory period, the Bulk Supply Tariff was adjusted every two years for changes in the generators fuel costs, which are entirely passed on by the generators to REN pursuant to the PPAs. For the 2002-2004 regulatory period, changes in fuel costs are now incorporated into the Bulk Supply Tariff on a quarterly basis. REN also buys and sells electricity into Spain s power pool at prevailing prices in the pool.

#### Imports and exports

The following table sets forth REN s net imports in each of the last five years in GWh and as a percentage of total demand.

	Net imports	
Year	(GWh)	Percentage of total demand
1999	(857)	N/A
2000	931	2.5%
2001	239	0.6%
2002	1,899	4.7%
2003	2,794	6.5%

#### DISTRIBUTION

Electricity distribution in Portugal is a regulated business and involves the transfer of electricity from the transmission system and its delivery across a distribution system to regulated consumers and Qualifying Consumers, meter reading and installation, and supply to regulated consumers. The local electricity distribution function in mainland Portugal is carried out almost exclusively by EDPD. Through fourteen network distribution areas as well as seven commercial areas directed at serving customers supplied in the Public Electricity System, EDP distributed electricity to 5,768 million consumers in 2003, amounting to 38,916 GWh, of which 4,048 GWh was distributed to Qualifying Consumers. At December 31, 2003, EDPD employed approximately 6,334 personnel.

Under Portuguese law, distribution of high voltage electricity, greater than 45kV and less than 110kV, and medium voltage electricity, greater than 1kV and less than or equal to 45kV, is regulated by DGGE through the issuance of a binding license with no time limitation. Our four distribution companies, subsequently consolidated into EDPD, were appointed by law as the holders of the license for distribution of high and medium voltage electricity. EDPD received the license in 2000. Distribution of low voltage electricity is regulated through 20-year municipal concession agreements with municipal councils. EDPD pays rent to each municipality as required by law. For more information on licenses and concessions held by us, you should read Regulation and note 1 to the consolidated financial statements.

Under the terms of the binding licenses, EDPD is obliged to supply electricity to all customers located within its licensed area that are part of the Public Electricity System. EDPD is also obliged to provide access to the distribution network to producers in the Independent Electricity System

in return for a regulated access charge from consumers. EDPD owns, leases or has rights of way for the land on which its substations are situated. In addition, EDPD has long-term rights of way for its distribution lines. If necessary, new properties may be acquired through the exercise of eminent domain. In those cases, EDPD compensates affected private property owners.

The authorized area of EDPD covers all of mainland Portugal. At December 31, 2003, EDPD s distribution lines spanned a total of approximately 194,609 kilometers. The only distribution lines in Portugal not owned by EDPD are those of the auto producers and small cooperatives, which own their own lines. The following table sets forth the kilometers of EDPD s distribution lines, by voltage level, at December 31, 2003.

41

Distribution lines	Km
Overhead lines:	
High voltage (60/130kV)	7,267
Medium voltage (6/10/15/30kV)	52,742
Low voltage (1kV)	98,099
Total overhead lines	158,108
Underground cables:	
High voltage (60/130kV)	361
Medium voltage (6/10/15/30kV)	11,513
Low voltage (1kV)	24,627
Total underground cables	36,501
Total	194,609

#### **Customers and sales**

EDPD distributes electricity to approximately 5.8 million customers. Approximately 67% of electricity consumption in 2003 was along the coast, with approximately 15% in the Oporto metropolitan region and 20% in the Lisbon metropolitan region. EDPD classifies its customers by voltage level of electricity consumed. The following chart shows the number of customers as of December 31, 2003, according to level of voltage contracted, and indicates whether such customers are binding customers supplied by EDPD or Qualifying Consumers to which EDPD distributes electricity on behalf of suppliers in the Independent Electricity System.

Customers by voltage level	Binding customers	Qualifying consumers	Total
High and very high voltage(1)	146	3	149
Medium voltage <sup>(2)</sup>	19,039	1,916	20,955
Special low voltage (3)	28,184	0	28,184
Low voltage <sup>(4)</sup>	5,718,999	0	5,718,999
Total	5,766,368	1,919	5,768,287

<sup>(1)</sup> High voltage is greater than 45 kV and less than or equal to 110 kV. Very high voltage is greater than 110 kV.

EDPD has experienced increased demand over the past five years in all electricity voltage levels. Considering overall demand on EDPD s distribution network, both from binding customers and Qualifying Consumers, consumption has grown at an average annual growth rate of 4.8% from December 31, 1999 to December 31, 2003. The highest average annual growth rate during this period (6.0%) was in demand from very high and high voltage customers. These voltage levels experienced a 9.3% increase in demand in 2003 due to a large increase in the industrial activity of one of our largest customers, as well as a higher demand on the distribution grid from auto producers. Under current regulations, REN must purchase all electricity offered by auto producers at a specified tariff through EDPD. As the auto producers may purchase electricity at a price below that at which they sell to REN, the buying and selling of electricity by auto producers has increased demand for use of the distribution grid. Demand by medium voltage levels increased from 10,639 GWh in 1999 to 12,534 GWh in 2003, representing average annual growth of 4.2%. Following the gradual decrease of the eligibility threshold between 1999 and 2003, more electricity distributed through EDPD s network corresponds to consumption by medium voltage qualifying consumers. As a result, electricity demand by medium voltage binding consumers decreased from 10,639 GWh in 1999 to 8,600 GWh in 2003, whereas electricity demand by medium voltage qualifying consumers,

<sup>(2)</sup> Medium voltage is greater than or equal to 1 kV and less than or equal to 45 kV.

<sup>(3)</sup> Special low voltage consumers have subscribed demands above 41.4KW and voltage levels below 1 kV. Special low voltage customers are primarily small industrial and commercial customers.

<sup>(4)</sup> Low voltage is less than 1 kV.

non-existent in 1999, increased to 3,934 GWh in 2003. Consumption by low voltage customers, typically residential and services, increased from 17,786 GWh in 1999 to 21,513 GWh in 2003, representing average annual growth of 4.8%. The growth in low voltage consumption during this period resulted primarily from the increase in the number of low voltage customers from approximately 5.3 million to approximately 5.8 million, as well as an increase in annual consumption per consumer.

The following table shows electricity distributed in each of the last five years, separated by type of consumer.

		Year ended December 31,			
	1999	2000	2001	2002	2003
			(GWh)		
Electricity distributed					
Very high voltage and high voltage:					
Binding customers	3,855	4,104	4,259	4,271	4,755
Qualifying consumers	0	83	176	182	114
Total very high voltage and high voltage	3,855	4,187	4,435	4,453	4,869
Medium voltage:					
Binding customers	10,639	11,092	11,358	11,198	8,600
Qualifying consumers	0	133	344	776	3,934
Total medium voltage	10,639	11,225	11,702	11,974	12,534
Low voltage	16,839	17,884	18,823	19,424	20,346
Public lighting	947	1,010	1,065	1,080	1,167
Total	32,280	34,306	36,025	36,931	38,916

On a revenue basis, our Portuguese electricity sales grew from 2,938 million in 1999 to 3,546 million in 2003. The most significant increase in sales has been to low voltage customers (typically residential and services), to whom sales increased from 2,056 million in 1999 to 2,596 million in 2003. Recent growth in revenue from electricity sales was due to expansion in consumption and average tariff increases set by the regulator of 2.8% in 2003 and 2.3% in 2002. Furthermore, the increase in revenue from electricity sales in 2001, 2002 and 2003 was also influenced by the tariff adjustment, as discussed below. The following table shows EDPD s total domestic sales of electricity to binding customers by level of voltage required, as well as revenues from the use of distribution network, charged to Qualifying Consumers.

		Year ended December 31,				
	1999	2000	2001	2002	2003	
		(t	housands of EUR	3)		
Electricity sales						
Very high voltage and high voltage	158,887	156,049	165,957	167,827	186,467	
Medium voltage	722,963	749,100	772,357	783,388	615,394	
Low voltage	1,981,460	2,080,475	2,194,035	2,335,135	2,500,380	
Public lighting	74,351	80,279	83,918	86,614	95,731	
Tariff adjustment	0	(55,995)	42,218	70,482	77,919	
J						
Total binding customers	2,937,661	3,009,908	3,258,485	3,443,446	3,475,891	
Qualifying Consumers	0	1,152	2,788	12,939	70,485	
		<u> </u>				
Total	2,937,661	3,011,060	3,261,273	3,456,385	3,546,376	

Tariffs are fixed by the regulator in advance for each year and are based in part on estimated data for variables such as demand and cost. If there are differences between the estimated data and the data actually experienced during the period, adjustments, shown in the table above as the tariff adjustment, will be made to the tariff in a subsequent period to account for these differences. The tariff adjustment reflects our estimate of the amount that will be applied in fixing tariffs in subsequent periods as a result of these differences. Tariff adjustments represent adjustments related to EDPD s distribution and supply activities. Due to actual consumption in 2002 and 2003 below that assumed in the setting of the 2002 and 2003 tariffs, amounts invoiced to final customers did not sufficiently compensate EDPD for the fixed amount that EDPD was required to pay for electricity acquired from REN, giving rise to a tariff adjustment in each of 2002 and 2003. For more information on the tariff adjustments you should read Operating and Financial Review and Prospects.

In 2003, the total number of Eligible Consumers in mainland Portugal, corresponding to very high, high and medium voltage customers, represented approximately 45% of total demand in 2003 in volume terms. Pursuant to Decree law no. 36/2004 of February 26, 2004, Eligible Consumers also include special low voltage customers. Accordingly, as of the end of February 2004, there were approximately 50,000 Eligible Consumers, representing approximately 53% of electricity distributed in 2003. We expect that in July 2004 all consumers will become Eligible Consumers.

43

The following chart shows the consumption profile of both binding and qualifying customers supplied by the public network operated by EDPD in the Portuguese mainland for the years from 1999 through 2003.

Year end	ded Dece	mber 31,
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	1999	2000	2001	2002	2003	
			(GWh)			
Consumption profile <sup>(1)</sup>						
Residential	8,987	9,678	10,188	10,513	11,110	
Cooking and heating	8	8	8	8	8	
Non-Residential	7,498	8,004	8,490	8,868	9,309	
Binding customers	7,498	7,964	8,428	8,728	8,165	
Qualifying consumers	0	40	62	140	1,144	
Industrial uses <sup>(2)</sup>	12,219	12,855	13,374	13,438	14,164	
Binding customers	12,219	12,679	12,917	12,620	11,277	
Qualifying consumers	0	176	457	818	2,887	
Agricultural uses	667	679	737	776	803	
Binding customers	667	679	737	776	784	
Qualifying consumers	0	0	0	0	19	
Traction for railways	364	360	358	439	450	
Lighting of State buildings, Administrative Bodies, etc.	1,529	1,632	1,722	1,700	1,850	
Binding customers	1,529	1,632	1,722	1,700	1,820	
Qualifying consumers	0	0	0	0	30	
Public Lighting	946	1,010	1,065	1,080	1,167	
Other <sup>(3)</sup>	121	129	137	137	141	
Total	32,340	34,355	36,079	36,959	39,002	

<sup>(1)</sup> Includes our own consumption.

Taking into account all customers linked to the public network operated by EDPD, including Qualifying Consumers, there has been a continuous increase in demand from every sector of activity in the past five years.

A breakdown of electricity consumption by sector of economic activity shows that, of the major consumer types, the fastest growing sector has been the power for railway traction and residential and public lighting, with an average annual growth rate of 5.4% between 1999 and 2003. During this same period, the agricultural and non-residential sectors exhibited an average annual growth rate of 4.7% and 5.6% respectively.

The number of distribution customers per distribution employee is an important measure for EDPD. In the period from 1999 through 2003, the number of customers per employee has increased from 586 to 910.

#### **Purchases of electricity**

<sup>(2)</sup> Includes electrochemistry and electrometallurgy.

<sup>(3)</sup> Other non-EDP distributors.

EDPD purchases all of its electricity in the Binding Sector from REN. In 1999, the regulator established a legal framework that limits purchases of electricity by EDPD from the Non-Binding Sector, which for the 2002-2004 regulatory period is 8%. EDPD has historically purchased less than 8% of its total energy from suppliers in the Non-Binding Sector and abroad. REN must purchase, and EDPD must purchase from REN, all electricity produced by Other Independent Producers. The cost of purchased electricity is passed through to customers in accordance with the regulated tariff system and is not a determining factor in EDPD s results.

44

#### Year ended December 31, 1999 2000 2002 2003 2001 (GWh) **Electricity Purchases** 35,282 32,307 From Binding Sector generation 32,483 33,915 34,801 From Other Independent Producers 2,165 2,469 2,552 2,817 3,694 From the non-binding system (SENV) 447 622 891 1,354 2,044 Total 35,095 37,007 38,726 38,972 38,046

#### **Distribution losses**

EDPD experiences technical losses of electricity which are associated with the normal use of its network and, to a far lesser extent, commercial losses of electricity due primarily to gaps between estimated meter readings and actual levels of consumption, which are usually recovered in subsequent years, with the exception of losses due to stolen energy and faulty meters. Although losses are within the normal range for the types of networks employed, management expects the amount of annual losses to decrease further as a result of capital expenditures in our distribution network.

The following table sets forth data regarding the losses of EDPD in absolute terms and as a percentage of demand, as well as EDP s own uses of energy.

		Year ended December 31,					
	1999	2000	2001	2002	2003		
		(in GWh, except percentages)					
Demand on the distribution network	35,095	37,230	39,263	39,965	42,261		
Own uses of energy	31	21	22	20	33		
Distribution losses	2,756	2,875	3,183	3,008	3,259		
Distribution losses/demand on the distribution network	7.9%	7.7%	8.1%	7.5%	7.7%		

### Capital expenditures

In recent years, our largest capital expenditures have been on the distribution system. EDPD is obligated by law to connect all customers who request to be linked to the Public Electricity System. As a result, the largest component of capital expenditures is spent on connecting new customers, improving network efficiency and developing the network (installing new cables and new lines) to accommodate the growth in demand.

EDPD s total 2003 capital expenditures in technical costs amounted to 334.7 million, of which approximately 8% are expenditures on non-specific administrative, technical and commercial systems and corresponding technology support infrastructure, including an installment

payment of approximately 12.0million for the acquisition of an IT system from EDINFOR. EDPD s capital expenditures in technical costs in distribution totaled 379.0 million in 2002, 260.4 million in 2001, 234.0 million in 2000 and 231.4 million in 1999. These amounts also include amounts paid by customer contributions in cash, but do not include in kind assets contributed by customers. These in kind contributions amounted to 61.0 million in 2003, 54.1 million in 2002, 69.5 million in 2001, 52.8 million in 2000 and 57.1 million in 1999. New customers are required by current regulation to make a contribution, in cash or in kind, for connections based on factors such as the type of voltage, the amount of power to be supplied, and distance to the network. In 2003, total customer contributions, and certain amounts contributed for infrastructure improvements, amounted to approximately 120.7 million.

#### **Conservation measures**

We have been progressively implementing a voluntary policy to promote electricity conservation in an effort to decrease the variability of the load on the system and to increase efficient use of electricity. In doing so, we have increased dissemination of information on end-use efficiency in several industrial subsectors, services and residential use. We have also launched a program of granting awards to industrial customers for successfully implementing electricity efficiency projects and have established a joint venture with other energy sector companies whose main goal is to promote energy conservation.

45

#### **Table of Contents**

In addition, the tariff structure has been designed to promote the rational use of electricity, basing tariffs on marginal costs, which may vary by time of day or season. Large consumers with a capability to reduce demand are offered an interruptible tariff rate, which results in a discount to the consumer and helps to alleviate demand at peak times.

#### **TARIFFS**

The prices we charge for electricity are subject to extensive regulation under a tariff regime that was revised in 1998, causing significant price reductions. In December 1998, the regulator implemented a new tariff regulatory code to be applied in mainland Portugal, establishing a periodic definition of regulatory parameters for tariffs and a methodology for setting tariffs. During the first regulatory period, including the years 1999-2001, and the second regulatory period, including the years 2002-2004, prices were set annually according to a series of formulae that were derived based primarily upon what was deemed to be an appropriate return on assets in transmission, a return fixed by price cap in distribution, and a return on assets and agreed costs in commercialization, i.e., the activity of supply, measurement and billing of energy sales to final clients.

For more information on tariffs during the 2002-2004 regulatory period, you should read Regulation Portugal Electricity/pricing tariffs. In April 2002, the Portuguese government extended the powers of the regulator to the Portuguese archipelagos of Azores and Madeira, with the intention of leveling the higher tariffs of these island regions to comparatively lower tariffs of the mainland Portugal while providing adequate financial returns to island electricity companies. This leveling leads to an incremental increase in prices charged to mainland customers, although such prices cannot increase more than inflation.

In the Binding Sector, distribution tariffs for customers are differentiated by voltage level, tariff option and period of electricity consumption. These tariffs, when set, are uniform throughout mainland Portugal within each level of voltage.

For the 2002-2004 regulatory period, the regulator has applied a four-rate tariff price structure related to the time of day for medium, high and very high voltage consumers. Low voltage consumers with subscribed demands above 20.7 kVA have a three-rate time of day structure, while low voltage consumers with subscribed demands up to 20.7 kVA might choose between a single-rate tariff, or a day-night tariff option.

Producers and consumers in the Non-Binding Sector have a right to access and use the national transmission grid and our distribution network through the payment of access tariffs for the Global Use of System, the Use of the Transmission Network, the Use of the Distribution Network and Network Commercialization, which terms and conditions were established by the regulator. For more information on the tariff structure, you should read Regulation Portugal Electricity/pricing tariffs.

Until the end of 1998, tariffs were fixed annually by convention, negotiated between the former Direcção Geral de Concorrência e Preços, or DGCC, and us. Tariffs were based on total estimated costs for the relevant year assuming average hydrological conditions. These tariffs were not specifically linked to an inflation-indexed formula. From 1995 through 1997, tariffs decreased in nominal terms by 2.8% and in real terms, adjusted for inflation by 7.8%. On September 15, 1998, the new tariff regime, which became effective from 1999 onward, was adopted by the regulator and on December 4, 1998, the regulator announced a new policy for the years 1999, 2000 and 2001. Under this regime, tariffs are set by the regulator pursuant to a periodic registration of regulatory parameters. In 1999, high, medium and low voltage tariffs declined in real terms by 12.8%, 12.8% and 7.5%, respectively, from 1998 levels. For 2000, in nominal terms, tariffs for all voltage levels declined by 0.6% from the 1999 levels. For 2001, in nominal terms, tariffs for all voltage levels increased, on average, by 1.2% from the 2001 levels. In November 2001, the regulator published the regulatory framework for the 2002-2004 regulatory period. For 2002, in nominal terms, tariffs increased across all voltage levels by an average of 2.2% from the 2001 levels. For 2003, in nominal terms, tariffs increased across all voltage levels by an average of 2.8% from the 2002 levels. In real terms, adjusted for inflation, very high, high and medium voltage tariffs have declined by an average of

3.4% over the period 1999 to 2004. The tariffs for low voltage customers have also declined by an average of approximately 3.1% over the same period. For 2004, in nominal terms, tariffs increased across all voltage levels by an average of 2.1% from the 2003 levels. To learn more about these tariffs, you should read Regulation Portugal Electricity/pricing tariffs.

46

For the 2002-2004 regulatory period, the regulator considers the distribution function to consist of three business areas, which could in the future be liberalized at different times and subject to different tariff regulatory regimes: use of the distribution network, network commercialization services and commercialization of supply in the Binding Sector. The use of the distribution network area involves activities relating to investments in and the operation of the distribution grid. Tariffs applicable to the use of the distribution network are based on a price cap mechanism designed to reduce distribution tariffs on an annual basis by, an average over the three years of the regulatory period, a percentage equal to the Portuguese Consumer Price Index, minus a percentage referred to as the efficiency coefficient. The efficiency coefficient was approximately 5% for the 1999-2001 regulatory period and is approximately 7% for the 2002-2004 regulatory period. The network commercialization area consists of activities related to meter installation, reading and the billing of all services associated with the use of the distribution network. The commercialization of supply in the Binding Sector area consists of activities directly relating to the final consumer, such as customer service, billing of final consumers in the Binding Sector and collecting payments from consumers. The tariff applicable to the network commercialization services and commercialization of supply in the Binding Sector area is based on costs accepted by the regulator plus a 9% return on assets. During the 1999-2001 regulatory period, distribution tariffs in the Binding Sector were subject to a sliding scale profit sharing mechanism, which required us to return to customers a portion of our annual profits that exceeded specified levels designated by the regulator. This mechanism was abolished at the second regulatory period 2002-2004.

Tariffs are also subject to an annual extra adjustment mechanism that takes into account the deviations of actual costs compared to forecasted costs used to derive tariffs for the previous one or two years. As a result, we have adopted a tariff adjustment in our financial statements that reflects our estimate of the amount that will be applied in fixing tariffs in subsequent periods as a result of differences between estimated and actual data. For the 1999-2001 regulatory period, the tariff adjustment also reflected our estimate of the portion of any excess profits or deficit in profits that would be applied in fixing tariffs in subsequent periods as a result of having achieved annual profits above or below levels set by the regulator. Customer tariffs for very high voltage, high voltage and medium voltage are subject to quarterly adjustments, primarily to accommodate changes in fuel prices. For more information on the tariff adjustment, you should read Distribution Customers and sales, Operating and Financial Review and Prospects and note 39(p) to the consolidated financial statements.

#### COMPETITION

Until 1988, we had a monopoly for the generation, transmission and distribution of electricity in Portugal, although a very small number of municipalities distributed low voltage electricity to consumers. Since 1988, measures have been taken to encourage limited competition in power generation in Portugal. In 1999, the regulator implemented measures to encourage competition in the supply of electricity in Portugal. For more information on these measures, you should read Electricity System Overview. In addition, as a result of political and regulatory developments, especially within the context of the creation of MIBEL, we expect increased competition from Spanish electricity companies.

In December 2003, four qualified suppliers were authorized to operate in the Portuguese non-binding system, three of which are Spanish companies: Endesa Energia, S.A.; Iberdrola, S.A.; Union Fenosa Comercial; Sodesa Comercialização de Energia, S.A. See Iberian Electricity Market, Spain History and Overview below and Regulation.

#### Generation

The existing power stations of CPPE, which in 2003 formed 89% of our generating capacity, are all part of the Public Electricity System. The earnings that CPPE derives from these power stations are unlikely to be affected by competition from generators in the Independent Electricity System. In accordance with the terms of the PPAs, CPPE s operating income is dependent on the availability of capacity and is substantially unaffected by levels of actual output. Under Portuguese law, any projects for construction of new thermal power plants in the Public Electricity System must be subject to an open tender coordinated by DGGE. In the case of hydroelectric generation, all plants planned to be commissioned until 2010 are allocated by law to CPPE.

The Public Electricity System includes two power stations that are not owned and operated by us: the Pego power plant, which was constructed and commissioned by us and later sold to Tejo Energia; and Tapada do Outeiro

47

#### **Table of Contents**

which commenced full operations in 1999 and is owned and operated by Turbogás. The admission of these power stations to the Public Electricity System resulted from two international tender processes coordinated by us in accordance with Portuguese government policy in effect at that time to establish competitive practice in the electricity generation sector. We expect to participate in future tender processes.

Subject to the issuance of generation licenses, we may construct plants that will operate in the Independent Electricity System, such as the TER CCGT plant. The first unit of the TER CCGT plant entered commercial service in early 2004. The two remaining units are expected to start operating in October 2004 and March 2006, respectively.

New plants in the Independent Electricity System will operate in the openly competitive market and sell power to REN under competitive offers or make bilateral contracts with REN, Non-Binding Sector customers, Binding Sector distributors or Spanish agents.

Because Portugal is contiguous only with Spain and there are limited connections between Spain and the rest of Europe, and because of recent political, legal and regulatory developments, management expects that a regional market on the Iberian Peninsula will develop. In January 2004, the Portuguese and Spanish governments signed a final agreement for the creation of the Iberian electricity market, which agreement was approved by the Portuguese parliament under Resolution no. 33-A/2004 of April 20, 2004 and ratified by the President of Portugal under Decree law no. 19-B/2004 of April 20, 2004. This agreement calls for, among other things, the harmonization of tariff structures, and the creation of a common pool for Portugal and Spain to be fully implemented in 2006. See Iberian Electricity Market and Spain. Accordingly, we expect to face increased competition in generation and wholesale supply from Spanish participants in the market.

#### Transmission

As the sole provider of transmission throughout Portugal, REN is well insulated from the effects of competition. In its role as the wholesale buyer and seller of electricity in the Public Electricity System, it is entitled to recover the electricity purchase costs via the Bulk Supply Tariff charged to EDPD for electricity destined for Public Electricity System customers. In the Non-Binding Sector, however, EDPD is permitted to purchase electricity from sellers other than REN, up to limits set by the regulator. For more information on these purchases, you should read Distribution below.

#### Distribution

EDPD, and previously, our distribution companies, have historically held an effective monopoly over distribution. However, increases in the levels of industrial auto production have reduced the amount of electricity sold to these entities from the Public Electricity System. In addition, in early 1999, the regulator implemented legislation liberalizing the electricity supply business.

As of May 15, 2003, all Eligible Consumers automatically may become Qualifying Consumers. In 2003, the total number of Eligible Consumers represented approximately 45% of demand in mainland Portugal in volume terms. If Eligible Consumers elect to become Qualifying Consumers, EDPD will continue to receive two of the three tariff components relating to distribution. For more information on the tariff mechanism, you should read Regulation Portugal Electricity pricing/tariffs. Since February 2004, Eligible Consumers include special low voltage consumers. The full liberalization of the electricity market is expected to be completed in July 2004 with the opening of the market to the rest of the low voltage consumers.

### **SPAIN**

### HISTORY AND OVERVIEW

The implementation of an Iberian Electricity Market is the driving force behind our decision to expand our operations to Spain. In 2001 we identified Hidroeléctrica del Cantábrico, or Hidrocantábrico, as an independent utility company that could facilitate our entry into the Spanish energy market.

48

#### **Table of Contents**

In January 2001, Adygesinval, S.L., a company jointly and equally owned by us and Cajastur Caja de Ahorros de Asturias, a Spanish savings bank, launched an unconditional cash public tender offer for 100% of the outstanding shares of Hidrocantábrico at 24 per share. Cajastur and Cáser Caja de Seguros Reunidos, Compañía de Seguros y Reaseguros, S.A., a Spanish insurance company, already held 14.97% of the shares of Hidrocantábrico. Adygesinval acquired a 19.2% shareholding in Hidrocantábrico directly from TXU Europe, an arm of the United States utility TXU Corp., for 24 per share, or approximately 522 million. Spanish industrial group Ferroatlantica, together with Energie-Baden-Württemberg AG, or EnBW, a German utility company, launched a rival tender offer for Hidrocantábrico shares. After the tender offers for Hidrocantábrico were completed in April 2001, a consortium formed by Adygesinval, Cajastur and Cáser owned approximately 35% of the shares of Hidrocantábrico, of which only shares representing 25% could vote because Hidrocantábrico s by-laws limit the voting rights of any single shareholder to 10%. Advgesinval could exercise 10% of the voting rights, Cajastur could exercise approximately 10% of the voting rights and Cáser could exercise approximately 5% of the voting rights. Ferroatlantica and EnBW owned approximately 60% of the shares and could exercise 10% of the voting rights of Hidrocantábrico. Pursuant to a Spanish merger law, Adygesinval and Ferroatlantica each notified the European Commission, or EC, of their respective acquisitions of Hidrocantábrico shares. The EC approved both the Adygesinval transaction and the Ferroatlantica/EnBW transaction, although with respect to the Ferroatlantica/EnBW transaction the EC required certain covenants from EnBW s controlling shareholder. Pursuant to a Spanish law aimed at shareholdings by state-linked businesses in certain sectors, the Spanish government temporarily suspended the political rights (including shareholder voting and rights to inspect corporate records) of Adygesinval and Ferroatlantica/EnBW pending the outcome of a procedure under this law, the purpose of which is to determine whether an acquiror is controlled by a government entity. These suspensions were both lifted subject to certain conditions, which in the case of Adygesinval were linked to the creation of an Iberian electricity market.

In December 2001, we signed an agreement with EnBW, Cajastur and Cáser concerning joint control of Hidrocantábrico through Adygesinval. Ferroatlantica transferred its holdings in Hidrocantábrico to EnBW at the time of the agreement. Under the agreement Adygesinval merged into Hidrocantábrico. The agreement also contains provisions for the corporate governance of Hidrocantábrico. The agreement of all parties is required for specified key corporate actions. Operational matters require only the consent of us and EnBW. In the event of a deadlock concerning operational matters, we would ultimately be able to decide the course of action, but EnBW would have a right to require us to purchase its shares in Hidrocantábrico in such an event. The appointment of Hidrocantábrico s chief executive officer, chairman and the secretary of the board of directors requires agreement of all three parties. If agreement cannot be reached, we will designate the chief executive officer, Cajastur will appoint the chairman and EnBW will appoint the secretary of the board of directors. The EC s Merger Task Force approved the agreement in early March 2002. One of the conditions to the transactions contemplated by the agreement, the delisting of Hidrocantábrico shares from the Madrid, Barcelona and Bilbao Stock Exchange, was completed in June 2002. Hidrocantábrico is currently 39.52% owned by us, 34.58% owned by EnBW and 24.70% owned by Cajastur and Cáser. The remaining 1.20% comprises shares owned by other shareholders and own shares held by Hidrocantábrico.

In March 2003, Hidrocantábrico won the auction privatization process that led to its acquisition of 62% of Naturcorp. Subsequently, Naturcorp reorganized its gas holdings as a result of which a minority shareholder in Gas de Euskadi, another gas company controlled by Hidrocantábrico, exchanged its holding for shares in Naturcorp such that 100% of Gas de Euskadi was integrated into the Naturcorp group and Hidrocantábrico s ownership of Naturcorp decreased from 62% to 56.8%. As part of this reorganization, Gas Natural, the minority shareholder in Gas de Euskadi, a subsidiary of Naturcorp, exchanged its 20.5% stake in Gas de Euskadi for a stake in Naturcorp. As a result of the reorganization of Naturcorp, Hidrocantábrico has become the second largest gas company in the Spanish market, with more than 500,000 customers and approximately 10% of Spain s regulated revenues for gas distribution, or 8% of GWh of gas distributed.

#### Market Structure

The two major characteristics of the Spanish electricity sector are the existence of the wholesale Spanish generation market, or the Spanish pool, and the fact that any consumer is free to choose its supplier as of January 1, 2003. Competition was first introduced in the Spanish electricity market on January 1, 1998 by Law 54/1997, which provided a regulatory framework that reorganized the functioning of the market.

Generation facilities in Spain operate either in the ordinary regime or the special regime. Special regime generators, which comprise cogeneration and renewable energy facilities of up to 50 MW may sell their net electricity output to the system either (i) at tariffs fixed by decree, or at tariffs linked to pool prices plus a premium, that vary depending on the type of generation and are generally higher than Spanish prices, or (ii) in the Spanish pool (or by bilateral contracts) together with certain premiums and incentives. Ordinary regime generators provide electricity to the Spanish pool and by bilateral contract to consumers and liberalized suppliers at market prices.

Companies with the capability to sell and buy electricity may participate in the Spanish pool. Electricity generators sell electricity in the pool and the regulated electricity distributors, suppliers in the liberalized, or unregulated, market and consumers that are permitted to participate in the pool, or qualified consumers, buy electricity in this pool. Foreign companies or consumers that have foreign agent status may also sell and buy in the Spanish pool. The market operator and agency responsible for the market s economic management and bidding process is Compañía Operadora del Mercado Español de Electricidad, or OMEL.

In addition to selling electricity to regulated consumers (customers that are subject to a regulated final tariff and are not qualified consumers), transmission companies and regulated distributors must provide network access to all suppliers and qualified consumers that have chosen to be supplied in the liberalized market. However, qualified consumers must pay an access tariff to the distribution companies if such access is provided. At the beginning of each year, the Spanish government sets both the final and access tariffs. By Royal Decree no. 1802/2003, the Spanish government established the electricity tariffs for 2004. For more information on tariffs, you should read Regulation Spain Electricity Regulation.

Liberalized suppliers are free to set a price to qualified consumers. These entities main direct activity costs are the wholesale market price and the regulated access tariffs to be paid to the distribution companies. Electricity generators and liberalized suppliers or consumers may also engage in bilateral contracts without participating in the wholesale market.

#### **GENERATION**

Hidrocantábrico s installed capacity represents 4.7% of Spain s mainland generation capacity, or 5.5%, excluding special regime facilities (which are generally cogeneration and renewable energy facilities). In 2003, Hidrocantábrico had a total installed capacity of 2,820 MW, approximately 56.9% of which are coal-fired facilities, 13.9% a CCGT facility, 16.1% hydroelectric facilities, 1.3% cogeneration facilities and 5.9% renewable energy facilities other than special regime hydroelectric. Hidrocantábrico also holds a 15.5% interest in the Trillo nuclear power plant that accounts for 165 MW of the plant s total installed capacity of 1,066 MW.

The following table sets forth Hidrocantábrico s total installed capacity by type of facility at year-end 2001, 2002 and 2003.

			As of December 31,			
Type of facility		2001	2002	2003		
			(MW)			
Hydroelectric						
Hydroelectric	Ordinary regime	408	413	432		
Hydroelectric	Special regime)	23	23	23		

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Total hydroelectric	431	436	455
Thermal:			
Coal	1,588	1,588	1,605
CCGT	0	393	393
Nuclear	165	165	165
Total Thermal	1,753	2,146	2,163
Cogeneration <sup>(2)</sup>	38	41	37
Wind <sup>(2)</sup>	24	30	129
Biomass <sup>(2)</sup>	3	5	6
Waste <sup>(2)</sup>	13	13	30
Total	2,262	2,671	2,820

<sup>(1)</sup> Includes 19.15 MW related to Hidrocantábrico s 48.86% stake in Hidraulica de Santillana (39.2 MW).

<sup>(2)</sup> In the case of projects owned by SINAE, these figures represent SINAE s stake in each project s installed capacity. Hidrocantábrico owns 80% of SINAE.

The following table sets forth Hidrocantábrico s thermal plants.

	Installed capacity		Year entered into
Thermal plants	(MW)	Fuel	service
Coal			
Aboño			
Unit I	366	Coal	1974
Unit II	556	Coal	1985
Soto de Ribera			
Unit I	68	Coal	1962
Unit II	254	Coal	1967
Unit III	361	Coal	1984
Nuclear			
Trillo	165	Uranium	1988
CCGT			
Castejón	393	Natural Gas	2002
Total installed capacity	2,163		

The following table sets forth Hidrocantábrico s hydroelectric plants in the ordinary regime:

Hydroelectric plants	Installed capacity (MW)	River reservoir plant type	Year entered into service	Year of last major refurbishment
La Malva	9.14	Reservoir	1917/24	2002
La Riera	7.83	Run of river	1946/56	2001
Miranda	73.19	Run of river	1962	2000
Proaza	50.33	Reservoir	1968	2002
Priañes	18.50	Reservoir	1952/67	2003
Salime	78.99	Reservoir	1954	2003
Tanes	125.46	Reservoir	1978	1995
La Barca	55.72	Reservoir	1967/74	2002
La Florida	7.60	Reservoir	1952/60	1998
Laviana	1.10	Run of river	1903	2001
Caño	1.00	Run of river	1928	1996
San Isidro	3.12	Run of river	1957	2002
Total installed capacity	431.98			

The average remaining useful life of Hidrocantábrico s hydroelectric generation plants is approximately 47 years.

Since hydroelectric generation is dependent on hydrological conditions, for forecasting model purposes the estimated Hidrocantábrico hydroelectric production based on current installed capacity in an average year is 806 GWh, ranging from a maximum of 1,058 GWh in a wet

year to a minimum of 590 GWh in a dry year.

Generation activity in 2003 was characterized by high availability and efficiency of, and high production by, Hidrocantábrico s power plants, together with lower pool prices than in 2002 due to the higher hydro availability in the Spanish power system. Hidrocantábrico s generation in the ordinary regime, excluding its own or ancillary consumption, rose 4.8% from 13,503 GWh in 2002 to 14,155 GWh in 2003, of which hydroelectric generation represented 861 GWh, an increase of 11.7% from 2002. Coal-fired thermal generation amounted to 10,491 GWh in 2003, a reduction of 4.6% from 2002 due to a wet year. Nuclear generation, in respect of the 15% stake in the Trillo plant, amounted to 1,257 GWh in 2003, an increase of 3.7% from 2002. Natural gas-fired thermal generation amounted to 1,546 GWh in 2003, a threefold increase from 2002 due to the full-year operation, in 2003, of the new Castejón CCGT that commenced electricity production in October 2002.

51

The following table summarizes Hidrocantábrico s electricity generation for 2001, 2002 and 2003, excluding losses at generation plants and Hidrocantábrico s own or ancillary consumption, and sets forth the hydroelectric coefficient at year-end 2001, 2002 and 2003.

		Year ended December 31,				
Type of facility		2001	2002	2003		
		(in GWh, excep	t by hydroelectric co	efficient factor)		
Hydroelectric	:					
Hydroelectric	Ordinary regime)	867	771	861		
Hydroelectric	Special regime	78	41	86		
Total hydroele	ctric	945	812	947		
Thermal:						
Coal		9,832	10,997	10,491		
Natural Gas		0	522	1,546		
Nuclear(2)		1,222	1,212	1,257		
Cogeneration		78	110	114		
Total thermal		11,132	12,841	13,408		
Wind		59	61	119		
Biomass		24	28	32		
Waste		11	44	81		
Total		12,161	13,786	14,587		
Hydroelectric o	coefficient <sup>(3)</sup>	1.080	0.96	1.068		

<sup>(1)</sup> Includes the following amounts of consumption for hydroelectric pumping: 140 GWh in 2001, 131 GWh in 2002 and 127 GWh in 2003.

The average availability for production of Hidrocantábrico s power plants increased from 94.21% in 2002 to 95.68% in 2003 for thermal plants and decreased from 89.26% in 2002 to 87.71% in 2003 for hydroelectric plants. Hidrocantábrico s forced outages in 2003 were 1.58% at thermal plants and 1.88% at hydroelectric plants.

The table below sets out for each type of Hidrocantábrico generating facility the average capacity utilization and the average availability factor for 2002 and 2003.

	Average capacity utilization <sup>(1)</sup> Year ended December 31,			Average availability factor Year ended December 31,		
Type of facility	2001	2002	2003	2001	2002	2003
Hydroelectric Thermal:	24.56%	21.66%	23.12%	93.21%	89.26%	87.71%

<sup>(2)</sup> Corresponding to 15% of Trillo s generation.

The hydroelectric coefficient varies based on the hydrological conditions in a given year. A hydroelectric coefficient of one corresponds to an average year, while a factor less than one corresponds to a dry year and a hydroelectric coefficient greater than one corresponds to a wet year.

Coal	74.97%	83.79%	78.75%	93.80%	93.94%	95.73%
Natural gas <sup>(2)</sup>	0%	47.31%	46.55%	0%	97.19%	96.26%
Nuclear	90.35%	89.57%	92.95%	90.67%	89.66%	93.85%
Total weighted average thermal <sup>(3)</sup>	76.42%	81.75%	73.98%	93.51%	94.21%	95.68%

<sup>(1)</sup> The average capacity utilization is defined as actual production as a percentage of theoretical maximum production.

Although Hidrocantábrico experienced increased production and plant efficiency, in terms of plant availability, in 2003, prices decreased in the Spanish electricity market due to very favorable hydrological conditions. This led to increased hydroelectric production, which adversely affected operating results of Hidrocantábrico s generation activity in 2003.

52

<sup>(2)</sup> Hidrocantábrico s natural gas fueled CCGT plant began operations in 2002.

<sup>(3)</sup> Weighted average is based on total installed capacity of the thermal system.

Planned outages in 2003 occurred as a result of maintenance on the Aboño Unit 1, Soto Unit 2 and Castejón power plants, as well as a refueling outage in the Trillo nuclear power plant. Hidrocantábrico s generation facilities benefited from several environmental improvements and equipment upgrades. Hidrocantábrico has improved its systems and management procedures through the integration of several functions and processes, including technical, administrative and purchasing processes.

Thermal generation consumed 3,865 thousand metric tons of coal in 2003, 73.4% of which was imported and 26.6% domestic. Fuel consumption costs including transportation amounted to 211 million in 2003 and 198.4 million in 2002, representing approximately 79.6% and 77.3%, respectively, of Hidrocantábrico s total consolidated operating expenses. Despite the fact that 2003 was a wetter year than 2002, Hidrocantábrico s fuel costs increased due to the full-year operation in 2003 of Hidrocantábrico s new CCGT plant at Castejón that started commercial operation in September 2002. Castejón s gas cost was the main cause of the fuel cost increase that occurred during 2003.

As a result of its increased thermal production, Hidrocantábrico s market share in the Spanish pool rose from 7.5% in 2002 to 7.6% in 2003. Hidrocantábrico generating plants sell all their electricity output into the Spanish pool at very competitive prices.

In 2003, capital expenditures on generating facilities amounted to 93.9 million, an increase of 8.18% from 2002. These expenditures are set forth below.

	Year e	ended December 31,		
Plant type and status	2001	2002	2003	
	(tho	usands of EU	s of EUR)	
Hydroelectric plants in operation	1,106	1,428	2,107	
Thermal plants in operation	9,801	65,082	20,151	
Plants under construction	101,776	0	0	
Special regime: <sup>(1)</sup>				
Hydroelectric plants in operation	3	2	0	
Wind	6,147	16,264	49,047	
Waste	698	2,067	3,500	
Biomass	2,194	1,120	350	
Cogeneration facilities	1,339	814	18,720	
Total Generation	123,064	86,777	93,875	

<sup>(1)</sup> Excludes capital expenditures of H. Santillana, a company in which we hold in minority stake. Data corresponding to SINAE, an 80%-owned subsidiary of Hidrocantábrico, represents 100% of capital expenditures of SINAE and its subsidiaries.

Hidrocantábrico is planning to develop three CCGT plants as set forth in the table below:

Facility	Type of generation	Developing entity	Planned capacity (MW)	Target year	Status
Soto	CCGT	Contratación de Construcción y Servicios	400	2007	Licensing Process

Castejón 2	CCGT	Contratación de Construcción y Servicios	400	2006	Licensing Process
Cadiz	CCGT	Contratación de Construcción y Servicios	400	2008	Licensing Process

#### Special regime generation

Special regime generation is developed by Hidrocantábrico through Genesa, a 100%-owned subsidiary mainly focused on cogeneration, and SINAE, an 80%-owned subsidiary mainly focused on renewable energy. Throughout 2003, Hidrocantábrico worked on the restructuring of SINAE s shareholdings, SINAE s industrial activities and SINAE s reorganization, with the objective of providing the basis for stable and sustained development of SINAE, with a focus on the promotion, operation and management of renewable energy sources, mainly wind power. In 2002 and 2003, delays in the launching of some projects resulted in a lower contribution than previously anticipated from Hidrocantábrico s renewable energy business, as did the high natural gas prices that reduced cogeneration margins, one of the main activities of this business.

During 2003, we commenced the construction of the 124 MW Campollano wind farm in Albacete. The construction of the 65 MW Parques Eólicos del Cantábrico in Asturias (including the Cuesta 8MW, the Los Lagos 39 MW and the Acebo 18MW wind farms) and the 34 MW Parque Eólico Arlazón wind farm in Burgos were concluded and all commenced operations in 2003, with the exception of the Acebo wind farm, which went into production in January 2004. Additionally, the 20MW Sierra del Cortado wind farm began operating in 2003. The waste plant of Sinova at Soria, with an installed capacity of 16.3 MW, started operations at the end of 2003.

Hidrocantábrico is planning to develop the following wind farms:

	Type of	Planned Capacity	Target	
Facility	Generation	(MW)	Year	Status
P.E. Cruz del Hierro (improvements)	Wind	5.3	2004	In construction
P.E. Albacete	Wind	124.1	2004	In construction
P.E. Madero (improvements)	Wind	33	2005	Planning
P.E. Curiscao-Pumar	Wind	87.8	2005	Planning
P.E. Brújula	Wind	73.5	2005	Planning
P.E. Las Lomillas	Wind	49.5	2005	Planning
P.E. Carondio	Wind	41.6	2006	Planning
P.E. Avila Oeste	Wind	68.0	2006	Planning
P.E. Munera I & II	Wind	70	2006	Planning
P.E. Medinaceli	Wind	40	2007	Planning
P.E. Avila Oeste	Wind	68.0	2007	Planning
P.E. Burgos Este	Wind	111	2007	Planning
P.E. San Roque	Wind	24	2008	Planning
P.E. La Dehesica	Wind	28	2008	Planning

### DISTRIBUTION AND SUPPLY

### **Electricity Distribution**

Hidrocantábrico has a network infrastructure that covers the regions of Asturias (accounting for the vast majority of its network), Valencia, Madrid and Alicante, totaling 19,147 km as follows:

Distribution lines	Km
Overhead lines:	
High voltage (50/132kV)	1,211
Medium voltage (5/10/16/20/22/24 kV)	4,493
Low voltage (<1kV)	11,089
Total overhead lines	16,793
Underground cables:	
High voltage (50/132kV)	7
Medium voltage (5/10/16/20/22/24 kV)	919
Low voltage (1kV)	1,428

Total underground cables	2,354
	<del></del>
Total	19,147

Electricity distributed in 2003 through Hidrocantábrico s own network amounted to 8,659 GWh, a 3.4% increase from 2002 levels. As of December 31, 2003, Hidrocantábrico had 561,208 customers, representing a 2.2% increase from 2002 and includes 1,468 qualified consumers that previously had been supplied by non-regulated suppliers. Since January 1, 2003, every consumer in Hidrocantábrico s market can elect to be supplied by non-regulated suppliers.

In 2003, the volume of electricity distributed and the number of customers by voltage level was as follows:

#### 2003 Sales and Customers

Distribution by level of voltage	GWh	% annual increase (decrease) from 2002	Total customers
High and very high voltage <sup>(1)</sup>	5,520	0%	19
Medium voltage <sup>(2)</sup>	991	19%	690
Low voltage <sup>(3)</sup>	2,148	6%	560,499
Total	8,659	3%	561,208

<sup>(1)</sup> High voltage is greater than 36 kV and less than or equal to 145 kV. Very high voltage is greater than 145 kV.

During 2003, Hidrocantábrico s distribution business, Hidrocantábrico Distribución Eléctrica, S.A.U., continued its expansion outside of Asturias in the autonomous communities of Madrid, Valencia and Alicante, all of which are geographic areas with strong economic activity. The operating results of the distribution business in 2003 increased from 2002 as a consequence of connecting new substations in Valencia and Alicante, which also reduced the initial launching activity expenses outside of Asturias.

In 2003, Hidrocantábrico continued to improve technical and operational management activities. The networks and facilities were enlarged and Hidrocantábrico continued the development of information technology and automation of the distribution network.

#### **Gas Distribution**

Gas invoiced in 2003 to the regulated market amounted to 4,370 GWh, representing a 199% increase from 1,464 GWh in 2002, due to the contribution of Naturcorp. Additionally, the volume of gas distributed in the liberalized market (in which we provide third party access to our network) reached 5,257 GWh. The total number of gas consumers that are connected to Hidrocantábricos distribution network increased from 157,051 in 2002 to 542,794 in 2003. The acquisition of Naturcorp added 372,364 customers. Hidrocantábricos gas distribution activities revenues of 157.0 million in 2003 compared with 55.6 million in 2002, the increase primarily reflecting the acquisition of Naturcorp.

### **Electricity and Gas Supply**

The energy supply activity performed by Hidrocantábrico Energía, S.A.U., or Hidrocantábrico Energía, includes the supply of electricity to qualified consumers. Hidrocantábrico Energía invoiced 4,712 GWh of electricity supply in 2003, with revenues of 394.3 million in 2003, compared to 241.8 million in 2002. This figure represents 6.5% of the liberalized market. More than 74% was supplied outside of Hidrocantábrico s traditional market.

<sup>(2)</sup> Medium voltage is greater than or equal to 1 kV and less than or equal to 36 kV.

<sup>(3)</sup> Low voltage is less than 1 kV.

In 2003, Hidrocantábrico Energía successfully participated in the annual auction of the RENFE electricity contract, the Spanish railroad and the biggest electricity consumer currently in the market. Hidrocantábrico Energía won 28% of the 2003 and 2004 supply contracts.

In 2003, Hidrocantábrico Energía continued its natural gas supply service that began in 2002. Since August 1, 2003, Naturcorp has been included in reported results of gas supply. Taking Naturcorp into account, Hidrocantábrico has entered into 474 contracts and invoiced 5,711 GWh.

#### OTHER ACTIVITIES

#### Telecommunications

In 2003, Hidrocantábrico s cable telecommunications business continued its development through two subsidiaries, which are the concessionaires of television, fixed line telephony and internet for Asturias, Telecable de Asturias, S.A.U., or Telecable, and for Castilla y León, Retecal, Sociedad Operadora de Telecomunicaciones de Castilla y León, S.A., or Retecal. Telecable is 100%-owned by Sociedad Promotora de las Telecommunicaciones en Asturias, S.A., which is 49.95%-owned by Hidrocantábrico. Retecal is 34.96%-owned by Hidrocantábrico.

55

#### **Table of Contents**

As of December 31, 2003, there were a total of 732,700 cabled homes and 189,982 customers for both subsidiaries, an increase of 17% from 2002. Telecable adopted a new network technology that allows voice over Internet Protocol (VoIP) services, deployed a television infrastructure improving image and sound quality, rolled out its cable network to the city of Pravia and moved its technical teams to its new headquarters at the Gijón City Technological campus.

Hidrocantábrico increased its shareholding position in Retecal from 30.99% in 2002 to 34.96% in 2003, as a consequence of a share exchange of its participation in TV Castilla-León, which resulted in receipt of additional Retecal shares. The transmission network among its 17 urban networks was finished, as was the fiber optics interconnection between León and Oviedo. Telecable revenues were 49.1 million in 2003, compared to 35.5 million in 2002. Retecal revenues were 49.6 million in 2003, compared to 45.9 million in 2002.

### **Research and Development**

Research and development activities carried out in 2003 were aimed at the reduction of emissions, treatment of by-products, maintenance and the extension of equipment life at various plants and were conducted in coordination with various universities and industry groups and were partially subsidized by the Spanish government and European Union entities.

#### **BRAZIL**

### **OVERVIEW**

Brazil s electricity industry is organized into one large interconnected electricity system, which is known as the Sistema Interligado Nacional, or the Brazilian SIN, comprised of electricity companies in the southern, southeast, central-western, northeast and parts of the northern regions of Brazil, and several other small, isolated systems. Generation, transmission, distribution and supply activities are legally separated in Brazil.

In 2003, Brazil had a total installed capacity of 77,321 MW, of which approximately 86% was hydroelectric and 14% was thermoelectric. In addition, in order to satisfy its electricity requirements, Brazil imported 8,078 MW of electricity in 2003. Centrais Elétricas Brasileiras S.A. Eletrobrás, or Eletrobrás, a company controlled by the Brazilian government, owns approximately 32.57% of the installed generating capacity within Brazil. Eletrobrás has regional subsidiaries responsible for generation and transmission of electricity: Centrais Elétricas do Norte do Brasil S.A. Eletronorte and Companhia Hidroelétrica do São Francisco CHESF in the north and northeast of Brazil, Furnas Centrais Elétricas S.A. in the southeast and central-west of Brazil and Centrais Elétricas do Sul do Brasil S.A. Eletrosul in the south of Brazil. In addition, Eletrobrás controls Eletrobrás Termonuclear S.A. Eletronuclear.

In addition to the government-owned entities at the federal level, certain Brazilian states have government-owned entities involved in the generation, transmission and distribution of electricity. They include among others, Companhia Energética de São Paulo CESP, Companhia Paranaense de Energia COPEL and Companhia Energética de Minas Gerais CEMIG. With regard to distribution activity, most of the former state-owned companies were privatized and in 2003 private companies distributed more than 70% of the distributed electricity in Brazil.

Our electricity operations in Brazil consist of distribution, generation and related activities. The following of our Brazilian subsidiaries are engaged in distribution:

Bandeirante Energia S.A., or Bandeirante, in São Paulo;

Espirito Santo Centrais Eléctricas S.A., or Escelsa, in the state of Espirito Santo; and

56

#### **Table of Contents**

Empresa Energética do Mato Grosso do Sul S.A., or Enersul, in the state of Mato Grosso do Sul.

In generation, we participate in the following companies:

FAFEN Energia S.A. in the state of Bahia;

Investco (Lajeado plant) in the state of Tocantins, through EDP Lajeado S.A.; and

Enerpeixe S.A. (under construction), in the state of Tocantins.

Our related businesses comprise our trading businesses, which are concentrated in Enertrade S.A.

In recent years the electricity sector in Brazil has been adversely affected by internal and external economic circumstances related to Brazil in general and by problems specific to the electricity sector. The Brazilian economy was affected by the worldwide economic slowdown in recent years and, in 2002, uncertainty inside and outside Brazil surrounding the October presidential elections. As a result, there was a sharp depreciation in the value of the real against other major currencies and increases in Brazilian inflation and interest rates. These conditions led to a scarcity of financing sources, which adversely affected the industrial sectors of the Brazilian economy including the electricity sector.

In addition to these adverse economic circumstances, in recent years electric utility companies in Brazil have had to contend with a government imposed rationing program that was in effect from June 2001 until February 2002, low wholesale prices in the wholesale electricity market, or the MAE, and uncertainties regarding the electricity sector s regulations and framework.

As a result of a shortage of electricity, the Brazilian federal government implemented an electricity rationing plan in June 2001. Although the rationing program ended on February 28, 2002, its implementation had an adverse effect not only on electricity consumption, which decreased significantly during the period the program was in effect, but also on consumption habits in affected areas. The lower demand from consumers has affected and we expect it to continue to affect demand for electricity from our distribution businesses in Brazil. In addition, 2003, like 2002, was characterized by very favorable hydroelectric conditions, creating increased supply that, combined with continuing low demand, severely depressed prices on the MAE. There continued to be uncertainties about electricity sector regulations and framework in 2003 due to the new programs recently implemented by the new administration and the lack of an existing stable and consistent legal framework. Additionally, strict fiscal and monetary policies adopted during 2003 slowed economic activity. Industrial activity increased only 0.3% in 2003 compared to an increase of 2.5% in 2002, driven mainly by the export sector.

Despite the adverse circumstances in the Brazilian electricity sector in 2003, there were positive developments, principally due to favorable changes in macroeconomic indicators, most notably the inflation and exchange rates. In 2003, a widely-used measure of inflation, IGP-M, was 8.71%, compared to 25.31% in 2002. The exchange rate of the Brazilian real appreciated 18% against the U.S. dollar, reaching 2.89 reais per U.S. dollar at the end of 2003, compared to 3.53 reais at the end of 2002. In relation to the euro, the exchange rate appreciated 2%, reaching 3.64 reais at the end of 2003. Domestically, the main factors influencing the movement of these indicators were the adherence to a strict inflation targets policy, the agreement of primary surplus levels with the International Monetary Fund, or IMF, and a surplus in the trade balance, which achieved a record surplus of \$24.8 billion in 2003. In order to reach the inflation targets, the Brazilian Central Bank increased the local interest rate (SELIC) at the beginning of 2003, reaching 26.5% in the first half of 2003. Lower inflation expectations led the government to adopt a gradually decreasing interest rates policy, with rates decreasing to 16.5% by the end of 2003. The movement of these indicators was also supported by high liquidity in global financial markets, caused by low interest rates in developed economies, which resulted in an increased

capital flow to Brazil. Additionally, economic growth experienced by major commercial partners of Brazil (namely the United States of America, China and Argentina) led to increased Brazilian exports in 2003.

In 2003, the main events affecting the Brazilian electric utility industry were: (i) the macroeconomic turnaround in the country; (ii) the good hydrological conditions in the main consumption markets (except the Northeast region);

57

#### **Table of Contents**

(iii) the substantial increase in the installed capacity, mainly due to investments started in the previous periods; and (iv) the moderate consumption growth despite the nearly zero economic growth. As a result, the electric sector in 2003 was characterized by energy oversupply. While the installed capacity increased on average 5% from 2000 to 2003, the consumption in 2003 was lower than in 2000.

In order to regulate excess energy generation in 2003 and to reestablish the revenues previously projected by distributors, the Ministry of Mines and Energy, or MME, released a proposal in mid-2003 presenting an outline of the New Energy Sector Model for discussion with industry, the public and government. In March 2004, the Brazilian government enacted the New Electricity Industry Model Law that redefined the major guidelines of the Brazilian energy sector.

The New Electricity Industry Model Law is intended to reform the Brazilian electricity market by increasing the role of private investment and eliminating barriers to foreign investment, especially in generation, in order to increase overall competition in the electricity industry. Additionally, it significantly changed the regulatory structure of this industry by expanding the oversight of the MME over the entire electricity sector. The scope of these changes to Brazil s regulatory system have yet to be completely defined, as several important aspects of the regulation have yet to be implemented by means of additional regulation. For more information on the regulation of the Brazilian electricity sector and the New Electricity Industry Model Law, you should read Regulation Brazil.

We continue to carry out a restructuring plan in Brazil. On October 31, 2002, we completed the first stage of the restructuring, which put the following companies under direct control of EDP Brasil S.A., our holding company for Brazil, or EDP Brazil: Energest S.A., Enertrade Comercializadora de Energia S.A., Bandeirante Energia S.A., EDP Lajéado S.A., FAFEN Energia S.A. and Enerpeixe S.A. On December 31, 2003, EDP Brazil took the control of IVEN S.A., or IVEN, the company that directly controls Escelsa and indirectly controls Enersul. In connection with this process, EDP Brazil merged Calibre Participações S.A., 135 Participações S.A., EDP 2000 Participações Ltda, and EDP Investimentos Ltda. Following the reorganization of the IVEN holding, EDP Brazil owns a 69.55% stake in the voting shares and a 23.99% stake in IVEN s total capital. The main goals of this transaction were to simplify the shareholding structure and to eliminate tax inefficiencies. In furtherance of our Brazilian shareholding restructuring process, we expect EDP Brazil to take control of the remaining shares of IVEN owned by EDP Group during 2004.

Another action taken was the merger of Enerpro into Energest, consolidating in Energest all activities concerning the development and implementation of generation projects, and also engineering, operation and maintenance services for the generation business units in Brazil.

On December 30, 2003, Investco, a company that operates the Lajeado plant and of which EDP Lajeado owns 14.36% of the shares and 27.65% of voting rights, did not redeem part of the Redeemable Shares Class R from Eletrobras scheduled to be redeemed at that time because it did not have sufficient retained results from previous years as required under Brazilian Law. Discussions are under way between Investco and Eletrobras in order to find alternatives to resolve the situation. The shares not redeemed amount to approximately 150 million reais ( 39.2 million).

In 2003, EDP Brazil recorded provisions related to its investments in EDP Lajeado and FAFEN Energia. Enersul also wrote off 22 million reais (7 million at the time of the charge) relating to the market value of its gas turbine.

In the case of FAFEN Energia, EDP Brazil recorded a provision of 139 million reais ( 40 million at the time of the charge) due to the unlikelihood of FAFEN Energia to sell energy at prices equivalent to the normative value for thermal plants, i.e., the regulated tariff for electricity from thermal plants. When the decision was made to invest in the FAFEN Energia plant, electricity price estimates were based on the normative value for thermal plants. In 2002, Bandeirante and FAFEN Energia signed a PPA based on such estimated value. The PPA was subject to approval by ANEEL, which was denied because FAFEN Energia had not complied with all of the conditions set out in Brazil s

Thermal Plant Priority Program, which provides for the sale of electricity at the normative value for thermal plants. Subsequently, FAFEN Energia and Bandeirante entered into a new PPA. The new PPA uses as a reference, in accordance with conditions set by ANEEL for its approval, the normative value of hydroelectric plants, which is considerably lower than the price previously expected. The new PPA has not yet been approved by ANEEL. As a result of the foregoing, EDP Brazil recorded a provision for future losses.

#### **Table of Contents**

With regard to EDP Lajeado, EDP Brazil recorded a provision of 90 million reais ( 26 million at the time of the charge). EDP Brazil s trading company, Enertrade, entered into a PPA to acquire electricity produced by the Lajeado plant and entered into PPAs with EDP Brazil s distribution companies with respect to such electricity. At the time these PPAs were entered into, the electricity price permitted under tariff regulations was higher than under regulations subsequently issued by ANEEL, but before ANEEL s approval of the PPAs. Enertrade contested ANEEL s decision and obtained an injunction permitting it to charge prices set forth in the PPAs until there is a decision on the merits. However, EDP Brazil s distribution companies have not yet obtained such an injunction despite contesting ANEEL s decision and are, therefore, prohibited from passing on to customers the prices in the PPAs. Given the current situation, EDP has recorded a provision for future losses.

In the case of Enersul, the company wrote off 22 million reais ( 7 million at the time of the write off) related to the market value of Campo Grande s gas turbine acquired in 2001 as Enersul has terminated this project and decided to sell the turbine.

#### GENERATION

### Lajeado

In late 1997, EDP Brazil formed a consortium with three Brazilian distribution companies that were awarded a 35-year concession to build a dam and operate a hydroelectric power plant in Lajeado, Brazil. We own 14.36% of the shares and 27.65% of the voting rights in Investco, the company that operates the plant. EDP Lajeado owns the right to sell 27.37% of the energy generated by the Lajeado hydroelectric power plant. Of the total energy generated, 24.75% can be freely traded with other electricity market agents, while the remaining energy must be sold at regulated prices to distribution companies. The Lajeado hydroelectric power plant began full operation in November 2002, following the completion and commissioning of its fifth unit, and has an installed capacity of 902.5 MW. The plant produced 4,457 GWh in 2003.

#### Couto Magalhães

In November 2001, a consortium 49%-owned by EDP Brazil and 51%-owned by Grupo Rede was awarded a concession to build and operate a 150 MW hydroelectric power plant on the Araguaia River in Brazil, the Couto Magalhães power plant. The construction of the project was expected to start in 2003 and its operations during 2006. The project has now been interrupted due to additional environmental requests by regulators that were not agreed to in the original concession contract, which led to increasing development costs and postponing the start-up of the construction as well as the plant operations. These requests negatively impact the economic viability of the project. The consortium has informally requested rescission by the regulator of the concession contract and is now waiting for a formal response.

## **Peixe Angical**

In June 2001, a consortium 95%-owned by EDP Brazil and 5%-owned by Grupo Rede was awarded a concession to build and operate a 450 MW hydroelectric power plant on the Tocantins River in Brazil, the Peixe Angical power plant. The annual concession rent is 6.8 million reais ( 1.8 million) for 29 years starting in the seventh year of the 35-year concession. After a one-year suspension, construction of the plant was reinitiated in October 2003, following the completion of an agreement between us and Eletrobrás and BNDES. The agreement included an equity participation of 40% of Furnas and funding of 670 million reais ( 175 million) approved by BNDES, reducing the amount to be supported by us. At the end of 2003, we had invested 204 million reais ( 72 million) in this project. Plant operations are planned to begin in 2006.

### **Table of Contents**

### **FAFEN Energia**

The first phase of the FAFEN Energia thermoelectric plant in the Bahia state of Brazil began on August 25, 2002, with an installed capacity to produce 54 MW of electricity and 152 tons per hour of steam. From that capacity, the plant has to produce 22 MW and 42 tons per hour of steam under a tolling regime to Petrobras Petróleo Brasileiro S.A. EDP Brazil has an 80% participation in the venture, and Petrobras holds the remaining 20%. Its second phase configuration will include an additional gas turbine of 26.7 MW and a steam turbine of 53 MW. The construction was initiated in March 2003 and should be completed during 2004. It is estimated that following completion of the second phase, the plant will produce a total of 133 MW of electricity and 42 tons per hour of steam. In 2003, FAFEN Energia produced 173,902 MWh and 352,603 tons of steam. FAFEN Energia and Bandeirante have signed a PPA, which ANEEL has not yet approved. At the end of 2003, we had invested 269 million reais (83 million) in this project.

#### DISTRIBUTION

In 2003 our distribution companies in Brazil served more than 2.9 million customers, distributed 21,424 GWh of electricity and had revenue of 3.2 billion reais ( 919.8 million).

Company	Customers (thousands)	GWh Distributed	Revenue (thousands of reais)	Revenue (thousands of euros)
Bandeirante	1,320	11,380	1,674,395	484,069
Escelsa	968	7,187	943,697	272,824
Enersul	614	2,857	563,586	162,933
Total	2,902	21,424	3,181,678	919,826

## Bandeirante

EDP Brazil holds a 96.48% stake in the share capital of Bandeirante, a distribution company in the Brazilian state of São Paulo that, in 2003, served more than 1.32 million customers.

In 2003, Bandeirante sold 9,539 GWh, a 6% decrease from 2002, primarily due to consumption decreases in the industrial segment. Consumption in the residential segment represented 22.4% of total sales volume, an increase of 0.8% from 2002. Consumption in the industrial segment represented 54.8% of total sales volume, a decrease of 12.8% from 2002, reflecting the loss of liberalized customers to other energy suppliers. Consumption in the commercial segment represented 12.4% of total sales volume, an increase of 4.5% from 2002. In the other segments, which represent 10.5% of total sales volume, the consumption increase was 8.2% from 2002. Taking into account electricity distributed to liberalized customers, which pay Bandeirante a fee for use of its distribution grid, Bandeirante distributed 11,380 GWh in 2003, a 4.2% increase from 2002.

On October 23, 2003, Bandeirante stariffs were adjusted as part of a periodic tariff review resulting in an increase of 18.08% over the period from 2004-2008, of which 14.68% will be applied during the first year and the remaining 3.4% will be applied over the next three annual tariff readjustment processes.

In 2003, Bandeirante made capital expenditures of 136 million reais ( 39.3 million) with a focus on modernization, customer service, improvement of the network s operational conditions in expanding regions and increases in the electricity grid s operational flexibility. As part of a program of modernization, 50 million reais ( 15 million) was spent in 2003, including expenditures relating to a new operations center and in the new commercial information system.

In order to improve productivity, Bandeirante has been encouraging its employees to adopt procedures that build a creative and innovative culture that is focused on results and responsive to customers and the market. In 2003, Bandeirante reduced its workforce to 1,261 employees, achieving a customer per employee ratio of 1,050.

60

#### **Table of Contents**

At the end of March 2003, the company raised 200 million reais ( 55 million at the time of the issue) through the issuance of 6-month promissory notes. In September 2003, the company issued new promissory notes in amount of 180 million reais ( 53 million at the time of the issue) to refinance the notes issued in March 2003.

At the end of 2003, Bandeirante s board of directors approved a long-term loan of US\$100 million from the Inter-American Development Bank to finance the expansion of the distribution grid and to improve the general quality of services.

#### Escelsa

EDP and its subsidiaries own 54.76 % of Escelsa-Espírito Santo Centrais Elétricas S.A., or Escelsa, a distribution company in the Espírito Santo state of Brazil that, in 2003, served more than 968,000 customers.

In September 2002, a lawsuit with GTD Participações, S.A., or GTD, a Brazilian company, received a favorable decision on the merits in our favor. This decision, however, is subject to an appeal to the High State Court of Rio de Janeiro, which has not yet been decided. Previously, a shareholders agreement with GTD that provided for joint control of Escelsa was in force. The lawsuit was filed by GTD when it contested the termination of the shareholders agreement provided for in such agreement. GTD attempted to suspend our rights as controlling shareholder, but the judiciary denied this request. We convened an extraordinary shareholders meeting of Escelsa in September 2002 at which we gained control of Escelsa, which control had previously been shared jointly with GTD. In October 2002, we took over the management of Escelsa and appointed new executive officers. Since that time, we have fully consolidated Escelsa. Following the decision of the Lower Court of Rio de Janeiro, GTD filed an additional lawsuit in the Federal Court of Rio de Janeiro with a similar complaint, but this time against Brazilian Union and Eletrobras as well, on which no ruling has yet been made.

The electricity required by Escelsa s distribution grid in 2003 totaled 8,185 GWh, an 11% increase from the previous year. In order to meet market demand, Escelsa s hydroelectric plants generated 922 GWh internally, which represents 11.2% of the electricity required. Escelsa purchased the remaining 5,975 GWh from other suppliers. In addition, 1,287 GWh produced by other generators passed through Escelsa s grid.

Escelsa s total electricity sales volume was 5,900 GWh in 2003, representing a 7% decrease from 2002 due to decreased electricity sales to the commercial and industrial segments. Consumption by the residential segment represented 20.3% of total sales volume, an increase of 5.5% from 2002. Consumption by the industrial segment represented 46.5% of total sales volume, a decrease of 16.6% from 2002, which reflects the loss of liberalized customers to other energy suppliers. Consumption by the commercial segment represented 12.8% of the total sales volume, a decrease of 10% from 2002, also reflecting the loss of liberalized customers. The energy supply sold to other electric utilities represented 5.4% of the total sales volume, an increase of 1% from 2002. Finally, sales to other segments represented 15.0% of the total sales volume, an increase of 13% from 2002. Taking into account electricity distributed to liberalized customers, which pay Escelsa a fee for use of its distribution grid, Escelsa distributed 7,187 GWh in 2003, an 11% increase from 2002.

On August 7, 2003, ANEEL approved Escelsa s tariff readjustment, an increase of 17.3% that consisted of:

8.96% to compensate for Escelsa s non-controllable costs, which are passed along to customers;

7.8% to compensate for Escelsa s controllable costs, which were adjusted to reflect inflation, and were discounted by 0.63%, due to the pass-through to the tariffs of the year s productivity gains, or the X Factor; and

0.54% to compensate for Escelsa s losses during the rationing period in 2001-2002.

Every three years, Escelsa s tariffs are reviewed according to its concession contract, for the purpose of reassessing the fair return on capital employed. Escelsa s next tariff review will conclude in August 2004. Preliminary studies by ANEEL and Escelsa s management with respect to the next tariff began in May 2004.

61

#### **Table of Contents**

In 2003, Escelsa had capital expenditures of 64 million reais ( 19 million), of which 57 million reais ( 17 million) were technical costs related to the expansion and improvement of the distribution grids, new substations and company modernization. The remaining 7 million reais ( 2 million) were financial costs related to the expenditures capitalized in Escelsa s assets.

Escelsa s workforce at the end of 2003 totaled 1,309 employees, 3.5% less than in 2002. Esclesa continues to increase the customers per employee ratio, reaching 742 in 2003 from 705 in 2002, an improvement of 5%.

#### Enersul

EDP and its subsidiaries indirectly hold a controlling stake in Enersul-Empresa Energética do Mato Grasso do Sul S.A., or Enersul, a distribution company in the Mato Grasso do Sul state of Brazil, that, in 2003, served more than 614,000 customers.

Enersul s total energy sales volume for 2003 was 2,816 GWh, representing a 2% increase from 2002. Sales to the residential segment represented 31.4% of the total sales volume, an increase of 1.1% from 2002. Sales to the industrial segment represented 23.5% of the total sales volume, a decrease of 2.5% from 2002. Sales to the commercial segment represented 19.7% of the total sales volume, an increase of 3.7% from 2002. Enersul had 613,645 customers at the end of 2003, an increase of 3% compared to 2002. Taking into account electricity distributed to liberalized customers, which pay Enersul a fee for use of its distribution grid, Enersul distributed 2,857 GWh in 2003, a 4% increase from 2002.

On April 8, 2003, ANEEL approved a tariff increase for Enersul of 42.26% as part of a periodic tariff review. Of this amount, 32.59% has already been applied to the current tariff and the remainder, 9.67%, will be added to the tariff over the years from 2004 to the next review in 2007.

In 2003, Enersul had capital expenditures of 56 million reais ( 16 million) focused on modernizing, improving and expanding the company s distribution grid.

Although at the end of 2003, Enersul s workforce was 1.2% higher that in 2002, totaling 940 employees, the company was able to improve its ratio of customers to employees to 653 in 2003 from 643 in 2002.

#### **CER.J**

In 1996, EDP, S.A. formed a consortium with Chilectra and Endesa that acquired approximately 70% of the stock of Companhia de Eletricidade do Rio de Janeiro, S.A., or CERJ, an electricity distribution company in the Rio de Janeiro state of Brazil. EDP, S.A. currently owns 7.77% of CERJ (11.27% at December 31,2003), reflecting reductions in our stake as a result of capital increases that we did not participate in.

### **Related Activities**

Enertrade manages contacts between our Brazilian generation and distribution businesses and engages in electricity trading. In addition, Enertrade seeks to capture business from liberalized clients that move away from our distribution companies as sources of supply and sell to other liberalized clients. As the New Energy Sector model provides that liberalized clients may only purchase electricity from generators or traders, we expect that the shift of these clients away from our distribution companies will continue.

In 2003, Enertrade s sales volume amounted to 2,713 GWh, of which 1,620 GWh were sold to liberalized customers. Enertrade purchased 1,072 GWh from EDP Lajeado. This represents an increase of 28% in comparison to the previous year. The average price of energy sold and purchased by Enertrade in 2003 were, respectively, 58.8 reais/MWh and 53.34 reais/MWh.

62

#### **Table of Contents**

#### **TELECOMMUNICATIONS**

#### HISTORY AND OVERVIEW

In March 2000, we announced a strategic decision to pursue the telecommunications business. This decision provided us with an opportunity to leverage our existing resources and expertise and to build on our initiatives in the telecommunications and information technology businesses. At that time we held a 25% stake in Optimus, Portugal s third mobile operator, and had, on January 1, 2000, launched the fixed-line operations of our subsidiary, ONI Telecom. In June 2000, we announced a new organizational structure for our telecommunications and related activities, which focused these activities in ONI, SGPS, S.A., or ONI, a holding company owned by us and our partners, that operates various business segments discussed in more detail below. The current shareholder structure in ONI is as follows: EDP 56.025%, Brisa 17%, BCP 16.188%, BCP s pension fund 6.637%, GALP Serviços 4.096% and GALP 0.054%.

On June 12, 2001, we announced ONI s acquisition of Comunitel enabling ONI to offer one-stop-shopping to the growing number of companies operating in both Portugal and Spain. Comunitel is a Spanish telecommunications operator with a portfolio of products and services directed to small and medium size enterprises.

For the year ended December 31, 2003, ONI had revenues of 331.1 million, of which 15.3 million was generated from services provided to the EDP Group, and an operating loss of 68.7 million compared with, for the year ended December 31, 2002, revenues of 320.8 million, of which 13 million was generated from services provided to the EDP Group, and an operating loss of 154.8 million.

In March 2002, we sold 100% of OPTEP, our subsidiary that, at the time of the sale, indirectly held 25.49% of Optimus, to Thorn Finance SA for 315 million. Prior to this sale, OPTEP transferred its interest in ONI to us. Since our subsidiary ONI Way and Optimus were each awarded a UMTS license in late 2000, we were required to sell our stake in Optimus by March 31, 2002 in order to comply with Portuguese regulatory requirements. We no longer hold any shares in Optimus, directly or indirectly, although our agreement with Thorn Finance SA gives us a right of first refusal to purchase the shares sold if Thorn Finance SA reaches an agreement to sell the shares to a third party.

In early 2002, ONI renegotiated its lease agreement of the fiber optic network owned by REN. Under the renegotiated terms of this agreement, the duration of the lease has been reduced from 20 years to 5 years and fiber optic pairs length has been reduced by 50% to approximately 1,850 kilometers.

In late 2002, ONI Way decided to significantly reduce its activity and proposed to its shareholders to decide whether the UMTS project should be temporarily frozen or terminated, due to several adverse economic, financial, technical and regulatory reasons. In order to optimize shareholder value, ONI Way entered into agreements with TMN, Vodafone-Telecel (now known as Vodafone Portugal) and Optimus under which ONI Way had the option to sell to those companies a substantial part of its assets. In addition, it was also agreed to enter into put and call options to sell to Vodafone-Telecel the entire share capital of ONI Way.

On January 6, 2003, a 72% majority of the shareholders general meeting of ONI Way decided not to launch ONI Way s UMTS project and to confirm the decisions and acts of the board of directors in this regard. Subsequently, ONI Way s UMTS license was revoked on January 13, 2003 by the Minister of Economy with the consent of ONI Way. ONI Way subsequently entered into arrangements with the majority of its employees, and, since December 31, 2003, has no labor agreements. In addition, ONI Way has terminated its distribution agreements and settled its

commitments with suppliers, all in connection with the termination of its UMTS activities.

In November 2003, the ONI Way put option was exercised and in February 2004 ONI Way s entire share capital was sold to Vodafone Portugal.

63

#### **Table of Contents**

In the first quarter of 2003, ONI revised its organizational structure to better achieve the goals and strategies defined for its business segments. This process was concluded in the fourth quarter of 2003, by the merger of ONI Grandes Redes, ONI Sistemas de Informação, ONI One, ONI Solutions, Shopping Direct and Brisatel into ONI Telecom. Accordingly, ONI s businesses are currently pursued in two main areas: wireline Portugal and wireline Spain.

Wireline Portugal comprises:

ONI Telecom, a wholly-owned subsidiary of ONI, is a licensed telecommunications company that develops and provides wireline communication services to corporate and residential clients and also serves as a carrier s carrier, selling capacity to other communications companies.

uCall, a 60%-owned subsidiary of ONI offering call center services, fulfilling ONI s needs in back office support, as well as providing services to companies outside the ONI group.

Wireline Spain comprises:

Comunitel, which is 99.93%-owned by ONI, is a telecommunications operator specializing in providing communication services to corporate clients. Comunitel was one of the first operators to provide advanced telecommunication services in Spain.

Ola Internet, a wholly-owned subsidiary of ONI, which is a company offering voice and data services to medium size companies in Spain.

In early 2004, ONI became the owner of 99.98% of Germinus XXI, or Germinus, an incubator company developing services in the market where telecommunications, media, hardware and software converge, increasing its previous ownership of approximately 80% of Germinus. The Germinus group offers services in four activities: applications and technological platforms, professional services, information services and network business.

ONI s management team is led by Pedro Norton de Matos, chief executive officer, and the executive members of ONI s board. Executive board members have the following responsibilities: Jorge Cruz Morais, former director of EDP Strategic Planning, is the chief financial officer of ONI, and Luís Ribeiro Vaz, former board member of the retail group Jerónimo Martins, heads Spanish operations.

### TELECOMMUNICATIONS MARKET

In accordance with EU requirements, the Portuguese government has taken significant steps during the past several years to open the telecommunications market to competition. In 1997, Portuguese regulations took effect that permitted us and others to install and provide infrastructure for telecommunications services. On January 1, 2000, Portugal opened the entire telecommunications sector to competition.

As of January 1, 2001, alternative carriers have been permitted to offer local and regional indirect calls, and as of June 30, 2001, customers have been allowed to keep their existing phone numbers while changing to a different access operator. Although number portability now exists in Portugal, ONI believes that some additional technical issues need to be addressed by ICP-Autoridade Nacional de Comunicações, or ICP-ANACOM, to make number portability a more efficient process.

In January 2002, liberalization of the telecommunications sector advanced a step further with the long promised unbundling of the local loop (ULL). However, technical and administrative restrictions by the historical monopoly telecommunications operator Portugal Telecom, or PT, did not allow for widespread use of this technology, effectively preventing the new operators from exploiting this new opportunity.

64

#### **Table of Contents**

#### COMPETITION

In the fixed line business area, ONI is competing for market share primarily with PT, which historically held a monopoly on fixed line services in Portugal. Currently, in the first stages of liberalization of this area, PT continues to hold a dominant position in this market. Other fixed line operators in Portugal include Novis, controlled by Sonae.Com and France Telecom, and Jazztel. Based on data released by ICP-ANACOM, in the fourth quarter of 2003 new operators accounted for 13.4% of the total minutes in the fixed line area.

Indirectly, fixed line operators also face strong competition from cellular telephone service providers, particularly in the voice segment. Cellular services in Portugal are currently provided by TMN, Vodafone Portugal and OPTIMUS.

We also face significant competition in data transmission services and as an Internet Service Provider, or ISP. Numerous operators compete in these areas, including SAPO, a PT ISP, IOL, a Media Capital ISP, and Clix, a Sonae.Com ISP.

#### TELECOMMUNICATIONS ACTIVITIES

Infrastructure: ONI has in place an extensive infrastructure to provide telecommunications services, which includes approximately 6,000 kilometers of fiber optic cable, including multiple strings, for a total of approximately 150,000 kilometers of fiber optic backbone, in Portugal. We own approximately 110,000 kilometers of this backbone and lease approximately 40,000 kilometers to REN, Transgás and EDIS. ONI currently has approximately 300 points of presence, (PoPs) and 2 network central offices, in Lisbon and Porto. At the end of 2000, ONI linked its fiber optic network to Iberdrola s network, creating two new connections to Spain and adding to the existing connection with the network of Comunitel.

The incorporation of Brisatel s assets in the ONI group in October 2001 added approximately 1,300 kilometers of fiber optic cable (of which approximately 1,120 kilometers are already installed) to the fiber optic cable that we had already in place at the time. Brisatel also added 70 PoPs and two international links with RENFE, the Spanish railroad operator, which required a restructuring of ONI s PoPs to avoid redundancy. The incorporation of Brisatel s assets in the ONI group was one of the factors that led ONI to renegotiate its lease of the fiber optic network owned by REN in early 2002. Under the renegotiated terms of this lease, the duration of the lease has been reduced from 20 years to 5 years and fiber optic pairs length was reduced by 50% to approximately 3,000 kilometers by the beginning of 2003. As of January 2004, fiber optic pairs length was reduced again to 2,329 kilometers.

ONI expects to increase consumer connections to its existing fiber optic backbone to provide telecommunications services. ONI has efforts underway to develop digital powerline technology and is currently conducting pilot tests.

Telephone and data services: In late 1999, we began aggressive efforts to build ONI brand recognition and generate customer pre-registrations. In November 1999, ONI acquired Comnexo, a private data operator providing services to closed user groups. This acquisition was designed to expand the scale and reach of our data operations. ONI Telecom commenced operations in January 2000 as a voice and data fixed-line operator concurrent with the opening of competition in Portugal. We continue to provide services in this area through ONI. ONI Telecom s initial activities were focused on fixed-line voice services for businesses and high-value customers. ONI currently expects to develop other products and services, including value-added voice services, data transmission, and integrated voice, data and video services.

At December 31, 2003, ONI had approximately 741,000 registered voice lines generating demand for approximately 2,6 million minutes per day, or an aggregate of 939 million minutes in 2003. In comparison, in 2002 ONI s fixed line operation in Portugal accounted for approximately 733 million minutes of voice traffic.

According to a report by ICP-ANACOM for the fourth quarter of 2003, ONI holds an overall market share in fixed line telephone traffic of approximately 5%, which corresponds to approximately 45% among the new fixed line operators in Portugal.

65

#### **Table of Contents**

In Spain, at December 31, 2003 our subsidiary Comunitel and its subsidiary Ola internet generated approximately 1,700 million minutes of voice traffic in 2003.

*Internet access services*: ONI has high capacity platforms to provide Internet access services and is operating as an ISP. As of December 31, 2003, ONI had approximately 436,000 registered ISP customers generating approximately 1.6 million minutes per day for an aggregate of approximately 638 million minutes in 2003.

In July 2002, ONI launched an Asynchronous Digital Subscriber Line, or ADSL, product that allows high speed Internet access over regular telephone lines and that can be installed by end users over their existing telephone lines.

#### **PARTNERSHIPS**

In March 2000, we entered into a strategic alliance with BCP to facilitate joint efforts in the areas of Internet-based electronic finance, or e-finance, non-financial Internet-based services and third generation wireless telephone services. The EDP-BCP agreement provides for the establishment of cross-shareholdings between our companies. We have acquired 4.25% of BCP s outstanding shares, including share consideration for BCP s interest in our telecommunications holding company, and BCP has acquired approximately 5% of our outstanding shares

On May 9, 2001, we entered into an agreement for a strategic alliance in the telecommunications sector with BCP, GALP and Brisa. Under the terms of the agreement, Brisa became a shareholder of ONI in exchange for its 100% stake in Brisatel, which owned 4% of ONI Way. Within the context of this strategic alliance, Brisa proposed two members of ONI s board of directors and they were subsequently elected by the shareholders of ONI.

Following its decision to focus on wireline communications in 2002, ONI decided to gradually reduce its investment in B2C (business to consumer) and B2B (business to business) platforms, having already disposed of some of its subsidiaries in this area.

### REGULATION

Our activities in the telecommunication area subject us to a number of regulatory regimes, including licensing requirements and operating restrictions. For more information on the regulation of telecommunications, please see Regulation Telecommunications. ONI holds licenses for the establishment and operation of public telecommunications networks (ICP-05/99-RPT, granted June 14, 1999) and the provision of Fixed Telephony Service (ICP-001/99-SFT, granted August 10, 2000). ONI also holds a registration for the provision of public use telecommunications services (Register-006/99 dated January 20, 1999). ONI was awarded two licenses for the use of frequencies aimed at fixed wireless access in the 3.6-3.8 Mhz and 24.5-26.5 Ghz bands (ICP-01/99-FWA and ICP-05/99-FWA granted December 29, 1999). In 2003, ONI requested the revocation of the 3.6-3.8 Mhz band license. The difficulties to install terminal equipment, the lack of scale, together with other technological difficulties made the operation of a fixed wireless network difficult and uneconomical.

#### **EMPLOYEES**

ONI s human resources have the experience and expertise to assist it in developing and growing the telecommunications business. As of December 31, 2003, ONI had approximately 1160 employees, 51% in wireline Portugal and 49% in wireline Spain.

#### FINANCIAL RESULTS

As a recent entrant in the telecommunications sector, during its first four years of operations ONI has incurred significant operating costs in connection with developing and sustaining its business while, at the same time, increasing revenues as a result of its growing customer base. ONI had revenues for 2003 of 331.1 million, of which services provided to the EDP Group amounted to 15.3 million, and an operating loss of 68.7 million. In comparison, ONI had revenues for 2002 of 320.8 million, of which services provided to the EDP Group amounted to 13 million, and an operating loss of 154.8 million. ONI s 2003 operational capital expenditures for fixed line communications in Portugal and Spain were approximately 28.6 million compared with approximately 140.8 million in 2002. ONI s total assets at the end of 2003 were 835 million compared with 888 million at the end of 2002.

66

### **Table of Contents**

ONI s current assessment of expenditures in the telecommunications area anticipates an investment by ONI of approximately 114 million for the period 2004-2006 almost exclusively for network infrastructure and client connections and equipment, although the amount of investments may change as ONI s plans develop.

Due to divestiture of the UMTS project, we are no longer committed to the approximately 2,600 million of aggregate capital expenditures forecasted in the bid submitted by ONI Way in the public tender for the fourth UMTS license in Portugal.

#### OTHER INVESTMENTS AND INTERNATIONAL ACTIVITIES

During 1998, we acquired in the Spanish securities market 3% of the share capital of Iberdrola, a Spanish utility company. In September 2003, we sold a block of 10 million shares representing 1.11% of the share capital of Iberdrola to Banco Bilbao Vizcaya Argentaria, S.A., for 153.9 million. In October 2003, we sold 17,050,000 shares, representing a 1.89% stake in the share capital of Iberdrola, to BANCAJA, Caja de Ahorros de Valencia, Castellón y Alicante for 246.2 million. As a result of this transaction, we no longer have any stake in Iberdrola holds a stake in us of slightly less than 5% of our share capital, which corresponds to slightly more than 5% of our voting rights.

We also have an interest of approximately 4% in ELCOGAS, S.A., a consortium that includes, in addition to us, Electricité de France, Endesa, Iberdrola, International Power and others. ELCOGAS, S.A. was formed to build and operate a 300 MW integrated gasification combined cycle plant in Puertollano, Spain. This plant burns gas obtained from the coal gasification process.

We hold a 21% interest in a consortium that indirectly owns an 80.88% interest in the capital of Empresa Eléctrica de Guatemala S.A., or EEGSA, which is an electricity distribution company in Guatemala. In 2003, EEGSA had approximately 717,000 customers, a sales volume of 3,429 GWh and a service area of 6,200 square kilometers. EEGSA is Central America s largest distribution company. In 2003, EEGSA generated 312.6 million in revenues and had a net income of 15.2 million. The consortium is made up of EDP, Iberdrola and Teco Energy, a Florida electric company.

We also own a 21.19% stake in CEM Companhia de Electricidade de Macau, S.A., or CEM, the electric utility company of Macau, and have an active role in CEM s management. In 2003, CEM had approximately 195,500 customers and sold 1,754 GWh of electricity. In 2003, CEM had revenues of 216.0 million and net income of 58.8 million. CEM has the concession for generation, transmission and distribution in Macau until December 2010. CEM serves a population of approximately 470,000 in an area of 28 square kilometers. In 2003, we reorganized our shareholding in CEM by winding up an intermediary holding company, Sogeste, in which we had an 85% stake, and acquiring a proportion of the stake held in CEM by the other shareholder of Sogeste, Gaixa Geral de Depósitos. As part of this reorganization process, we sold a 2.06% stake in CEM to China Power International Holding, a company of the main electricity operator in mainland China, as an opportunity to diversify and strengthen the shareholder structure of CEM.

In late 1999, we formed a consortium, 60% owned by us and 40% owned by AdP Aguas de Portugal, which was chosen by the government of Cape Verde to acquire a 51% interest in Electra, for which we paid 27 million. Electra produces electricity and distributes electricity and water in Cape Verde. In 2003, Electra produced 199 GWh of electricity, compared to 181 GWh in 2002, and distributed 133 GWh to 65,538 customers in an area of 4,030 square kilometers. Also in 2003, Electra produced 4 million cubic meters of water and distributed 2.8 million cubic meters of water to 22,578 customers. Electra had revenues of 27.7 million and a net loss of 5.0 million in 2003.

67

#### **Table of Contents**

#### SUBSIDIARIES, AFFILIATES AND ASSOCIATED COMPANIES

Apart from EDP Produção, EDPD, Hidrocantábrico, our Brazilian companies and ONI, we hold interests in a number of subsidiaries that provide various services to our other companies. Some of these subsidiaries also provide services to third parties. These entities contributed million in revenues in 2003.

EDP Valor integrates some of our service companies with the objective of achieving cost reductions within EDP through the consolidation of resources and the centralizing of purchasing activities. Since the first quarter of 2002, EDP Valor has extended its services to EDP Produção and EDPD.

EDP - Electricidade de Portugal Internacional, S.G.P.S., S.A. provides management and organization consulting services in electricity generation, transmission and distribution, undertakes project management and promotion, and executes and supervises the performance of commercial contracts.

EDINFOR Sistemas Informáticos, S.A. develops, operates and markets software and systems, and also provides consulting and vocational training in information technology. See Telecommunications. EDINFOR holds a 57.77% interest in ACE-SGPS, which is holding for Portuguese companies that provide management, strategic and information systems consultancy, supply of corporate turnaround services, organization restructuring, e-trade, data warehousing, knowledge management, customer relationship management, planning and management of information implementation of IT Solutions, financial services and implementation and training in SAP R3. Amongst other companies, EDINFOR also holds major interests in: Copidata Industrial Gráfica e Equipamentos, S.A., a company that creates, executes and sells graphic systems; IT-Log, Logística e Gestão de Tecnologias de Informação, S.A., a company whose activities consist of the conception, production, installation, logistics and management of IT systems; and IT-GEO, Tecnologias e Informação Georeferenciadas, S.A., a company whose activities consist of the development and integration of geographic information systems and the production, maintenance and sale of geographic data.

Affinis Serviços de Assistência e Manutenção Global, S.A. provides home services and contractor management to residential and corporate customers through a network of skilled professionals. In the residential area, Affinis offers home services including the planning, installation, maintenance and repair of electrical, gas, plumbing and structural systems and the replacement of household appliances. In the corporate area, Affinis provides technical assistance with respect to many of the services provided in the residential area. In October 2002, our subsidiary EDP Participações acquired a 45% stake in Affinis s share capital and shareholder loans from PROCME Gestão Global de Projectos, S.A., or PROCME, for a total of 13.5 million, of which 11.5 million corresponds to the share capital acquisition. Of this amount, 4.05 million was paid in October 2002, and the balance is due in three 3.15 million installments over 2004, 2005 and 2006. These installments may be adjusted depending on the financial performance of Affinis. Following the acquisition operation, EDP Participações and PROCME subscribed to a 5 million capital increase in Affinis in amounts proportional to their holdings in the company.

### REGULATION

#### THE IBERIAN ELECTRICITY MARKET

On November 14, 2001, in accordance with the liberalization objectives contained in EU Directive 96/92/EC, the Portuguese and Spanish governments signed the Protocol, in which they undertook to create an Iberian electricity market based on the principles of free and fair competition, transparency, objectivity and efficiency. In particular, the Protocol was intended to:

guarantee consumers in Portugal and Spain access to the electricity network from either country and to interconnections with third countries on equal terms; and

give electricity operators in an Iberian electricity market the freedom to contract with consumers, to engage in distribution activities in both countries and to participate in a common Iberian electricity pool.

68

#### **Table of Contents**

In late December 2001, the regulators from Spain and Portugal, (Comision Nacional de Energia, or CNE, and Entidade Reguladora dos Serviços Energéticos, or ERSE, respectively) presented a paper for public discussion on the MIBEL organizational model. In March 2002, based on that public discussion, they presented a compromise structure for MIBEL. As determined in the Protocol, the model took into consideration the principles stated in the Protocol, the applicable EU legislation, the recent experience of both countries—electricity markets and regulatory best practices. The model also introduced ideas to allow for the development of a competitive and efficient market, equipped with the necessary supervision and control mechanisms, in order to guarantee the satisfaction of consumers—needs, to provide for the security of electricity supply in the short and long term and to be fully compatible with the objectives of energy efficiency and the development of renewable energy in both countries.

Although MIBEL was expected to come into force by January 2003, representatives of the Portuguese and Spanish governments at the October 2002 Valencia summit established a new schedule for MIBEL s implementation. The revised timeframe was created due to the fact that MIBEL would be delayed not only due to a change in the Portuguese government, but also because of the need for the harmonization of the Spanish tariff structure.

For the purpose of developing MIBEL, the Protocol contains a timetable for the development of the following interconnections between Spain and Portugal that was not amended at the Valencia summit: Alqueva-Balboa, a 400kV line scheduled for completion in 2004; Douro Internacional-Aldeadavila, either the construction of a new 400kV interconnection or an increase of the existing interconnection capacity scheduled for completion in 2006; and Alto-Cartelle-Lindoso, a second interconnection for the purpose of increasing transmission efficiency, for which a new 400 kV circuit was put into operations in April 2004.

During the Figueira da Foz summit of November 8, 2003, the Portuguese and Spanish governments executed a memorandum of understanding that established a new timeframe for the creation of MIBEL and agreed to specific aspects in connection with this creation, including:

Implementation of operating mechanisms governing the working of the two poles of the market and their integration;

Harmonization of regulation applicable to the spot and forward electricity markets in Portugal and Spain;

Termination of the majority of PPAs in Portugal by the start date of the integrated operation of MIBEL; and

Institutionalization of the Iberian Regulatory Board, including representatives of the two regulators, the purpose of which will be to be resolve conflicts and control the working of the markets within the scope of their common responsibilities.

On January 20, 2004, both governments entered into a more detailed agreement known as the international agreement, which was approved by the Portuguese Parliament under Resolution no. 33-A/2004 of April 20, 2004 and ratified by the President of the Republic of Portugal under Decree law no. 19-B/2004 of April 20, 2004. This agreement creates an Iberian electricity market designated as MIBEL, and is intended to constitute a milestone in the process of integration of the electricity markets of both countries.

Under the international agreement, MIBEL will operate with a spot market, which includes daily and intra-daily markets and will initially be managed by the current market operator of the Spanish market (OMEL), and a forward market, which will initially be managed by a market operator located in Portugal (OMIP). In addition, electricity transactions may also be negotiated by means of bilateral contracts with a term not less than one year. The international agreement also clarifies that the existence of two market operators, OMEL and OMIP, is temporary and that the two operators will eventually be merged into a single market operator. By April 21, 2005, each market operator is expected to limit the

amount of its share capital held by any single shareholder to 5%, except that technical and economic managers of other electricity systems may hold stakes of up to 10%. Additionally, by April 21, 2005, system operators may no longer hold interests in the share capital of market operators. By April 20, 2006, it is expected that both market operators will merge and create a single market operator designated as the Iberian Market Operator (*Operador do Mercado Ibérico*).

69

#### **Table of Contents**

Within the context of MIBEL, changes introduced to the Portuguese energy policy in April 2003 resulted in the redefinition of the Portuguese government s main objectives in the energy sector, which comprise, among others: the liberalization of the market, improvement of the quality of service, security of supply and reinforcement of the productivity of the national economy. The Portuguese government has indicated its intention to proceed with the restructuring of the Portuguese electricity system, which includes, among other measures, terminating the existing PPAs by means of adequate compensation mechanisms and changing REN s single buyer status. As a result, Decree law no. 185/2003 of August 20, 2003 contemplates the early termination of PPAs according to specific rules to be defined in a subsequent decree law, which is also expected to define indemnification measures adequate to compensate the investments and commitments provided for in each PPA that are not achievable through the expected market revenues once the PPAs are terminated. It is also expected that both Portugal and Spain should take all necessary measures to open the market to all consumers and harmonize both tariff structures through clear and transparent rules, particularly in Spain.

### **PORTUGAL**

The basis and principles of the organization of the electricity sector in Portugal were set out in 1995 legislation that was partially revised in 1997 in accordance with the general principles of EU Directive 96/92/CE. Following the 1997 revisions, the Regulatory Entity of the Electric Sector, or ERSE, was appointed as the independent regulator in February 1997. On April 12, 2002, ERSE became the Regulatory Entity of the Energetical Services, and its authority was extended to the domain of natural gas regulation. On March 25, 2002, by Decree law no. 69/2002, ERSE s authority with respect to the electric sector was extended to the Autonomic Regions of Madeira and Azores. The responsibilities for regulation of the electricity sector in Portugal are now generally split between Direcção Geral de Geologia e Energia, or DGGE, ERSE and the Competition Authority, as described below.

### Direcção Geral de Geologia e Energia

DGGE has the primary responsibility for planning and developing the Public Electricity System including, approving the issuance, modification and revocation of generation and distribution licenses and preparing expansion plans for the Public Electricity Sector every two years, in conjunction with REN, for the approval of the Portuguese Ministry of Economy. DGGE is also responsible for regulations applicable to the transmission grid and the distribution network and service quality.

## The regulator

ERSE, or the regulator, has clearly defined regulatory duties, powers and objectives established by law, including the responsibility to approve the main regulations that are published in the form of the following codes:

the tariff code and the values for the tariffs and prices to be implemented;

the commercial relations code governing relations between entities in the Portuguese electricity system;

the dispatch code;

the access to the national transmission grid code; and

the interconnections code.

The codes listed above are applicable to the 2002-2004 regulatory period and were adopted by the regulator in September 2001. For the upcoming regulatory period (2005-2007), in April 2004 the regulator revised the codes referred to above to incorporate the recent expansion, in February 2004, of the eligibility threshold to include special low voltage consumers.

70

#### **Table of Contents**

### The Competition Authority

The Competition Authority applies legislation relating to competition, especially with regard to restrictive practices and concentrations.

#### National energy policy

Pursuant to a public announcement made in March 2003, the Portuguese Council of Ministers passed two resolutions regarding, on the one hand, Portuguese energy policy, and, on the other hand, the Portuguese government s options for the restructuring of the Portuguese energy sector.

Resolution no. 63/2003 of the Portuguese Council of Ministers of April 28, 2003 revoked the previous national energy strategy of September 2001, announced the new Portuguese energy policy and defined general objectives and specific measures to carry out the new policy. In accordance with this resolution, the Portuguese government declared its intention to:

develop and assure the safety of the national energy supply by adopting measures necessary to (i) reduce the dependency of external sources of energy primarily by country and type of source, (ii) diversify external sources of energy by country and type of source, (iii) keep mandatory reserves of combustibles, and (iv) guarantee an adequate energy generation capacity;

develop rational energy needs in order to fulfill environmental requirements, namely by (i) setting up mechanisms to achieve the Kyoto Protocol s goals, (ii) participating in European market of emissions, and (iii) promoting the rational use of energy; and

promote national competitiveness in the new liberalized energy market, namely through, among other measures, (i) the implementation of MIBEL, in stages, to be fully operational by 2006, (ii) the promotion of competition and the opening of the Portuguese electricity and natural gas sectors, which involves, for instance, implementing procedures to renegotiate or terminate the existing PPAs, and (iii) expansion of natural gas regulation, liberalization of combustibles prices and monitoring the functioning of the respective markets, which involves, for example, the separation of the gas high pressure transport network from other activities related with natural gas.

On May 10, 2003, Resolution no. 68/2003 of the Portuguese Council of Ministers defined the options the Portuguese government may utilize to restructure the Portuguese energy sector: (i) combine gas and electricity management and offer the two via the same entrepreneurial organization, allowing a better use of its synergies and complementarities; (ii) no unilateral imposition of energy sector model restructure on the sector s companies and their shareholders; (iii) definition of the political, competition and regulatory framework of the energy sector; (iv) freedom of the market s functioning, requiring that from the strategic and organizational framework, rational solutions should arise for the interests of the companies, their shareholders, workers and costumers in order to assure competition of Portuguese companies and the economy within a progressively integrated European market.

For the execution of these options, the Portuguese government has decided, among other measures, (i) to promote the liberalization of access to gas infrastructures for electric generation companies operating in Portugal, beginning July 1, 2004, (ii) to promote adequate legislative measures to open gas infrastructures to eligible consumers under principles of equality, (iii) to promote and support the consolidation of regulated infrastructures of gas and electricity under one company.

## Recent developments in the liberalization of the Portuguese electricity system

With the progression of the liberalization process and taking into account the creation of MIBEL, new transitional legislation was enacted to bring the structure of the National Electricity System and its operations into line with a competitive market regime, as detailed below:

71

#### **Table of Contents**

Order no. 12596/2003 of July 1, 2003: Approves the draft by laws and the organization and working model of the Iberian Energy Market Operator Portuguese Pole. The main object of this order is to undertake the organization and management of the MIBEL system in relation to the forward physical products and derivatives that will contribute to the concentration of the market in fewer products, without prejudice to the respective agents freedom to contract. The operations involved in the negotiation, transaction and settlement of energy-based products and services will take place on these markets.

Order no. 14315/2003, of July 23, 2003: Establishes the general principles of the methodology and of the main valuation parameters to be used in the calculation of the compensation or contractual balance maintenance costs (CMEC) applicable to the termination of the PPAs.

Decree law no. 184/2003, of August 20, 2003: Enshrines the exercise of new activities in the electricity market, namely wholesale and retail trading and importing and exporting electricity and, to develop them, it creates the positions of traders and external agent.

Decree law no. 185/2003, of August 20, 2003: For the purpose of developing MIBEL, this decree law establishes a set of general rules of a transitory nature required to create a free, competitive electricity market and called for the enactment of a new framework that is expected to undertake a profound revision of the electricity sector legislation. For this purpose, the decree law enshrines the general rules applicable to the trading of electricity within the National Electric System, particularly the functions and duties of the market agents and the obligations of public service and universal service. It also establishes the guarantee of the adoption of indemnity measures for producers in case of termination of the PPAs entered into with REN. In addition, the decree law defines the organized market and the responsibilities of the market operator, and enshrines the principal of transfer to producers of the land allocated to respective electricity generating power plants.

Decree law no. 198/2003, of September 2, 2003: Recognizes the right to remuneration for the land constituting the sites on which the PES electricity power plants are built and establishes the rules allowing REN to sell or lease them to the present National Electric System producers. It also publishes, as an appendix, plans of the areas allocated to the power plant sites.

Regulation no. 96/2004, of January 23, 2004: In anticipation of the scope of the early termination of the PPAs, this regulation establishes that the CMEC shall include, as operating expenses, the costs inherent to the leases of the land where the power plants are located, except hydroelectric plants. It also establishes the methodology and criteria for the settlement of the leasing or acquisition values of the sites.

Decree law no. 36/2004, of February 26, 2004: Progressing the liberalization process, this decree law lowers the eligibility threshold in mainland Portugal to include special low voltage consumers.

In addition, further laws and regulations are expected to be enacted for the purpose of moving Portugal to a liberalized market environment, including legislation creating a new framework legal regime for the electricity sector.

### Electricity pricing/tariffs

According to Portuguese law, the tariff regulation follows two basic principles: harmonization of tariffs throughout the country, according to which the tariff regulation will apply to all clients of the Binding Sector; and the principle of financial viability of all companies operating in the Binding Sector, subject to adequate management, according to which the changes in conditions of the license cannot endanger the viability of those companies.

Since December 1998, the regulator has implemented a new tariff regime, under which tariffs are periodically reviewed for a period of three years. The first regulatory period ranged from years 1999-2001, for which period the regulator defined tariffs for customers in the Binding Sector and customers in the Non-Binding Sector who access the national transmission grid. The regulator also defined the parameters for tariffs to be applied to distribution companies. Annual rates were set based primarily upon what was deemed to be an appropriate return on assets in transmission and by profit sharing and price cap mechanisms in distribution.

#### **Table of Contents**

In the 2002-2004 regulatory period, annual rates are set in a similar fashion except that the profit sharing mechanism in distribution was eliminated. The tariffs for network services and supply in the Binding Sector were applicable in the 1999-2001 regulatory period and required us to return to customers a portion of our annual profits that exceeded specified levels designated by the regulator. Tariffs regarding the use of the distribution network continue to be based on a price cap mechanism similar to that applied in the 1999-2001 regulatory period. Currently, the overall electricity tariff comprises charges for generation, transmission and distribution, which includes physical distribution and commercial supply.

Under the applicable tariff regime, low voltage customers using up to 20.7 kVA are charged at rates applicable to defined consumption levels. Low voltage customers using more than 41.4 kVA and medium, high and very high voltage customers are invoiced for demand based on subscribed demand and average monthly peak demand.

The current tariff regime offers two discount schemes for customers in the Binding Sector, which apply to all customers equally. Under the first scheme, medium voltage customers with contracted demand above 4 MW and a yearly utilization greater than 5,000 hours or consumption above 30 GWh are entitled to a discount of 6% (in 2003). Discounts are applied to monthly invoices. This scheme is expected to be completed by 2005. The second method available for obtaining discounts is through a reduction of a customer s load. A customer that is able to reduce its load by at least 4 MW can elect to have an interruptible tariff. In cases in which a distributor declares an interruptibility period and the customer complies with that period, the customer can receive an additional discount. Under the load discount scheme, an eligible customer may elect one of two interruptible tariffs, which results in average rebates of approximately 13%, depending on the interruptible load contracted.

At the beginning of the 2002-2004 regulatory period, the regulator introduced a new tariff structure, based on the concept of an additive tariff consisting of sub-tariff components using an approach that is more reflective of costs, both between the Binding and Non-Binding Sectors, and also in each sector. For example, in the 1999-2001 regulatory period, costs were less efficiently reflected in the tariff in the Binding Sector, thereby giving customers in the Binding Sector the benefit of lower tariffs than in the Non-Binding Sector where costs were more efficiently reflected in tariffs.

Generation revenues arising from power sold by CPPE and other plants in the Binding Sector under PPAs allow these plants to achieve a return on assets of 8.5% in real terms. For more information on the PPAs, you should read Portugal Transmission Purchase of Electricity. The price of electricity in each PPA consists of the capacity and energy charges, which account for 95% of PPA costs, together with costs associated with imports, autoproduction and generation facilities. The capacity and energy charges have been, and continue to be, passed through to the final tariff paid by customers in the Binding Sector.

Transmission revenues have been changed from the 1999-2001 regulatory period to the 2002-2004 regulatory period. The transmission component of the tariff is calculated annually by the regulator to cover operating and maintenance expenses of the national transmission grid as well as to provide to REN a return on assets in the 2002-2004 regulatory period of 9% in nominal terms, excluding the remuneration of the land used for generation sites owned by REN. During the 1999-2001 regulatory period, an 8.5% return on assets figure was used.

Because the transmission component of the tariff is based on estimated data for variables such as cost and demand, each formula incorporates an annual adjustment mechanism that operates with a two year time lag and is intended to adjust for differences between amounts recorded as revenue and the revenue level permitted by the tariff when applied to actual operational data. For more information on the tariff adjustment, you should read 
Item 5. Operating and Financial Review and Prospects 
and note 39(p) to the consolidated financial statements.

The remuneration of distribution in the Binding Sector is the only one of the three businesses where returns are fixed primarily according to a price cap mechanism. For the 2002-2004 regulatory period, the commercial supply of electricity was split into network commercialization and Binding Sector commercialization, both with regulatory schemes of cost acceptance plus an allowed return on assets. As with generation and transmission, the distribution tariffs are subject to an annual adjustment mechanism with adjustments made based on actual costs two years after

#### **Table of Contents**

originally recorded. For the 2002-2004 regulatory period, the regulator fixed the price cap at 7.5% for high and medium voltage levels and 6.6% for the low voltage level. For the network commercialization and for the Binding Sector commercialization, the regulator set at 9% the fixed asset return rate. However, the profit sharing mechanism for this regulatory period was eliminated.

In the Binding Sector, customer tariffs for low voltage consumption cannot increase by more than the forecast inflation rate for a particular year. In addition, customer tariffs for very high voltage, high voltage and medium voltage are subject to quarterly adjustments, primarily to accommodate changes in fuel prices.

#### Other codes

The Commercial Relations Code was published on September 1, 2001, and is intended to govern the commercial relations between entities within the Binding Sector as well as the commercial relations between the Binding Sector and the Non-Binding Sector. This code also governs the access to the Non-Binding Sector by Qualifying Consumers and the rules applicable to the purchase and sale of electricity within a system established for the Non-Binding Sector. The regulator has also enacted the rules of access to this system and the rights and obligations of the system s participants, including Qualifying Consumers who have elected to participate in the Non-Binding Sector, their agents and REN as the manager of the system. The Commercial Relations Code was recently amended in April 2004, in light of the regulatory regime set out in Decree law no. 36/2004 of February 26, 2004.

The Dispatch Code, also published on September 1, 2001 (and amended in December 2001), establishes the rules of dispatch that are applicable to REN based on principles of equality of treatment and opportunity and safeguarding the public interest in the Binding Sector.

The Access to the Grid and Interconnections Code published on September 1, 2001, is based on the same general principle as the Dispatch Code. Access to the grid is subject to the execution of an agreement in accordance with a model provided by the regulator. This Code was also amended pursuant to the approval of the Decree law no. 36/2004 of February 26, 2004.

Since 2001, ERSE has been updating these codes, on a yearly basis, to accommodate changes in the electricity sector.

On January 1, 2001, DGGE issued a quality of service code. Under this code, DGGE seeks to enhance the quality of service with a system of penalties assessed against electricity companies based on their performance. DGGE has defined benchmarks against which a company s performance can be measured if requested by the company s customers. Fines are imposed against electricity companies in the event of power failures or any disturbances in power supply that, in each case, cause an operator s performance to fall below DGGE s benchmarks. These benchmarks were effective as of July 1, 2001.

In February 2003, DGGE approved and published a new quality of service code that clarifies and tightens quality standards imposed on electricity companies as well as the compensation amounts to be paid to costumers.

## Reversionary assets

Our assets held under concession agreements with the Portuguese government or municipalities or licenses issued by the government for generation and distribution of electricity are treated either as being within the public domain of the Republic of Portugal or municipalities (for assets used in low voltage distribution) or dedicated to public service. We use assets that are part of the public domain and own and use assets that are dedicated to public service subject to limitations on their disposal.

Assets within the public domain that by their nature are replaceable may be replaced by another asset performing the same function, subject to prior authorization in certain cases. Any asset that has been replaced will thereafter be treated as a private asset. Other assets held by us, including land and buildings not held under concessions or license, are our private property.

74

#### **Table of Contents**

Under Portuguese law, assets under public domain cannot be sold, pledged or otherwise encumbered and are not available for enforcement of judgments. The same regime applies to assets dedicated to public service, subject to specified exceptions.

The reversion of assets is subject, in specified cases, to payment as described in the following paragraphs:

### Licenses for generation

Assets held by the CPPE for generation revert to REN, as concessionaire for the national transmission grid, at the termination of the relevant PPA, subject to payment of the residual value of assets, in accordance with the PPA, provided that the assets are considered by REN to be necessary for generation in the Binding Sector according to the expansion plan for the Binding Sector in place at the time. If not considered necessary by REN, CPPE is entitled to purchase those assets for use in the Non-Binding Sector.

#### Licenses for distribution

Our assets held under a binding license for distribution of high voltage and medium voltage revert to REN, as concessionaire for the national transmission grid, when the license terminates. If the termination occurs by revocation or resolution of the license, payments are due as established in the binding agreements entered into between the parties. If the license terminates for any other reason, the payment due will be the average of the net book value of the assets and value of lost profits.

## **Concessions with municipalities**

Assets held by EDPD in low voltage revert to municipalities at the end of the term of concession, subject to payment of the net value of assets as determined by a commission of three members, one appointed by each party and a third one by the Portuguese government. Both the expiration and early termination of these concessions can only take place if the municipalities meet specified conditions regarding the viability of the proposed distribution arrangements and the transfer of assets and workers.

#### **Environmental**

Overview

In Portugal, the fundamental principles regarding environmental matters are set forth in the Portuguese Constitution, which guarantees each Portuguese citizen the right to a healthy and ecologically balanced human environment and establishes environmental protection as a duty of the state. Also, in 1987, the Portuguese government has adopted an environmental statute, the *Lei de Bases do Ambiente*, which (i) sets forth certain fundamental rules regarding air, light, superficial soil and subsoil, flora and fauna, (ii) establishes certain principles regarding environmental protection, including the polluter-pays principle, and (iii) establishes a regime of civil and criminal liability.

Specifically, the Portuguese electricity supply industry and we have to comply with a number of EU and Portuguese environmental laws and regulations, regarding, among others, (i) air emissions, (ii) waste water discharges, (iii) waste management, (iv) use of water resources and (v) assessment of the environmental impact of new projects.

Management believes that we are in compliance with all existing material environmental laws and regulations to which we are subject and expects us to remain in compliance with these laws and regulations.

Specific regulation

Concerning  $SO_2$  and  $NO_x$  emissions, the EU Directive 2001/80/CE, October 23, 2001 relating to the emission of pollutants from Large Combustion Plants, was implemented in August 2003 in Portugal by Decree law no. 178/2003 of August 5, 2003. Under this new regulation, Portuguese environmental authorities are currently creating a plan,

75

#### **Table of Contents**

called the National Emissions Reduction Plan, to reduce  $SO_2$  and  $NO_x$  emissions. This plan is expected to be formally approved during the first half of 2004. Management expects to be in compliance with the National Emissions Reduction Plan by the time required since the necessary emissions abatement equipment (fuel gas desulfurization and additional  $NO_x$  primary reduction measures) is expected to be installed in the Sines power plant by 2008, while the Barreiro, Carregado and Setúbal power plants are expected to be exempt from compliance with new emission limit requirements.

With regard to CO<sub>2</sub> emissions, both the EU and Portugal are signatories to the UN Framework Convention on Climate Change, adopted in May 1992, and parties to the Kyoto Protocol of December 1997, under which the EU committed to reduce CO<sub>2</sub> and other greenhouse gases, or GHGs, by 8% from 1990 levels during the period 2008-2010. Both the EU and Portugal ratified the Protocol in 2002. In 2003, a revised draft of the Portuguese National Program on Climate Change, which defines GHG emission reduction measures, was put forward for public comment. This draft, which proposes additional GHG measures, is expected to be approved by the Portuguese government in 2004. The EU Directive on GHG emissions trading, Directive 2003/87/EC, was published in October 2003 and has not yet been implemented under Portuguese law. Under this Directive, Portugal released a National Allocation Plan proposal for public comment on March 17, 2004. This proposal assigns GHG emission allowances to installations in specific industrial sectors, including thermal power plants, for the 2005-2007 regulatory period and is expected to be finalized in October 2004. Although this proposal does not fully contemplate dry hydrological conditions that could necessitate additional licenses and result in higher electricity costs, management expects to be able to fulfill our responsibilities under these national and industry-specific emissions allowance assignations for GHGs.

As part of our strategy to address public concern over the possible effects of electromagnetic fields, or EMF, we adopted the International Radiation Protection Association, or IRPA, recommendations published in 1990 for the design of new overhead lines. These recommendations have been substantially confirmed by the International Commission on Non-Ionizing Radiation, or ICNIRP, guidelines (1998) that were adopted in the Recommendation on the Limitation of Exposure of the General Public to EMF of the EU Council (June 1999).

In connection with the establishment of new facilities or significant increase in capacity of existing power plants, Portuguese legislation requires us to undertake environmental impact studies. New thermal power plants must comply with specific emission limits for  $NO_X$ ,  $SO_2$  and particles. EDP has only one such project current under development and it complies with the new LCPD Directive.

Our environmental policy and activities

In 1994 our board of directors has adopted an Environmental Policy Declaration, which sets forth our principles for environmental policy and activities. Our policy is aimed at minimizing or, where possible, eliminating negative environmental impacts. Management believes that we are in compliance with all existing material EU and Portuguese government environmental regulations, and expects that we will comply with proposed changes in EU regulations.

We made capital expenditures related to environmental matters in 2003 and 2002 of approximately 15 million. We expect these capital expenditures to amount to approximately 40 million in 2004, of which 20 million will be related to new investments in emissions abatement equipment in the Sines power plant, in order to adapt the facility to the new environmental regulations relating to  $SO_2$  and  $SO_3$  and  $SO_4$  million.

**SPAIN** 

## **Electricity regulation**

The enactment of Law 54/1997 of November 27, 1997 has gradually changed the Spanish electricity sector from a state-controlled system to a free-market system with elements of free competition and liberalization. With this change, the Spanish government intends to guarantee the electricity supply at the highest quality and at the lowest possible price. The current regulatory framework provides for:

the unbundling of activities so that no operator can carry out regulated activities (transmission, distribution, technical management of the system and economic management of the wholesale market) and liberalized activities (generation, trading and international/intra-community exchanges) at the same time;

76

#### **Table of Contents**

a wholesale generation market, or electricity pool;

freedom of entry for new operators with liberalized activities in the electricity sector;

liberalized activities to take place in a competitive environment, while transmission, distribution, technical management of the system and economic management of wholesale market activities will continue to be regulated as these activities particular characteristics impose severe limitations on the possibility of introducing competition;

as of January 1, 2003, all consumers may select their suppliers and the method of supply, either at market prices or with a set tariff fixed by the Spanish government;

all operators and consumers have the right to access the transmission and distribution grid by paying access tariffs previously approved by the Spanish government; and

environmental protection.

Technical and economic management of the system

Prior to the enactment of Law 54/1997, operation of the electricity system in Spain was a public service provided by the government through Red Eléctrica de España, S.A., or REE, a state controlled entity. Currently, under Law 54/1997, REE continues to serve as the system operator, but some of its dispatching functions have been taken over by the market operator, Companía Operadora del Mercado Español de Electricidad, S.A., or OMEL. Accordingly, OMEL is responsible for the economic management of the wholesale market and REE is responsible for the technical management of the transmission grid and the balancing mechanism that ensures that energy supply is equal to energy demand. The Spanish government no longer controls REE, although it still retains a 28.5% interest in the company through Sociedad Estatal de Participaciones Industriales, or SEPI. To ensure that REE and OMEL are guaranteed the highest levels of independence and transparency, the maximum stake that can legally be held in REE has been reduced to 3% (except for SEPI) and in the case of OMEL to 5%, except that economic managers of other electricity systems may hold stakes of up to 10% in OMEL until June 30, 2006.

Supervision of the system

The National Energy Commission is the public authority in charge of supervision of the electricity, hydrocarbons and liquid natural gas industries in Spain.

Generation

Law 54/1997 seeks to create a competitive electricity generation market where power generation plants are dispatched based on the results of a competitive bidding process administered by OMEL. Moreover, the same law provides for a transitional period until 2010 during which power generation companies that were subject to the Stable Legal Framework on December 31, 1987 will be entitled to partial compensation for the costs they incurred in connection with the transition to the competitive market regime, or stranded costs. This compensation is paid from amounts collected from consumers, as part of the tariffs, and settled by the National Energy Commission. Law 54/1997 also provides that the

installation of new power generation plants be completely liberalized and not subject to government planning, subject only to the authorizations required by the applicable laws and regulations (town planning and environmental protection, for example). New electricity generators will be entitled to the same rights and payments as other generators.

On June 23, 2000, Royal Decree no. 6/2000 was adopted to increase competition in the electricity and other sectors. The main consequences of these measures were the following:

a 3-year moratorium on generation capacity increases, which ended on June 23, 2003, was imposed on those operators with more than 20%, and less than 40% of the total Spanish installed capacity and a 5-year moratorium on those operators with more than 40% of the total Spanish installed capacity excluding capacity increases related to projects currently under the public inquiry process at the date of the Royal Decree and future projects to replace current generation capacity;

77

#### **Table of Contents**

eligibility for all consumers to participate in the liberalized market from January 1, 2003;

a maximum reduction in residential tariffs during the period between 2001 and 2003 of 9% depending on the evolution of demand, interest rates and efficiencies resulting from the opening of the market to competition; and

a prohibition on from holding third parties stakes in more than one main operator and nor are main operators permitted to hold stakes in other main operators.

Due to increasing concern over environmental matters, generation activities included in the special regime (those based on non-consumable, renewable energies as well as specific cogeneration plants) have become increasingly important in recent times. Royal Decree no. 436/2004 of March 12, 2004 establishes a new legal and financial framework for generation activities. The aim of this Royal Decree is to promote clean energy such that it will constitute approximately 30% of total electricity consumption by 2010. The new financial framework allows special regime generators to choose between selling their energy at market prices (in the electricity pool, the long-term pool or through bilateral agreements, in all cases, plus certain premiums and incentives) or at set tariffs (to distributors).

Transmission and distribution

Under some of the provisions of the current regulatory scheme, electricity transmission and distribution activities will continue to be regulated as their particular characteristics impose limitations on the possibility of introducing competition. The current regulatory framework has changed, however, the manner in which electricity businesses receive payments, in order to promote efficiency and quality of service.

The regulations take into account the investment and operational costs related to transmission activities. Fixed payment for distribution is based on investment and on operational and maintenance costs, as well as distribution areas, incentives for the quality of supply, loss reduction and commercial management costs.

Trading

Trading (or retailing) in Spain was created by Law 54/1997. Traders are companies that have access to the transmission and distribution networks and whose function is to sell electricity to eligible consumers or other agents in the system. Economic terms of retailing transactions are freely agreed to by the parties concerned. Therefore, this type of supply is not subject to fixed tariffs.

Tariffs

Spanish electricity tariffs are fixed annually by the government through Royal Decree. Royal Decree no. 1432/2002 of December 2002 established a new method of calculation for the period 2003-2010. The new method of calculation allows tariffs to be fixed under more objective, transparent and predictable conditions. Annual increases to tariffs cannot exceed 2% and electricity companies carrying out regulated activities can recover the losses known as rate deficits, caused by the reduction of tariffs during the period 2000-2002.

Royal Decree no. 1802/2003 of December 26, 2003 fixed the tariffs for 2004 and provided for an average rise of 1.72% on the 2003 average tariff (or reference tariff, which includes all applicable tariffs and costs).

78

#### **Table of Contents**

The integrated supply tariffs increased 1.54% from 2003, while access tariffs were increased 1.60% from 2003. Both the supply and access tariffs for residential consumers increased 1.475% from 2003, and tariffs for other consumers increased 1.6% from 2003.

These tariff increases are due to the inclusion of the following elements of the tariffs for 2004 (the last three of which were introduced for the first time for 2004):

payments in respect of regulated activities such as transport, distribution and trading carried out by certain companies, mainly in the Canary and Balearic Islands;

fixed compensation for the costs incurred by specific companies owning electricity generation facilities in connection with the transition to the competitive market regime (stranded costs);

the annual compensation for recovering the rate deficit of regulated activities as well as the review of the compensation to the electricity systems inside and outside the Iberian Peninsula during 2001 and 2002;

the outcome of the updates for deviations in the estimates adopted for calculating the 2003 tariff; and

REE s costs relating to the management of the system outside the Iberian Peninsula.

#### Gas regulation

Law 34/1998 of October 7, 1998 began the liberalization process of the Spanish natural gas sector and has been amended several times in recent years in order to improve this liberalization process.

The main features of the current regulatory framework are as follows:

the unbundling of activities so that no operator may carry out regulated activities (regasification, strategic storage, transmission, distribution and supplying at set tariffs) and liberalized activities (trading at market prices) simultaneously;

as of January 1, 2003, all consumers, regardless of their consumption, are fully eligible to select their suppliers as well as the method of supply, either at market prices or with a set tariff;

all operators and consumers have the right to access the transmission and distribution grids by paying access tariffs previously approved by the Spanish government. This right is based on principles of free access, objectivity and transparency. Access to the grid can only be denied under circumstances set forth in certain laws and regulations in cases where there is a lack of capacity or reciprocity;

all tariffs, tolls and royalties are based on costs that are transferred to consumers of natural gas. The tariff is based on levels of pressure and consumption rather than by type of use. The tolls and royalties for transport and distribution are based on the level of pressure at which the network is connected to the consumers installation and on the volume of annual consumption rather than on distance;

to ensure that ENAGAS, S.A., the current technical manager of the system, as well as the owner of the majority of the high-pressure transmission grid, is guaranteed the highest level of independence, the maximum stake that can be legally held in it, directly or indirectly, by any shareholder has been reduced to 5%. Any necessary reductions must take place before December 31, 2006; and

Royal Decree no. 1434/2002 of December 27, 2002, specifically regulating transmission, distribution, trading and supply activities, as well as the process of authorizing natural gas plants and installations, regulates relations between gas companies and their customers, both in the regulated and unregulated markets.

79

#### **Table of Contents**

#### **EU LEGISLATION**

On December 19, 1996, a major breakthrough in the creation of an internal market in energy in the EU was reached with the adoption by the European Parliament and the EU Council of Ministers of Directive 96/92/EC concerning common rules for the internal market in electricity, or the Access Directive.

The Access Directive endeavors to promote a competitive open electricity market reconciling the following challenges: (1) increasing efficiency in production, transmission and distribution; (2) reinforcing security of supply; (3) increasing competitiveness of the European economy. The Access Directive was reviewed beginning in March 2001. As a result, Directive 2003/54/EC was adopted and went into effect in August 2003. Member States must implement this Directive by July 1, 2004. The expected scope and impact of this new Directive is discussed below.

#### Public service obligations and customer protection

Member States must ensure that electricity companies are operated in accordance with the principles of Directive 2003/54/EC with a view toward achieving a competitive, secure and environmentally sustainable market in electricity and must not discriminate between these companies with respect to rights or obligations. Member States may require distribution companies to connect customers to their grid under the Directive. Member States must ensure that eligible customers are effectively able to switch to new suppliers.

#### Planning of new generation capacity

With regard to construction of new generating capacity, Member States must adopt a tender procedure that must be conducted in accordance with objective, transparent and non-discriminatory criteria. Member States must provide precise criteria for the tender and these criteria must be made public. In the event of a refusal of authorization to construct new generation facilities, the applicants must be duly informed of the reasons for such refusal, and appeal procedures must be made available.

## Tendering for new generation capacity

Member States must ensure the possibility of providing for new capacity or energy efficiency/demand-side management measures through a tendering procedure or an equivalent procedure based on certain objectives, including transparency, non-discriminatory terms and published criteria. However, these procedures may only be launched if, on the basis of the authorization procedure, the generating capacity being built or the energy efficiency/demand-side management measures being taken are not sufficient to ensure the objectives referred to above.

Tender specifications must be made available to any interested undertaking established in the territory of a Member States, and must contain a detailed description of the contract specifications and the procedure to be followed by all tenderers, including an exhaustive list of criteria governing the selection of tenderers and incentives.

Member States must designate an independent authority responsible for the organization, monitoring and control of the tendering procedure.

80

#### **Table of Contents**

### Transmission system operation

Member States must ensure the long-term ability of the system to meet reasonable demands for the transmission of electricity in order to ensure the security of supply. The transmission system operator will be, in that context, responsible for ensuring a secure, reliable and efficient electricity system and ensuring the availability of all necessary ancillary services insofar as this availability is independent from any other transmission system with which its system is interconnected. The transmission system operator must also provide to any other system operator with which its system is interconnected, sufficient information to secure efficient cooperation and non-discrimination between users or classes of system users.

Where the transmission system operator is part of a vertically-integrated undertaking, it must be independent, at least in terms of its legal form, organization and decision-making, from other activities not relating to transmission, but these rules do not require the separation of ownership of assets of the transmission system from the vertically-integrated undertaking. In order to ensure the independence of the transmission system operator, specific criteria must be followed, including that the entities responsible for the management of the transmission system operator may not be part of the corporate structure of the integrated electricity undertaking responsible, directly or indirectly, for the day-to-day operation of the generation, distribution and supply of electricity.

#### Distribution system operation

Member States must designate or require companies that own or are responsible for distribution systems to designate, for a period of time to be determined by the Member State, one or more distribution system operators. The distribution system operator must maintain a secure, reliable and efficient electricity distribution system in its area, respecting the environment and without discrimination between system users or classes of users in favor of its related companies.

Where the distribution system operator is part of a vertically-integrated undertaking, it must be independent, at least in terms of its legal form, organization and decision making, from other activities not relating to distribution, without having to separate the ownership of assets of the distribution system operator from the vertically-integrated undertaking. In order to ensure the independence of the distribution system operator, specific criteria must be followed, including that the ones responsible for the management of the distribution system operator may not be part of the corporate structure of the integrated electricity undertaking responsible, directly or indirectly, for the day-to-day operation of the generation, transmission or supply of electricity. These requirements, however, may not be applied to integrated electricity undertakings serving less than 100,000 connected customers, or serving small, isolated systems.

The above considerations do not prevent the existence of a combined transmission and distribution system operator, which is independent in its legal form, organization and decision making from other activities not related to transmission or distribution system operation. These rules do not require separation of ownership of assets of the combined system from the vertically-integrated undertaking.

### Unbundling and transparency of accounts

Member States or designated authorities, including regulatory authorities, must have access to the accounts of electricity undertakings. Electricity companies whatever their system of ownership or legal form, must draw up, submit to audit and publish their annual accounts in accordance with the rules of national law concerning the annual accounts of limited liability companies.

Electricity companies must keep separate accounts for their transmission and distribution activities, as they would be required to do if the activities in question were carried out by separate companies, in order to avoid discrimination, cross subsidization and distortion of competition. Until July 1, 2007, they must keep separate accounts for supply activities for eligible customers and supply activities for non-eligible customers.

81

#### **Table of Contents**

#### Organization of access to the system

Third party access to transmission and distribution must be ensured by Member States, based on published tariffs and applicable to all eligible customers and applied objectively and without discrimination between system users. The operator of a transmission or distribution system may refuse access only if it lacks the necessary capacity, but must provide duly substantiated reasons for such refusal.

Member States must ensure that the eligible customers are: (a) until July 1, 2004, the eligible customers as specified in Article 19 of Directive 96/92/EC; (b) from July 1, 2004, at the latest, all non-household customers; (c) from July 1, 2007, all customers. In order to avoid imbalance in the opening of electricity markets, contracts for the supply of electricity with an eligible customer in the system of another Member State may not be prohibited if the customer is considered eligible in both systems involved.

Member States must designate one or more competent bodies as regulatory authorities. Those bodies must be completely independent from the interests of the electricity industry and are responsible for ensuring non-discriminatory, effective competition and the efficient functioning of the market and have the authority to require transmission and distribution system operators, if necessary, to modify terms, conditions, tariffs, rules, mechanisms and methodologies. They may act as dispute settlement authorities and, therefore, must be competent to judge and to decide on a complaint that any third party may present relating to the transmission or distribution system operator.

Member States are to create appropriate and efficient mechanisms for regulation, control and transparency so as to avoid any abuse of a dominant position. In the event of a sudden crisis in the energy market, a Member State may temporarily take the necessary safeguard measures, taking into consideration that such measures must cause the least possible disturbance in the functioning of the internal market.

Derogation of relevant provisions concerning transmission, distribution, unbundling and transparency of accounts and organization of access to the system may apply if Member States demonstrate that there are substantial problems with regard to the operation of their small isolated systems.

Member States must bring into force all necessary provisions to comply with the Directive 2003/54/EC by July 1, 2004. Member States may, however, postpone until July 1, 2007, the implementation of unbundling of distribution system operators (Article 15 (1)), without prejudice to all legal requirements to produce such implementation.

### Gas

The European Parliament and Council of Ministers adopted the new Gas Directive 2003/55/EC of June 26, 2003, which contains common rules for the natural gas market. The Directive entered into force in August 2003 and Member States must implement it by July 1, 2004. This Directive requires legal unbundling of network activities from supply, establishes a regulator with well-defined functions in all Member States, requires that network tariffs are published, reinforces public service obligations and introduces measures to increase the security of supply.

The main provisions established by the Gas Directive 2003/55/EC are as follows:

General rules for the organization of the sector: Member States must ensure, on the basis of their institutional organization and with due regard to the principle of subsidiarity, that natural gas undertakings are operated in accordance with the principles of this Directive with a view toward achieving a competitive, secure and environmentally sustainable market in natural gas and must not discriminate between these undertakings with respect to either rights or obligations. Member States may require that undertakings, in the general economic interest, carry out public service obligations that are clearly defined, transparent, non-discriminatory, verifiable and guarantee equality of access for EU gas companies to national consumers and must take appropriate measures to protect final customers. Member States must ensure that eligible customers are effectively able to switch to new suppliers. Nevertheless, long-term contracts will continue to be an important part of the gas supply of Member States and should be maintained as an option for gas supply undertakings as long as they do not undermine the objectives set by the Directive and are compatible with the Treaty, including competition rules.

82

#### **Table of Contents**

Transmission, storage, LNG, distribution and supply: In the case of a gas undertaking performing transmission, distribution, storage or liquified natural gas (LNG) activities that are separate, in legal form, from those undertakings performing production and/or supply activities, the designated operators may be the same undertaking owning the infrastructure. In order to ensure efficient and non-discriminatory network access, transmission and distribution systems should be operated through legally separate entities where vertically-integrated undertakings exist.

Organization of access to the system: Third party access to the transmission and distribution system, and LNG facilities must be ensured based on published tariffs, applicable to all eligible customers, including supply undertakings, and applied objectively and without discrimination between system users.

For the organization of access to storage facilities and linepack, Member States may choose either or both of the following access procedures (i) negotiated access (with the relevant storage system operator or natural gas undertakings) in which the parties are obliged to negotiate in good faith and must publish their main commercial conditions for the use of storage, linepack and other ancillary services; or (ii) in the case of regulated access, Member States must give rights to access on the basis of published tariffs and/or other terms and obligations for use of those facilities. This right of access for eligible customers may be given by enabling them to enter into supply contracts with competing natural gas undertakings other than with the owner and/or operator of the system or a related undertaking.

Member States must ensure that natural gas undertakings and eligible customers are able to access upstream pipeline networks in compliance with the objectives of fair and open access, achieving a competitive market in natural gas and avoiding any abuse of a dominant position.

Eligibility: Member States must ensure that the eligible customers are: (a) until July 1, 2004, the eligible customers as specified in Article 18 of Directive 98/30/EC; (b) from July 1, 2004, at the latest, all non-household customers; (c) from July 1, 2007, all customers. Contracts for supply with an eligible customer in the system of another Member State must not be prohibited if the customer is eligible in both systems involved.

Unbundling of accounts: Natural gas undertakings, whatever their system of ownership or legal form, must draw up, submit to audit and publish their annual accounts. These undertakings must, in their internal accounting, keep separate accounts for each of their transmission, distribution, LNG and storage activities as they would be required to do if the activities in question were carried out by separate undertakings, in order to avoid discrimination, cross-subsidization and distortion of competition.

Emergent markets: Member States qualifying as an emergent market, which, due to the implementation of this Directive would experience substantial problems, may derogate some provisions of this Directive, including matters relating to the unbundling of transmission and distribution systems operators, third party access to both systems of transmission and distribution and provisions related to market opening and reciprocity. This derogation must automatically expire at that time the Member State no longer qualifies as an emergent market.

According to Article 28 of this Directive, at the time the derogation referred in the previous paragraph expires, the definition of eligible customers must result in an opening of the market equal to at least 33% of the total annual gas consumption of the national gas market. Two years thereafter, all non-household customers must be eligible customers, and three years thereafter, all customers must be eligible.

83

#### **Table of Contents**

**BRAZIL** 

#### Legal and regulatory framework

The Brazilian Constitution provides that the development, use and sale of electricity may be undertaken directly by the federal government or indirectly through the granting of concessions, permissions and authorizations. Historically, the Brazilian electricity industry has been dominated by generation, transmission and distribution concessionaires controlled by the federal and state governments. In recent years, the Brazilian government has taken a number of measures to reform the electricity industry. Generally speaking, these measures have been taken with a view toward increasing the role of private investment and eliminating existing barriers to foreign investment, thus increasing overall competition in the electricity industry.

Initiated in 1995, the reform carried out in the energy industry established the rules for the execution of concession agreements between concessionaires and the Brazilian government, the requirement of a public bidding process for the granting of concessions related to energy facilities and services and competition in generation activity, following a transition period to a competitive market foreseen at that time. Due to difficulties faced during the implementation of these reforms, combined with an aversion to risk caused by the rationing program that occurred in 2001, the current Brazilian government launched a new reform in the energy industry with a view toward securing the future supply of electricity and reasonable tariffs.

On March 15, 2004, the Brazilian government enacted the New Electricity Industry Model Law, or New Model Law. This law significantly changed the regulatory structure of the Brazilian electricity market, mainly by increasing the oversight of the federal government over the industry, including government contract awards, and granting it responsibilities previously given to ANEEL.

#### Principal regulatory authorities

Ministry of Mines and Energy and ANEEL

The Ministry of Mines and Energy, or MME, is the Brazilian government s primary regulatory entity for the electricity industry. Following the adoption of the New Model Law, the MME has taken over certain duties that were previously the responsibility of ANEEL, an independent federal regulatory agency, including the drafting of guidelines governing the award of concessions and the issuance of directives governing the bidding process for the construction and operation of hydroelectric plants. The MME may, at its discretion, however, delegate such tasks to ANEEL.

The Brazilian electricity industry is regulated by ANEEL. After the enactment of the New Model Law, ANEEL s responsibilities have changed such that its primary responsibility now is to regulate and supervise the electricity industry in line with the policy to be dictated by the MME and to respond to matters that are delegated to it by the federal government.

National Energy Policy Council

In August 1997, the National Energy Policy Council (*Conselho Nacional de Política Energética*, or CNPE) was created to advise the Brazilian president with respect to the development and creation of national energy policy. The CNPE is presided over by the MME, and the majority of its members are ministers in the federal government. The CNPE was created to, among other things, promote the rational use of Brazil's energy resources and to assure the supply of energy to the country.

ONS

The National System Operator (*Operador do Sistema Nacional*, or ONS) was created in 1998. The ONS is a non-profit, private entity comprised of liberalized customers (defined below in The New Model Law The Liberalized Market) and electric utilities engaged in the generation, transmission and distribution of electricity, in addition to other private participants such as importers and exporters. The primary role of the ONS is to coordinate and control the generation and transmission operations in the Interconnected Power System, subject to the MME s authorization and ANEEL s regulation and supervision.

84

#### **Table of Contents**

Wholesale Electricity Market and its successor the CCEE

The Wholesale Electricity Market was originally a self-regulated body responsible for the operation of the short-term energy market, primarily to ensure that purchases of energy in the short-term energy market were settled and cleared in an efficient manner. Beginning in 2002, the Wholesale Electricity Market became subject to authorization, inspection and regulation by ANEEL. Participants in the Wholesale Electricity Market include all of the large electricity generating companies, distributors and energy traders.

Under the New Model Law, the Wholesale Electricity Market will be discontinued and its activities and assets will be absorbed by the new Electricity Trading Chamber (*Câmara de Comercialização de Energia Elétrica*, or CCEE) within 90 days of the official publication of the regulation establishing the CCEE. No date has yet been set for the official publication of this regulation.

Electricity Industry Monitoring Committee and the Energy Research Company EPE

The New Model Law authorized the creation of the Electricity Industry Monitoring Committee (*Comitê de Monitoramento do Setor Elétrico*, or CMSE) which acts under the direct supervision of the MME. The CMSE is in charge of monitoring the supply conditions of the system and with indicating steps to be taken to correct eventual identified problems uncovered by such monitoring.

The New Model Law authorized the creation of the Energy Research Company (*Empresa de Pesquisa Energética*, or EPE), a state-owned company that is responsible for conducting strategic research on the energy industry, including electricity, oil, gas, coal and renewable energy sources. EPE will be responsible for, among other things, studying projections of the Brazilian energy matrix, preparing and publishing the national energy balance, identifying and quantifying energy resources and obtaining the required environmental licenses for new generation concessionaires.

#### The New Model Law

The New Model Law, enacted by the current Brazilian administration in March 2004, introduced significant changes to the former directives and structure of the electricity industry, with a view toward fostering a more centralized industry at the federal level. The model aspires to provide incentives to private and public entities to build and maintain generation capacity that guarantees Brazil a secure electric power supply while simultaneously providing reasonable consumer tariffs through competitive energy auctions. Although the New Model Law is already in effect, as are the directives described below, several important aspects of this model have yet to be regulated.

Parallel Environment for the Trading of Electricity

Electricity sales under the new model will be divided into two market segments: the regulated market, or Pool, which includes the sale of electricity to regulated consumers such as distributors, and the free market, which includes sales of electricity to non-regulated consumer such as liberalized customers and electricity traders.

The Regulated Market, or Pool

The purchase of electricity by distributors for purposes of providing electricity to captive consumers will be made in the regulated market by means of a bidding process (auction). Distributors will be required to contract energy from generators via a pooling process managed by ANEEL, directly or through the CCEE, the successor to the Wholesale Electricity Market (See Principal Regulatory Authorities ). Energy purchases will be made through two types of bilateral agreements: the Contrato de Quantidade de Energia ( Energy Agreement ) and the Contrato de Disponibilidade de Energia ( Capacity Agreement ). Together, these agreements comprise the PPAs in the Regulated Market (*Contratos de Comercialização de Energia no Ambiente Regulado*).

85

#### **Table of Contents**

The Liberalized Market

The free market will cover freely negotiated energy sales between generation concessionaires, independent power producers, self-generators, energy traders, importers of electricity and liberalized customers. Liberalized customers are consumers that may purchase bulk electricity through bilateral contracts and are limited to (i) existing consumers that, in July 1995, had demand of at least 10 MW, supplied at voltage levels equal to or greater that 69 kV, (ii) new consumers with demand of at least 3 MW at any voltage, (iii) groups of consumers subject to agreement with the local distribution concessionaire and (iv) existing consumers with demand of at least 3 MW, supplied at voltage levels equal to or greater than 69 kV. The free market will also include existing bilateral contracts between generators and distributors until they expire. Upon expiration, these contracts must be executed under the New Model Law guidelines.

Energy consumers wishing to negotiate contracts for energy supply outside the Pool will be able to leave the regulated system by notifying their respective distributors up to three years in advance. Once a consumer has opted for the free market, it may only return to be supplied by the local distributor once it has given its regional distributor five years notice, provided that the distributor may reduce such term at its discretion. State-owned generators may sell energy to liberalized customers, but unlike private generators, they are obligated to do so through an auction process.

Restricted Activities of Distributors

The distributors in the National Interconnected System are not permitted to (i) develop activities related to the generation or transmission of electricity, (ii) sell electricity to liberalized customers, except for those in their concession area and under the same conditions and tariffs maintained with respect to captive consumers, (iii) hold, directly or indirectly, any interest in any other company, corporation or partnership or (iv) develop activities that are unrelated to their respective concessions, except for those permitted by law or in the relevant concession agreement. Generators will not be allowed to hold equity interests in excess of 10% in distributors. The New Model Law has granted a transition period of eighteen months for companies to comply with these rules, and ANEEL can extend this term for another eighteen months in the event that companies are unable to do so within the prescribed timeframe.

Elimination of Self-Dealing

Since the purchase of electricity for captive consumers will be performed through the Pool, self-dealing, a practice whereby distributors were permitted to purchase up to 30% of their energy needs through electricity that was either self-produced or acquired from affiliated companies, is no longer permitted, except in the context of agreements that were duly approved by ANEEL prior to the enactment of the New Model Law.

Independent Power Producers and Self-Producers

The Brazilian government introduced the concept of the independent power producer, or IPP, as an additional measure in opening the electricity industry to private investment and enhancing competition in energy generation. An IPP is a legal entity or consortium holding a concession or authorization for the sale of electricity to (i) liberalized customers in the free market, (ii) concessionaires of electricity services, subject to criteria defined by the MME, (iii) consumers who have not had their supply assured by the local distribution concessionaire after more than 180 days, upon request, subject to criteria defined by the MME and (iv) groups of ordinary consumers, upon previous agreement with the local distribution concessionaire, subject to criteria defined by the MME. Self-producers that generate power primarily for their own use may

contribute or exchange electricity with other self-producers within a consortium, sell excess electricity in the free market or exchange electricity with the local distribution concessionaire to allow for consumption by industrial plants owned by the self-producer and located somewhere other than in the area of generation.

86

#### **Table of Contents**

Initial Supply Contracts

During the transition period (1998-2006) to a free and competitive energy market as envisioned in the reform initiated in 1995, purchases and sales of electricity between generation and distribution concessionaires must occur pursuant to Initial Supply Contracts. Initial Supply Contracts are primarily take or pay commitments with prices and volumes approved by ANEEL. The purpose of Initial Supply Contracts is to guarantee stable supply and prices for distribution companies and a predictable stream of revenue for generation companies. During the transition period, the goal was to permit the gradual introduction of competition in the industry and to protect market participants against exposure to potentially volatile spot market prices. From 2003 to 2006, the electricity committed to Initial Supply Contracts has been reduced by 25% each year. Generation companies, under the New Model Law, will be allowed trade their uncontracted electricity in the Pool or in the free energy market. In addition, the New Model Law allows public generation companies to amend the Initial Supply Contracts that were in full force and effect as of March 2004. Generation companies that have amended their Initial Supply Contracts are not required to comply with the requirement to reduce the amount of electricity committed under such contracts by 25%.

#### **Ownership limitations**

In 2000, ANEEL established new limits on the concentration of certain services and activities within the electricity industry. Under these limits, with the exception of companies participating in the National Privatization Program (which need only comply with such limits once their final corporate restructuring is accomplished) no electricity industry company (including both its controlling and controlled companies) may (i) own more than 20% of Brazil s installed capacity, 25% of the installed capacity of the South/Southeast/Central-West region or 35% of the installed capacity of the North/Northeast region, except if such percentage corresponds to the installed capacity of a single generation plant, (ii) own more than 20% of Brazil s distribution market, 25% of the South/Southeast/Central-West distribution market or 35% of the North/Northeast distribution market, except in the event of an increase in the distribution of energy exceeding the national or regional growth rates or (iii) own more than 20% of Brazil s trading market with final consumers, 20% of Brazil s trading market with non-final consumers or 25% of the sum of the above percentages.

#### **Distribution tariffs**

Distribution tariff rates are subject to review by ANEEL, which has the authority to adjust and review tariffs in response to changes in energy purchase costs and market conditions. When adjusting distribution tariffs, ANEEL divides the costs of distribution companies between (i) costs that are not the under control of the distributor, or non-manageable costs, and (ii) costs that are under the control of distributors, or manageable costs. The readjustment of tariffs is based on a formula that takes into account the division of costs between the two categories.

Non-manageable costs include, among others, the following:

costs of electricity purchased for resale pursuant to Initial Supply Contracts;

costs of electricity purchased from Itaipu;

costs of electricity purchased pursuant to bilateral agreements that are freely negotiated between parties; and

certain other charges for the transmission and distribution systems.

Manageable costs are determined by subtracting all the non-manageable costs from the distribution company s revenues.

Each distribution company s concession agreement provides for an annual readjustment of tariffs. In general, non-manageable costs are fully passed through to consumers by the tariff. Manageable costs, however, are restated for inflation in accordance with the IGP-M index. After the initial three to five years following a periodic tariff review, depending on each concession agreement (Escelsa, 3 years; Bandeirante, 4 years; Enersul, 5 years), the IGP-M index must be reduced by a factor determined by ANEEL in order for distribution companies to share with their consumers gains of productivity, the so-called X Factor.

87

#### **Table of Contents**

The X Factor is determined by ANEEL in accordance with three components: (i) expected gains of productivity from increase in scale; (ii) consumers evaluation through ANEEL s Consumer Satisfaction Index; and (iii) the cost of the labor force. Tariffs are readjusted annually to reflect the effects of inflation on tariffs. Every period, as noted in the relevant concession agreement, there is a periodic review of the tariffs rates (revisão tarifária periódica) in which the tariff is reviewed with a view toward assuring the necessary revenues to cover efficient operational costs and adequate remuneration of prudent investments. In addition, concessionaires of distribution are entitled to extraordinary review of tariffs (revisão extraordinária), on a case-by-case basis, to ensure the financial equilibrium of the concession and to compensate for unpredictable costs, including taxes, which significantly change their cost structure.

#### Impact of the New Model Law on our Brazilian operations

The impact of the New Model Law on our Brazilian operations depends on the complete implementation of the rules. In the case of our Brazilian generation assets, it is not expected to have a major impact because most of our companies have already signed PPAs that have been approved by ANEEL, leaving only a limited exposure in the new environment for energy contracting. Regarding distribution, the main risks relate to the forecast of the energy consumption for the 5-year period and the potential exposure to the regulated contracting environment.

#### **TELECOMMUNICATIONS**

Legislative and regulatory measures have been taken in recent years to change the telecommunications market in Portugal from a monopoly held by PT to a fully open and competitive market. PT operates under a concession, which had granted it the exclusive right for 30 years from March 20, 1995, renewable thereafter for successive periods of 15 years upon agreement by the government and PT, to provide, among other things, domestic and international public fixed voice telephone services and leased lines and to install and operate the related basic telecommunications network in Portugal. By the end of 2002, the government released the infrastructures that constitute the basic telecommunications network from public domain and sold them to PT, pursuant to the amendment of the terms of the concession introduced by Decree law no. 31/2003 of February 17, 2003.

The EU adopted in 2002 a number of directives (known as the Review, 99 Telecom package) relating to the telecommunications market, the latest of which is Directive 2002/77/CE of September 16, 2002, that set forth the parameters for regulating telecommunications sectors in EU member countries. This package was implemented in Portugal through the Electronic Communications Law (Law no. 5/2004 of February 10, 2004), also known as Regicom. This law revoked the Law 91/97 of August 1, 1997, as amended by Law 29/2002 of December 6, known as the Basic Law of Telecommunications, which had been adopted in Portugal in anticipation of the full opening of competition in the Portuguese telecommunications market. In accordance with EU Legislation, this law established the principle of telecommunications liberalization, therefore abolishing the exclusive rights of PT and provided that the Portuguese telecommunications market would be fully opened to competition as of January 1, 2000.

#### Legislative framework

Following the revocation of the Basic Law of Telecommunications, the Electronic Communications Law now provides the legislative framework and basis for telecommunications regulation in Portugal. The Portuguese government enacted this law in order to comply with and implement a number of directives on telecommunications adopted by the EU Council of Ministers on March 7, 2002 (part of the Telecom Package). The other key elements of the framework of laws and regulations that apply to the telecommunications sector in Portugal are:

regulations to be adopted by the Portuguese telecommunications regulator to implement and give effect to different provisions of the Electronic Communications Law (provisionally, certain regulations approved under the former Basic Law of Telecommunications will be kept in effect until the new regulations are approved);

88

#### **Table of Contents**

decree laws not revoked by the Electronic Communications Law and concerning in particular the use of radio frequencies, the approval and free circulation of terminal and radio equipment and the telecommunications infrastructures in buildings regime;

directives, regulations, and policies of the EU;

legislation establishing and defining the functions of the *ICP-Autoridade Nacional de Comunicações*, or ICP-ANACOM, as the Portuguese telecommunications regulator and the Ministry of Economy, or ME, as the government entity with basic responsibility for telecommunications policy in Portugal; and

ICP-ANACOM determinations and regulations issued on the basis of specific powers granted by specific legislation.

Broadly, the Electronic Communications Law introduced, among other things, (i) new rules on access to telecommunications infrastructure, (ii) increases to administrative fines and (iii) the reinforcement of the powers and autonomy of ICP-ANACOM, namely by granting it powers to approve and publish legally binding regulations, to define the relevant telecom markets and to identify companies with significant market power.

Because the approval of the Electronic Communications Law entirely superseded the Basic Law of Telecommunications and almost all previous ancillary legislation, it is expected that extensive regulation will have to be passed in the coming months in order to fully replace the former legislation and fully implement the new Electronic Communications Law. Matters such as implementation of the new municipal tax for rights of way, the definition of telecommunications fees and relevant markets, identification of companies with significant market power and their inherent obligations, and the regulation of the procedures required for the attribution of rights to use numbering and frequency resources are amongst the issues expected to require immediate attention. As this regulation is still being developed, there can be no assurance that final regulations will be favorable for new market entrants such as ONI.

As under the Basic Law of Telecommunications, the Electronic Communications Law also regulates the general obligations of operators and service providers concerning their users, in particular on issues such as mandatory publicly available information concerning their offers. Under the new regime, ICP-ANACOM may also decide to impose specific additional obligations on operators deemed to have significant market power.

#### The Portuguese regulator

Although the Ministry of Economy retains basic responsibility for telecommunications policy in Portugal, ICP-ANACOM, acting under new statues approved by Decree law no. 309/2001 of December 7, is allowed to act with great autonomy and is entrusted with a wide range of responsibilities regarding the regulation, supervision and representation of the telecommunications sector. The Electronic Communications Law also defines the main objectives of regulation and gives ICP-ANACOM the main competencies foreseen in the new EU legal framework.

#### Licensing and registration

The new EU Licensing Directive prohibits any limitation on the number of new entrants in telecommunications markets, except as required to ensure an efficient use of radio frequencies. The licensing regime is based on general authorizations as opposed to individual licenses. However, it permits national regulatory authorities to make the granting of numbering and radio frequency resources subject to individual usage rights.

To facilitate implementation of the EU Licensing Directive, the Electronic Communications Law introduced a new concept regarding access to the telecommunications market. According to the relevant provision, telecommunications services normally fall under a general authorization regime (*Regime de autorização geral*). This, in turn, requires that the entities that provide telecommunications services in Portugal are obligated to (i) provide ICP-ANACOM with a summary and description of the services they intent to offer, (ii) communicate the date planned for the launch of their activity and (iii) provide certain identification elements under terms defined by ICP-ANACOM and recently published. After the provision of this information to ICP-ANACOM the companies may immediately start their activity.

89

#### **Table of Contents**

If the provision of the relevant services requires individual rights of use of frequencies or numbering, these rights can only be granted through an open, transparent and non-discriminatory procedure. The specific rules applicable to this procedure will be established by ICP-ANACOM, unless it relates to services to be made available for the first time in a specific frequency band, or relates to frequencies available for the first time and involves a competitive selection between several interested parties. In cases for which the service is available for the first time, the government will be responsible for approving the relevant applicable regulations.

### Pricing and fees

Telecommunications operators in Portugal other than PT are free to establish the prices for their services. PT entered into a pricing convention with ICP-ANACOM and the former DGCP, the Portuguese commerce and prices Department in the Ministry of Economy, which established price caps on PT s prices for fixed telephone services (i.e., installation charges, line rental fees and prices for domestic and international telephone calls), leased lines and telex. Prices must be transparent, cost oriented and non-discriminatory and must be published in the Official Gazette.

Operators and service providers must pay administrative fees to ICP-ANACOM, established by the Ministry of Economy. The amounts of these fees are yet to be determined, as the relevant fees due under the Basic Law of Telecommunications are no longer applicable under the Electronic Communications Law. The granting of numbering resources will also be subject to administrative fees that are different than those under the previous legal framework. The possibility for competitive bidding or auction procedures for the allocation of numbers and frequencies is also considered in the Electronic Communications Law.

#### Interconnection

Interconnection regulation is now generally regulated by the Electronic Communications Law. The basic principle is that operators are free to negotiate the technical and commercial terms and conditions applicable to interconnection agreements. However, it has also granted ICP-ANACOM a wide range of powers not only to intervene in dispute resolution or by its own initiative and to fix ex-ante conditions, but also to introduce certain conditions deemed necessary to modify existing interconnection agreements.

#### National telecommunication strategy

According to the Portuguese Plans approved by the Portuguese Parliament for the four year period 2003/2006, it is intended to improve the telecommunication sector s technological progress and to promote an independent regulator furnishing it with means to prevent all obstacles to a fully open and competitive market.

#### Internet

At present, there is limited Portuguese and EU legislation specifically covering the provision of Internet services, apart from the general rules established by the Electronic Communications Law, although there are laws and regulations relating to certain specific aspects of Internet

activities, including the use of domain names, digital signatures, electronic invoices and data protection. In addition, the EU adopted what is known as the E-Commerce Directive, which sets out basic principles for regulating electronic activities in the EU. There are also a number of pending legislative and regulatory proposals in Portugal and in the EU.

Internet advertising activities are subject to the relevant restrictions of the Portuguese Advertising Code, to Portuguese legislation applicable to home advertising and, more recently, to Decree law no. 7/2004 of January 7, 2004, or the E-Commerce Law implementing the corresponding EU e-Commerce Directive. In addition, sales through the Internet can be considered a form of retail sales and subject to Decree law no. 143/2001 of April 26, 2001, pursuant to which a consumer has the right to cancel a contract within 14 business days to 3 months, depending on the extent to which the seller has complied with the information requirements established by this decree law.

90

#### **Table of Contents**

On June 8, 2000, in order to ensure the free circulation of electronically provided services, including commerce between Member States, the EU adopted the E-Commerce Directive (2000/31/EC). This Directive sets out two main principles: services electronically provided by an ISP established within a Member State are required to comply with the legal requirements of such Member State (country of origin principle); and any Member State may not, as a rule, restrict the electronic services provided from another Member State (principle of mutual recognition). Portugal has recently implemented this directive in the E-Commerce Law (approved by Decree law no. 7/2004, of January 7) and, although exceptions apply to several matters such as tax, competition, personal data, gambling activities and notarial acts, this law sets out the main rules applicable to the provision of services using Internet and online contracting.

On December 21, 1998, the EU approved a plan, known as the Action Plan, to promote safer use of the Internet by combating illegal and harmful content on global networks. While some member countries have adopted this Action Plan, to date Portugal has not.

It is also possible that cookies, or pieces of electronic information used to track demographic information and to target advertising, may become subject to increased levels of legislation limiting or prohibiting their use. The recently-enacted E-Commerce Law did not, however, clarify this issue.

In addition, because of the global nature of the Internet, our Internet activities may be deemed subject to the laws or regulations of other countries

#### Item 5. Operating and Financial Review and Prospects

### **OVERVIEW**

### **COMPANY OVERVIEW**

Our principal business is the generation and distribution of electricity in Portugal and Spain (the Iberian Peninsula), which we consider to be and refer to in this annual report as our domestic market. We are also involved in activities related to our core energy business both in our domestic market, such as the distribution and supply of natural gas, and in Brazil, where we exercise control over three distribution companies and own interests in generation. In addition, we hold interests in other complementary businesses, such as a 56% stake in ONI, a fixed line telecommunications operator in Portugal and Spain.

#### FACTORS IMPACTING OUR BUSINESS

Our businesses, financial condition and operating performance have been and will continue to be primarily affected by:

the macroeconomic conditions in the countries in which we operate, which influence the overall level of demand for electricity and gas;

changes in the regulatory frameworks in the countries in which we operate, which can affect the tariffs that we are permitted to charge for electricity and gas;

our level of operating costs, which consist primarily of depreciation and amortization, fuel costs and costs of purchased electricity and gas, and wages and salaries; and

the volatility of the Brazilian real against the euro, which influences our reported results and the value of our consolidated assets and liabilities.

91

#### **Table of Contents**

#### **Economic factors**

The level of demand for electricity in countries in which we operate is directly related to the general level of economic activity in those countries.

Over the last decade, Portugal has experienced a stronger rate of economic growth than many other EU Member States. From 1993 through 2003, Portugal s real gross domestic product grew at an average annual rate of 2.6%, as compared with an average of 2.2% for all EU Member States. Portugal, like other European countries, was affected by a recession from 1992 through 1994. Since 1996, however, the Portuguese economy has recovered and growth in Portugal s gross domestic product has exceeded the EU average. The structure of Portugal s economy has been undergoing significant changes, as higher value-added sectors, such as manufacturing and services, have gained in relative importance compared to lower value-added sectors, such as agriculture. In 2003, Portuguese GDP declined by about 1.0% compared to a growth rate of 0.5% in the euro zone and a growth rate of 0.4% in Portugal in 2002 and 1.6% in 2001. The slowdown in the Portuguese economy in 2003 was mainly the result of international economic factors, principally the difficulty experienced in the euro zone and North America as these areas attempted to stage economic recoveries, lower demand in Portugal and a decline in EU exports as a result of the appreciation of the euro against the U.S. dollar. In addition, budgetary restrictions in several EU countries prevented the adoption of expansionary economic policies. Despite the unfavorable macroeconomic environment, electricity consumption in Portugal grew by 5.3% in 2003, one of the fastest growing rates in the euro zone, driven by a cold winter and a particularly warm summer.

In Spain, where we have a 40% ownership stake in Hidrocantábrico, GDP growth was 2.4% in 2003, compared to 2.0% in 2002 and 2.7% in 2001. In 2003, Spain had one of the highest-performing European economies, significantly above the EU average and above Spanish GDP growth in 2002, despite the difficult international economic environment in 2003, particularly in Europe. Electricity consumption growth in the Spanish market was 5.8% during 2003, compared with growth of 2.4% in 2002.

During 2001 and 2002, Brazil experienced a series of events that had a negative effect on its economy. On the international front, the troubled state of several of the major economies of Latin America, especially Argentina s default on its debt obligations and the Argentine government s decision to remove the peg of the Argentine peso to the U.S. dollar, raised fears that Argentina s economic difficulties would spread to Brazil. On the domestic front, the Brazilian economy was significantly affected by the energy rationing program implemented by the Brazilian government, the weakening of demand in Brazil and the uncertainty surrounding the results of the October 2002 presidential elections, which raised concerns over the continuity of a number of economic reforms. In 2003, Brazil experienced a positive turnaround in its economy, reflected in inflation indicators and currency exchange rates. This turnaround was largely due to improved liquidity in international financial markets, the economic growth of Brazil s main commercial partners (China, Argentina and the United States of America), adherence to the targets of inflation policy, agreement on primary surplus levels with the IMF and improvement in Brazil s trade balance, which reached US\$24,800 million in 2003. The real depreciated 18.7% in 2001 and 52.2%% in 2002, against the U.S. dollar, largely due to Brazil s increased financing requirements and a decrease in the inflow of foreign capital. In 2003, the Brazilian real appreciated 18% against the U.S. dollar, reaching 2.89 reais per U.S. dollar at the end of 2003, compared to 3.53 reais at the end of 2002, due to Brazil s decreased financing requirements, an increase in the inflow of foreign capital and government fiscal and monetary policies. Despite improvements in certain economic indicators and in currency exchange rates, the tight monetary policy pursued by the Brazilian government in 2003 adversely affected the domestic economy and GDP decreased by 0.22% after increases of 1.31% and 1.93% in 2001 and 2002, respectively. Despite the relatively modest economic growth, as measured by GDP, in 2002 and 2003, the resolution of most of the difficult economic factors and signs of the adoption of an economic policy based on stability have led to more optimistic expectations for the Brazilian economy for 2004.

**Regulatory factors** 

Since the 1990s, the policy of successive Portuguese governments has been to remove barriers to trade, privatize state-owned companies and liberalize key economic sectors, such as telecommunications, transportation and energy and power. Prior to 1988, we had a nearly complete monopoly of the electricity generation, transmission and distribution business in Portugal. Since 1988, however, competition has increased in the generation business and is expected to continue to do so during the next few years as the EU competition policy is implemented. In

#### **Table of Contents**

1999, the regulator implemented measures to encourage competition in the distribution of electricity in Portugal, and beginning in June 2004 all consumers will be able to choose their supplier. To learn more about these measures, you should read 
Item 4. Information on the Company Portugal Competition.

Until the end of 1998, tariffs were fixed annually by convention, negotiated between us and DGCC. Tariffs were based on total estimated costs for the relevant year assuming average hydrological conditions. These tariffs were not specifically linked to an inflation-indexed formula. From 1995 through 1997, tariffs decreased in nominal terms by 2.8% and in real terms, adjusted for inflation, by 7.8%. On September 15, 1998, the new tariff regime, which became effective in 1999, was adopted by the regulator and on December 4, 1998, the regulator announced a new policy for the years 1999, 2000 and 2001. Under this regime, tariffs are set by the regulator pursuant to a periodic registration of regulatory parameters. In 1999, in nominal terms, tariffs for all voltage levels declined by an average of 6.3% from 1998 levels. For 2000, in nominal terms, tariffs for all voltage levels declined by 0.6% from the 1999 levels. For 2001, in nominal terms, tariffs for all voltage levels increased, on average, by 1.2% from the 2001 levels. In November 2001, the regulator published the regulatory framework for the 2002-2004 regulatory period. For 2002, in nominal terms, tariffs increased across all voltage levels by an average of 2.2% from the 2001 levels. For 2003, in nominal terms, tariffs increased across all voltage levels by an average of 2.8% from the 2002 levels. In real terms, adjusted for inflation, very high, high and medium voltage tariffs have declined by an average of 3.4% over the period 1999 to 2004. The tariffs for low voltage customers have also declined, in real terms, by an average of approximately 3.1% over the same period. For 2004, in nominal terms, tariffs increased across all voltage levels by an average of 2.1% from the 2003 levels. In real terms, very high voltage tariffs increased 1.6% between 2003 and 2004, high voltage tariffs remained stable, medium voltage tariffs decreased by 0.1% and low voltage tariffs increased 0.1%. Tariffs in 2004, in real terms, increased 0.21% on average across all voltage levels. To learn more about these tariffs, you should read Item 4. Information on the Company Portugal Tariffs and Regulation Portugal.

In late 2000, the Portuguese government purchased a 70% interest in REN from us. The government s decision to purchase a controlling stake in REN from us was a part of the government s reorganization of the Public Electricity System in accordance with the European trend toward greater liberalization. As part of this liberalization, the government sought to separate the company managing the national grid from generation and distribution companies, which the government in the decree law stated is the most suitable model of operation and would bring greater transparency and competition to the electricity sector. The decree law relating to the REN purchase permits us to purchase the sites of the power plants used in the Binding Sector in the event REN chooses not to use such sites and plants at the conclusion of the applicable contract for the expansion of the Binding Sector, thereby permitting us to continue to operate the plant in the Non-Binding Sector. The decree law also provides that, in the event we sell our remaining shares in REN, the government will have the first right to acquire these shares. Currently, our 30% interest in REN is accounted for under the equity method of accounting. The reduction of the Portuguese government s ownership to less than a majority interest in our shares and the reduction of our ownership interest to less than a majority interest in REN s shares triggered provisions in some of our debt agreements that provide specified remedies for creditors. For more information, see Liquidity and Capital Resources.

In Spain, following the trend of privatization and liberalization in other regulated sectors, a new regime was introduced by Law 54/97 whereby management, transmission and distribution of electricity remained the only regulated activities in the electricity sector. Furthermore, in order to accomplish a complete unbundling between generation and transmission activities, accounting separation was established for companies carrying out both activities. Under the new framework, a wholesale market, which is run by OMEL, was established for generation activities. Customers above a determined voltage threshold were allowed to choose their electricity supplier and REE remains responsible for the technical management of the transmission grid.

In recent years, further measures have been implemented to enhance competition, and since January 1, 2003 all customers can choose their electricity supplier. In other words, they can decide to remain regulated and subject to the electricity tariff or enter into a contract with a supplier at a market rate.

Pursuant to Law 54/97, the regulated electricity tariffs will be determined by a Spanish governmental Royal Decree on an annual basis. The tariff may be amended if special circumstances warrant doing so, once the legal requirements have been complied with and the necessary reports are obtained. In 2002, a new method of tariff calculation was adopted for the period 2003-2010. Electricity companies that were in operation as

of December 31, 1997

93

#### **Table of Contents**

can recover a fixed amount of competition transition costs. This enables these companies to recover part of the costs borne by electricity generators during a period of transition to a competitive market until 2010. The regulated electricity tariff is based upon an average tariff or reference tariff, which includes all the applicable tariffs and costs. These tariffs are not specifically linked to an inflation-indexed formula. The system of regulated tariffs is used to determine the price of the supply of electricity and access to the transportation and supply networks. The regulated supply tariff is based upon a range of general tariffs, which are determined by the supply tension and the use of the power contracted.

For 1999, in nominal terms, the average tariff in Spain decreased by 5.57%. The decline of the average tariff continued until 2002, when the new method of calculation was adopted. Since then, the average tariff increased for 2003 and 2004 by 1.65% and 1.72%, respectively. However, the reference tariff has decreased in real terms, adjusted for inflation, every year since 1992. Thus, the cumulative variation of the tariff in real terms presupposes a 44.5% reduction since 1993.

#### Factors affecting the comparability of our results of operations

In the first half of 2002, we acquired 40% of Hidrocantábrico and started proportionally consolidating the company as of June 1, 2002. Our 2002 consolidated financial statements included Hidrocantábrico s contribution for the last seven months of 2002, whereas in 2003, our consolidated financial statements include Hidrocantábrico s contribution from the full year.

In October 2002, we gained operational control over Espirito Santo Centrais Electricas, S.A., or Escelsa, a Brazilian electricity distributor located in Espirito Santo State. Escelsa owns 65% of Emprea Energetica do Mato Grosso do Sul, S.A., or Enersul. Until the end of September 2002, we accounted for Enersul using the equity method and from October 1, 2002 fully consolidated both Escelsa and Enersul. Despite the fact that this change in the consolidation method had no impact on our reported net profit, it did have an impact on our consolidated financial statements.

Our operating margin and net profit in 2003 increased by 39.6% and 13.7%, respectively, from 2002. In 2002, operating margin and net profit decreased by 3.7% and 25.6%, respectively, from 2001.

The increase in 2003 operating margin was influenced by the consolidation changes between 2002 and 2003 mentioned above relating to Hidrocantábrico, Escelsa and Enersul. If we had fully consolidated these companies for 12 months of 2002, our operating margin would have increased 23.8% in 2003. This increase is partly explained by the strong growth rates in electricity consumption across all of the countries in which we operate, an increase in the regulated revenues of EDPD, tariff increases granted to our distribution companies in Brazil by the Brazilian electricity regulator and better operating performance of ONI as a result of the implementation of a cost reduction plan and following discontinuation of ONI Way in 2002. The decrease in operating margin in 2002 was partially due to the effects of lower electricity distribution tariffs in Portugal following the start of the 2002-2004 tariff period and the combination of lower consumption in areas served by Bandeirante, Escelsa and Enersul following the electricity rationing program of the Brazilian government, and a severe devaluation of the real against the euro. A devaluation in the real negatively affects our consolidated results as the results of our Brazilian companies are translated into euros in our consolidated results.

The 13.7% increase in net profit from 2002 to 2003 was due to a 39.6% increase in operating margin discussed above and lower extraordinary losses due to a one-time write-off in 2002 of our investment in ONI Way, in connection with the divestment of ONI s UMTS business. The factors positively affecting net profit were partially offset by higher financial charges and lower contributions from minority interests resulting from the proportional consolidation of Hidrocantábrico for 12 months in 2003 compared with 7 months in 2002.

Looking forward, we do not expect one-time items to materially affect our results in 2004. Although we will continue to experience lower tariffs in our distribution business, we are optimistic that the regulator may allow us to include in our regulatory cost base significant restructuring costs related to our human resources, which we began to implement in the last quarter of 2003. In addition, in 2004 we will not have the capital expenditures previously required for ONI s development of a UMTS network.

94

### **Table of Contents**

Our costs are influenced by inflationary trends, fluctuations in fuel costs and hydrological conditions. In years with less favorable hydrological conditions, or drier conditions, use of thermal power can increase significantly, causing our spending on fuel to increase substantially. In years with more favorable hydrological conditions, or wetter conditions, the opposite result occurs. To smooth the impact on earnings and customer prices, the hydro account was established. The hydro account is discussed below in 2003 compared with 2002 Hydrological correction and in notes 2(p) and 21 to the consolidated financial statements.

Our profit and loss account is prepared on the total-cost basis typically used by major Portuguese companies. Costs related to our personnel and materials incurred for assets under construction that are capitalized as part of fixed assets and will be amortized in future periods are classified in the income statement as expenses, and a corresponding amount is credited to Own work capitalized.

#### CRITICAL ACCOUNTING POLICIES

Our reported financial condition and results of operations are sensitive to accounting methods, assumptions and estimates that underlie the preparation of our consolidated financial statements. Our critical accounting policies, the judgments and other uncertainties affecting application of those policies and the sensitivity of reported results to changes in conditions and assumptions are factors to be considered in reviewing our consolidated financial statements and the discussions below in Results of Operations.

A critical accounting policy is one that is both important to results of operations and financial condition and requires management to make critical accounting estimates. An accounting estimate is an approximation made by management of a financial statement component or account. Accounting estimates reflected in our financial statements measure the effects of past business transactions or events, or the present status of an asset or liability. Accounting estimates included in the accounting policies presented in the consolidated financial statements require assumptions about matters that are highly uncertain at the time the estimate is made. Additionally, different estimates that could have been used, or changes in an accounting estimate that are reasonably likely to occur, could have a material impact on the financial statements. The inherent uncertainty of some matters can make judgments subjective and complex. The effects of estimates and assumptions related to future events cannot be made with certainty. Our estimates are based upon historical experience and on assumptions that management believes to be reasonable in the circumstances. These estimates may change with changes in events, information, experience, and our operating environment. The following critical accounting policies and estimates are those used in the preparation of our consolidated financial statements.

#### Fixed assets

Fixed assets are presented at historical cost except for items acquired before 1992, at revalued amounts. Historical costs include, except for assets constructed prior to 1995, finance charges and foreign exchange differences. They also include direct internal costs and general and administrative overheads.

We have entered into PPAs with REN, as the sole buyer for the Binding Sector, for the majority of the generation assets economic lives. As permitted under Portuguese GAAP, these assets are classified as assets in our financial statements. Additionally, REN has recorded the minimum contracted payments made to producers in the Binding Sector in connection with PPAs as an expense of the respective periods. In accordance with U.S. GAAP, these PPAs between REN and CPPE are accounted for as capital lease receivables for CPPE and capital lease obligations for REN. Prior to July 1, 2000, the effects of the PPAs between the two related companies were eliminated in consolidation.

The carrying values of all generation and distribution assets have been approved by the regulator for the purposes of accepting amortization as part of the new tariffs.

Depreciation is calculated on the straight-line basis at specific rates accepted by the tax authorities for us or for general purposes business, which reflect the economic useful lives of each category of fixed assets.

95

#### **Table of Contents**

Payments received from customers and subsidies granted for the construction of fixed assets are presented as deferred revenue and amortized to income over a period equivalent to that of the related items.

#### Impairment of long-term assets

Tangible and intangible fixed assets, net of the relevant deferred revenue, are reviewed for impairment if events or changes in circumstances indicate that the carrying amount may not be recoverable. Goodwill is reviewed for impairment at the end of the first complete financial year after the relevant acquisition, and thereafter if events or changes in circumstances indicate that the carrying amount may not be recoverable. When conducting a review for impairment, consideration is taken of the regulated and contractual aspects of our operations.

Uncertainties exist when assessing the recoverability of the carrying amounts of the tangible and intangible fixed assets. The assessment is made based on the best information available regarding the anticipated continuity of the concession or other contractual arrangements in place.

#### Allowance for uncollectible accounts

Estimated provisions for uncollectible accounts receivable from retail electricity sales are recorded in the same period as the related revenues. These estimates are based on management s assessment of the probable collection of customer accounts, aging of accounts receivable, bad debt write-offs, and other factors. Certain circumstances and events can cause actual bad debt write-offs to vary from assumptions used in estimating uncollectible account provisions; these include general economic conditions, industry trends, deterioration of major customer credit worthiness, and higher defaults. Our earnings would be affected should such circumstances require a material adjustment to our provision for uncollectible accounts.

#### **Employee retirement benefits**

We have a commitment to complement retirement and survivors pensions of the employees subject to the ACT (collective labor agreement) to the extent that these are not covered by the Portuguese government social security plans. Those employees have the option of taking early retirement, subject to certain conditions relating to pre-defined age and length of service requirements being met. Retired employees retain the right to medical assistance based upon similar conditions as those pertaining to employees still on the active payroll. The entitlement to these benefits is usually based on the employee remaining in service up to retirement age. The expected costs of these benefits are accrued over the period of employment, using valuations performed by independent qualified actuaries. The pension plans are generally funded by payments from the EDP Group companies, taking into account the recommendations of the independent qualified actuaries.

There are numerous uncertainties inherent in estimating employee retirement benefits and assumptions that are valid at the time of estimation, but may change significantly when new information becomes available. Fluctuations in the rates and other assumptions used for the actuarial valuations may, ultimately, result in actuarial gains or losses that, in accordance with the relevant accounting criteria, will be recognized in the financial statements.

#### **Deferred income taxes**

Deferred income taxes, recoverable and payable, have been included in our balance sheet as deferred tax assets and liabilities for the expected future tax consequences attributable to differences between the financial statement carrying amount of assets and liabilities and their tax bases.

There are certain uncertainties inherent in estimating deferred income taxes, namely that of the relevant companies of the EDP Group obtaining taxable profit in the periods in which such differences revert in the income statement.

96

#### **Table of Contents**

#### Revenue recognition

Unbilled revenues

Revenues from retail electricity sales are recognized when monthly billings are made to customers for energy sold, based upon meter readings performed on a cycle basis during each month, together with historical consumptions individually by customer. In order to properly match revenue with related expenses (power costs, distribution expenses, etc), estimated unbilled revenues are accrued for electricity provided from meter read dates to each month-end. Such estimated unbilled revenues are based on our net system load, the number of days from meter reading to the end of each calendar month, and current retail customer rates.

In Portugal, the tariffs of electrical energy supplied to clients in the Binding Sector are determined by the regulator. Tariffs for clients outside the Binding Sector are negotiated and contracted on an individual basis. Tariffs in the electricity distribution business are subject to a price cap mechanism. These earnings are subject to a gross profit restriction and after being subject to confirmation or approval by the regulator are to be adjusted in future periods. We estimate amounts that are subject to future tariff revenue or adjustments and defer the recognition of the revenues until future periods. These amounts are recorded as accounts receivable-trade in the accompanying balance sheet.

Hydrological correction account

The hydrological correction account constitutes a legally mandated mechanism for compensating the variable costs of electric-power generation. In years with unfavorable hydrological conditions, thermal generation increases and, consequently, expenditures on fuel and electricity imports increase substantially. In years with abundant rainfall, the opposite occurs. We cannot modify the tariffs we charge to take into account the changes in variable costs incurred as a result of hydrological conditions. In this context and with a view to avoiding major distortions in operating results, due to favorable or unfavorable hydrological conditions, the hydrological correction account is adjusted upwards or downwards based upon average hydrological conditions. Estimation of future hydrological conditions is based on the best information currently available. Changes in such estimates will result in changes to the hydrological correction account in future financial periods.

The annual changes in the hydrological correction account consist of the following:

The difference between the economic costs of generating electricity and the economic reference costs is charged to REN for inclusion in the Binding Sector costs(prior to June 2000 this difference was charged to the income statement).

A financial charge associated with the hydrological correction account s accumulated balance.

An adjustment, which may be either an income or an expense item, corresponding to the amount necessary to make the expected balance, in a time scale of 10 years, equal to an adequate reference level.

The Portuguese government approves the amount of the accumulated balance and the movements during the year on an annual basis. Under U.S. GAAP, the effect of future changes in hydrological conditions is viewed as a general business risk and the resulting adjustments are therefore reversed.

Tariff adjustment

Prior to 1999, the selling price of electricity in Portugal was based upon a negotiated price between us and the government. Tariffs were generally based on operating costs incurred during a year associated with average hydrological conditions. However, there were no specific guidelines in place ensuring that we would recover actual cost incurred during this time. On January 1, 1999, and again on January 1, 2002, new tariff regimes were introduced that established formulae for the calculation of the selling price of electricity in Portugal. These tariffs at current market conditions allow us to recover actual costs incurred. On January 1, 2002, the regulator implemented alternative revenue programs that allow us to increase tarrifs in future periods to recover allowable revenues.

97

#### **Table of Contents**

#### Investments

Derogating accounting principles generally accepted in Portugal, we have implemented early International Accounting Standard 39 Recognition and Measurement of Financial Instruments , or IAS 39, for fiscal year 2003, having calculated the retroactive effects from December 31, 2002. Consequently, we classified our investments in accordance with this IAS 39, particularly with regard to the types of financial instruments and their recognition and measurement, carrying them under the following categories of financial assets: trading, held to maturity and available for sale. The classification depends on the purpose for which the investments were acquired. Our board of directors determines the classification of these investments on the date of acquisition and re-assesses this classification on a regular basis.

Trading account securities

Investments acquired primarily for the purpose of being traded in the very short-term are classified as trading securities and are recorded as current assets. For the purpose of our financial statements, short-term is defined as three months. Realized and unrealized gains and losses caused by changes in the fair value of trading securities are recorded in the profit and loss account during the period in which they occur.

Medium- and long-term investment portfolio (investment securities available for sale)

Investments expected to be held for an undetermined period of time and that can be sold to meet liquidity requirements or in the event of changes in interest rates, are classified as available for sale under non-current assets, unless our board of directors has the express intention of holding the investments for a period of less than 12 months from the balance sheet date or if there is a need to sell them to generate operating capital, in which case they are carried under current assets. Acquisition cost includes transaction costs. Investments available for sale are accounted at their fair value.

Accounting for derivatives

Derivatives are initially measured in our consolidated balance sheet at cost and subsequently carried at fair value. The method of recognition of the resultant gain or loss depends on the nature of the item that is hedged. We identify derivatives as either: (i) hedging the fair value of the recognized assets or liabilities; (ii) hedging of a planned transaction or firm commitment; or (iii) hedging of a net investment in a foreign entity on the date on which the derivatives are acquired. Changes in the fair value of derivatives identified as fair-value hedging instruments and qualifying as effective, are recognized as a gain or loss in the profit and loss account together with the changes in the fair value of the asset or liability for which the hedging risk was taken. Changes in the fair value of derivatives identified and classified as cash-flow hedging instruments are recognized against reserves. When the planned transaction or firm commitment leads to recognition of an asset or liability, the gains and losses previously recorded against reserves are included in the initial measurement of the cost of the respective asset or liability. In any other case, the amounts recorded against reserves are transferred to the profit and loss account and classified as income or expense during the period in which the firm commitment or planned transaction impacted on the profit and loss account. For any transaction which, despite economic hedging in accordance with our risk management policies, is not classified as hedging in accordance with IAS 39, the gains and losses are recognized in the profit and loss account during the period to which they relate. On the date on which the hedging instrument expires or is sold, or when the hedging transaction no longer meets the requirements for hedge accounting in accordance with IAS 39, any cumulative gain or loss recorded against reserves is maintained until such time as the planned transaction or firm commitment is recognized in the profit and loss account. If the planned transaction or firm commitment is no longer expected, the cumulative gain or loss reported against reserves is transferred to the profit and loss account. The hedging of a net investment in a foreign entity is recorded in a manner similar to cash-flow hedging. If the hedging instrument is a derivative, any gain or loss on the hedging instrument in respect of the effective part of the hedge is recognized against

reserves. The gain or loss on the ineffective portion of the hedge is recognized immediately in the profit and loss account. However, if the hedging instrument is not a derivative, all gains and losses on exchange rate fluctuations are recognized against reserves. To achieve hedge accounting on the date of commencement of the transaction, we document the relationship between the hedging instruments and the hedged items, as well as the respective risk-management objectives and strategies underlying the respective hedging transactions. This process includes the link between all derivatives identified as hedging instruments for assets and

98

#### **Table of Contents**

liabilities or for specific transactions or firm commitments. We also document in our evaluation, at the inception of the hedge and during the life of the hedge, whether the derivatives used in the hedging transactions are highly effective to compensate the fair value or the cash flows of the hedged items.

Estimate of the fair value of financial instruments

The fair value of derivatives traded on liquid markets and of assets available for sale is based on their listed prices on the balance sheet date. The fair value of interest-rate swaps is calculated on the basis of the present value of future estimated cash flows. The estimated value of future cash flows is used to determine the fair value of other financial instruments. The book values of financial assets and liabilities with a maturity of less than one year are assumed to be close to their fair values.

#### RESULTS OF OPERATIONS

Beginning in January 2001, we consolidated the results of Bandeirante with our results. In 2002, following the conclusion of our acquisition of a 40% stake in Hidrocantábrico, we proportionally consolidated the results of Hidrocantábrico from June through December. On October 10, 2002, we gained control over Brazilian distribution companies Escelsa and Enersul. As a result, we consolidated the results of Escelsa and Enersul from October through December 2002. We currently control 54.74% of Escelsa and 35.69% of Enersul. In December 2002, we decided to discontinue ONI Way s UMTS operations, a decision which was reflected by a write-off of ONI Way and the consequent increase in Other non-operating expenses (income) due to the creation of a non-recurring provision of 280.9 million. The following table sets forth our revenues by geography and activity for 2001, 2002 and 2003. For more information concerning our revenues, see note 26 to our consolidated financial statements.

	Sales of	Other	Services	m . 1	
	Electricity	sales	rendered	Total	
		(millions of EUR)			
Year ended December 31, 2001					
Portugal					
Generation	1,277.9	12.4	14.6	1,294.9	
Distribution and supply	3,282.5	1.6	19.9	3,304.1	
Brazil					
Distribution and supply	690.5	0	0	690.5	
Telecoms	0	30.9	157.0	187.9	
Information technology	0	39.1	149.9	189.0	
Services and other adjustments	(39.7)	13.9	9.7	(16.0)	
EDP Group	5,201.3	98.0	351.1	5,650.4	
Year ended December 31, 2002					
Portugal					
Generation	1,425.4	18.7	18.2	1,462.3	
Distribution and supply	3,503.4	1.7	33.1	3,538.2	
Spain					
Generation	145.1	2.5	0.8	148.3	
Distribution and supply	150.1	7.6	6.3	164.0	
Gas	0	10.5	1.1	11.5	

Brazil				
Distribution and supply	668.6	0	0	668.6
Telecoms	0	46.7	274.1	320.8
Information technology	0	35.5	188.5	224.0
Services and other adjustments	(16.5)	(11.2)	(123.5)	(151.2)
EDP Group	5,876.2	112.0	398.4	6,386.6

#### **Table of Contents**

Year ended December 31, 2003				
Portugal				
Generation	1,318.9	19.7	26.6	1,365.2
Distribution and supply	3,610.6	1.9	60.2	3,672.8
Spain				
Generation	256.8	2.0	1.1	259.9
Distribution and supply	287.7	28.9	12.4	329.0
Gas	0	75.9	10.1	86.0
Brazil				
Generation	27.4	2.3	11.5	41.3
Distribution and supply	929.0	0	37.6	966.6
Telecoms	0	7.3	323.8	331.1
Information technology	0	27.0	159.3	186.3
Services and other adjustments	(134.2)	(4.9)	(121.6)	(260.6)
EDP Group	6,296.1	160.3	521.2	6,977.5

The following table sets forth our operating costs and expenses and our results of operations as a percentage of total revenues:

			Year	Year ended December 31,		
			-			
			2001	2002	200	

	2001	2002	2003
Total revenues	100%	100%	100%
Raw materials and consumables	54.5%	57.7%	56.2%
Personnel costs	10.5%	9.8%	9.3%
Depreciation and amortization	11.8%	11.6%	12.1%
Supplies and services	11.5%	10.6%	9.1%
Own work capitalized	(4.1)%	(3.8)%	(3.4)%
Concession and power-generation rental costs	2.6%	2.5%	2.5%
Provisions	2.1%	1.6%	1.1%
Other operating expenses (income)	(0.8)%	(0.1)%	0.1%
Total operating costs and expenses	88.1%	89.8%	87.0%
Operating margin	11.9%	10.2%	13.0%
Net interest and related expenses	3.6%	3.5%	5.1%
Other non-operating income / (expenses)	(2.2)%	2.2%	0.2%
Profit before tax	10.5%	4.5%	7.6%
Consolidated net profit	8.0%	5.2%	5.5%

#### 2003 COMPARED WITH 2002

#### Revenues

Our total revenues in 2003 increased by 9.3% to 6,977.5 million from 6,386.6 million in 2002, due primarily to the increase in electricity sales, which in 2003 represented approximately 90.2% of our total revenues compared with 92.0% of total revenues in 2002. In 2003, revenues as well as the other items in our consolidated profit and loss account were affected by the proportional (40%) consolidation of Hidrocantábrico for twelve months, which in 2002 was proportionally consolidated for seven months, and the full consolidation of Escelsa and Enersul for twelve months, which in 2002 were equity consolidated for the first nine months and fully consolidated in the last quarter of the year. We have

consolidated revenues from Hidrocantábrico in the amount of 662.5 million in 2003 and 321.4 million in 2002. Escelsa and Enersul contributed 435.8 million in 2003 and 100.8 million in 2002.

Sales of electricity. Our total electricity sales increased by 7.1% to 6,296.1 million in 2003 from 5,876.2 million in 2002 mainly due to the consolidation effects of Hidrocantábrico, Escelsa and Enersul noted above.

Electricity sales in Portugal from generation and distribution and supply activities, which represented 78.3% of our total consolidated electricity revenues, remained stable at 4,929.5 million in 2003 from 4,928.8 million in 2002, with the increase in electricity sales from distribution and supply activities being offset by a decline in electricity sales from generation activity.

100

#### **Table of Contents**

Electricity sales from our distribution and supply activities in Portugal increased 3.1% from 3,503.4 million in 2002 to 3,610.6 million in 2003 due to a 5.4% increase in the Portuguese electricity system demand from 36,931 GWh in 2002 to 38,916 GWh in 2003 and due to the fact that, in nominal terms, tariffs increased across all voltage levels by an average of 2.8% in 2003 from the 2002 levels. The 5.4% increase in electricity sales volume was primarily due to a 4.9% increase in low voltage consumption, which occurred as a result of a cold winter and a particularly warm summer in 2003, as well as due to a 9.3% increase in very high voltage and high voltage consumption following an increase in the number of our industrial clients, after EDPD gained four large industrial clients. Electricity distribution in the PES decreased 3.1% to 34,868 GWh in 2003 from 35,973 GWh in 2002, whereas in the Non-Binding Sector, electricity distributed increased by more than fourfold to 4,048 GWh in 2003 from 958 GWh in 2002 due to the fact that some medium voltage consumers opted to become Qualifying Consumers.

Beginning with the new tariff regime in Portugal that became effective in 1999, tariffs are fixed by the regulator in advance of each year based in part on estimated data for variables such as demand and cost. If there are differences between the estimated data and the actual data during a period, an adjustment will be made to the tariff in a subsequent period to account for these differences. Our revenues include tariff adjustments that we calculate to estimate the portion of our revenues from electricity sales that should be deferred to a subsequent period to take account of data that the regulator will consider in setting tariffs. If actual costs and demand deviate from the estimated data, the revenues REN receives from electricity sales to EDPD will vary from the revenues allowable under the tariff regime. In the event actual revenues exceed the revenue level allowable, such as due to higher than estimated demand, REN is obligated, two years later, to compensate the Public Electricity System for the excess. This compensation takes the form of a reduction in the amounts charged by REN to distributors such as EDPD in the Public Electricity System. By contrast, if REN s actual revenues are less than the revenue level allowable, such as due to higher than estimated costs, REN will, two years later, be able to recover the shortfall through an increase in the amounts charged by REN to distributors such as EDPD in the Public Electricity System. Any reduction or increase received by or charged to EDPD is fully passed through to the customer tariffs in the Binding Sector. There is also a tariff adjustment in respect of 1999, 2000 and 2001 reflecting the profit sharing mechanism in distribution relating to EDPD s selling and distribution activities, which is reflected in the customer tariffs two years later. For the 2002-2004 regulatory period the profit sharing mechanism was eliminated. None of the accounting entries associated with tariff adjustments have an impact on our cash flow. For more information on the tari

In 2003, the aggregate tariff adjustment was 77.9 million. This figure includes a positive adjustment of 77.0 million from the 2003 tariff adjustment, a positive adjustment of 17.9 million from a revision made to the tariff adjustment of year 2002, a negative adjustment of 10.2 million from the 2002 tariff adjustment reposition and a negative adjustment of 6.7 million from the 2001 tariff adjustment reposition. In 2002, the aggregate tariff adjustment was 70.5 million. This figure includes a positive adjustment of 50.0 million relating to the application of the new tariff regulation in 2002, and a positive adjustment of 20.5 million relating to the 2000 tariff adjustment reposition.

Electricity sales from our generation activity in Portugal decreased 7.5% from 1,425.4 million in 2002 to 1,318.9 million in 2003. Approximately 89% of EDP Produção s generation revenues are based on long-term PPAs between each of its power plants and REN as the single buyer for the Portuguese PES. The PPAs include an energy charge component that remunerates EDP Produção s plants operating in the PES for fuel consumption incurred by producing electricity. Given that 2003 was a wet year, EDP Produção s thermal power plants were less utilized and we incurred lower fuel costs, resulting in lower revenues from the variable component of the PPAs that remunerate for fuel consumption.

Electricity sales in Spain increased to 542.2 million in 2003 from 295.1 million in 2002, primarily due to the proportional consolidation of Hidrocantábrico for twelve months in 2003 compared to seven months in 2002. Other factors that influenced this increase were higher electricity revenues in 2003 from Hidrocantábrico supply activity that were partially offset by lower Spanish electricity pool prices during 2003.

101

#### **Table of Contents**

Electricity sales in Brazil increased to 956.4 million in 2003 from 668.6 million in 2002, primarily due to the full consolidation of Escelsa and Enersul for twelve months in 2003 compared to three months in 2002. Other factors that influenced this increase were tariff revisions that affected our distribution companies in Brazil during 2003, namely a 14.68% average tariff increase for Bandeirante (as of October 22), a 17.30% average tariff increase for Escelsa (as of August 6) and a 32.59% average tariff increase for Enersul (as of April 8). These tariff increases were partially mitigated by the devaluation of the Brazilian real against the euro beginning in June 2002.

Other sales. Our other sales activities, including sales of natural gas, steam, ash, information technology products, telecommunications equipment and sundry materials, generated revenues of 160.3 million in 2003 compared with 112.0 million in 2002, due primarily to the inclusion since August 2003 of gas sales of Naturcorp, which was proportionally consolidated in our accounts on the same basis as Hidrocantábrico. As a result, the contribution of the Spanish activities to the consolidated revenues from other sales activities increased to 105.3 million in 2003 from 20.1 million in 2002. This increase more than offset an 84.4% decrease in revenues from telecommunications equipment sales from 46.7 million in 2002 to 7.3 million in 2003, due to the completion of a major contract, and a 23.9% decrease in sales from our information technology activity from 35.5 million in 2002 to 27.0 million in 2003, due to a decrease in demand for IT solutions, as result of the economic slowdown that resulted in lower investments by corporations in IT systems.

Services rendered. Our revenues from services increased to 521.2 million in 2003 from 398.4 million in 2002, due to the changes in EDP s consolidation of Hidrocantábrico, Escelsa and Enersul, as noted above, and increased sales by EDP Energia, Bandeirante and ONI. Activities generating these revenues include electricity-related services, services related to information technology systems, telecommunications, engineering, laboratory services, training, medical assistance, consulting, multi-utility services and other services. Revenues from services provided by the electricity activity in Portugal increased to 86.9 million in 2003 from 51.3 million in 2002, mainly due to an increase at EDP Energia resulting from the ongoing liberalization process in Portugal. Services provided in Spain by Hidrocantábrico contributed 6.2 million and 15.0 million in 2002 and 2003, respectively, following the proportional consolidation of Hidrocantábrico for twelve months in 2003. Our operations in Brazil contributed 49.1 million to our consolidated revenues from services in 2003, as a result of the full year consolidation of Escelsa and Enersul, as well as Bandeirante's contribution following the increased number of liberalized clients in its concession area that have to pay for the use of Bandeirante's distribution grid. The 18.2% increase in telecommunications services to 323.8 million in 2003 from 274.1 million in 2002 resulted from higher voice telecommunications services provided by ONI. Information technology activity revenues from services provided declined 15.5% from 188.5 million in 2002 to 159.3 million in 2003, due primarily to the Portuguese economic slowdown in 2003.

#### Operating costs and expenses

Our total operating costs and expenses increased by 5.8% to 6,071.8 million in 2003 compared to 5,737.9 million in 2002, mainly due to the consolidation effects already mentioned above relating to Hidrocantábrico, Escelsa and Enersul. These consolidation effects more than offset lower fuel costs at EDP Produção, following a wet year in which thermal generation was reduced in favor of hydro power, lower operating costs at Bandeirante associated with the depreciation of the Brazilian real against the euro beginning in June 2002, and lower costs at ONI, primarily as a result of the cost-cutting program and a reduction in the number of employees.

Hidrocantábrico s contribution to our total operating costs and expenses in 2003 totaled 580.3 million compared to 283.3 million in 2002 (seven months of proportional consolidation), while Escelsa and Enersul contributed 372.9 million in 2003 compared to 85.6 million in 2002 (three months of full consolidation). In addition, total operating costs at Hidrocantábrico reflect the consolidation of five months of Naturcorp in 2003 and the start of Castejón CCGT s operations in October 2002.

As a percentage of revenues, total operating costs and expenses decreased to 87.0% in 2003 from 89.8% in 2002 due primarily to lower costs of purchased electricity and fuel.

Raw Materials and Consumables. The major components of our raw materials and consumables are the costs of purchased electricity, fuel costs and costs of other materials. Our raw materials and consumables costs increased 6.3% to 3,921.1 million in 2003 from 3,687.1 million in 2002 due to the consolidation of Hidrocantábrico,

102

#### **Table of Contents**

Escelsa and Enersul, as noted above. These consolidation effects more than offset lower fuel costs at EDP Produção, following a reduction in use of thermal generation due to a wet year, and a decrease in the cost of sales of telecommunications equipment.

Our costs of purchased electricity increased 11.8% to 3,360.3 million in 2003 from 3,005.5 million in 2002, due to the consolidation effects of Hidrocantábrico, Escelsa and Enersul, as noted above.

Generation and distribution and supply activities in Portugal represent 73.7% of our costs of purchased electricity. Electricity purchases from generation in Portugal increased 28.1 million in 2003 to 65.3 million due to an increase in electricity purchases of small hydro producers operating in the Non-Binding Sector as these producers are allowed to acquire energy up to their installed capacity in order satisfy energy procurements of the Non-Binding Sector. Our costs of purchased electricity in distribution and supply activity in Portugal primarily include purchases made by EDPD from REN as well as purchases from private generators and small independent producers. The energy that EDPD purchases from REN is supplied to the binding sector. In 2003, electricity purchases increased 1.1% to 2,412.5 million in 2003 from 2,386.4 million in 2002, mainly due to a 4% increase in the average tariff charged on power purchases from REN, offset by a 3.1% decrease in the Portuguese binding system electricity consumption. For more information on these purchases of electricity, you should read Item 4. Information on the Company Portugal Electricity System Overview The Independent Electricity System and Competition.

Costs of purchased electricity in Spain by Hidrocantábrico represented 358.2 million in 2003 compared with 154.1 million in 2002. This increase is mostly due to consolidation effects. In addition, in 2003, Hidrocantábrico s costs of purchased electricity reflect the first time consolidation of five months of Naturcorp in 2003 and the start of Castejón CCGT s operations in October 2002.

Costs of purchased electricity in Brazil increased 34.9% in 2003 to 656.5 million from 486.5 million. This increase is primarily due to the consolidation of Escelsa and Enersul, as noted above. In 2003, Escelsa and Enersul contributed 251.1 million compared with 57.5 million in 2002. Costs of purchased electricity at Bandeirante decreased 16.8% to 357.0 million in 2003 from 429.1 million in 2002, mainly due to the depreciation of the Brazilian real against the euro.

Our fuel, steam and ashes costs decreased 14.5% to 398.0 million in 2003 from 465.5 million in 2002. In 2003, fuel costs from generation in Portugal represented 78.5% of our fuel costs and decreased 32.9% to 312.3 million from 465.5 million in 2002. This decrease in fuel costs reflects a decline in fuel utilization by EDP Produção associated with a lower use of thermal generation due to a wet year. In order to account for the variability of hydrological conditions in Portugal and its impact on the fuel costs, EDP uses the Hydrological correction account, or hydro account. The hydro account is an accounting mechanism we established pursuant to Portuguese law. The purpose of this account is to smooth the short-term effect on our earnings and customer prices that result from changes in hydrological conditions. In years with favorable hydrological conditions, there is an increase in hydroelectric generation and a decrease in variable costs of thermal generation. Conversely, in years with unfavorable hydrological conditions there is a decrease in hydroelectric generation and our expenditures on fuel and electricity imports increase substantially and the variable costs of thermal generation increase accordingly. We cannot modify the tariff we charge to take into account the changes in variable costs incurred due to hydrological conditions. In order to reduce major distortions in operating results due to changing hydrological conditions, the hydro account is reinforced in years of favorable hydrological conditions with a corresponding operating charge in the income statement, thereby eliminating the overstatement of its net income. In years of less favorable hydrological conditions we use the hydro account (with a corresponding credit to operating income) so as to reduce the negative impact on our net income arising from the increased expenditures on fuel and electricity imports. These upward or downward adjustments to the hydro account are made based upon the economic reference cost calculated on the basis of an aver

Prior to REN s sale, all of the movements relating to the hydro account were considered as being of a non-cash nature on the grounds that they were made (in accounting terms) in our consolidated financial statements as an expense recorded to the hydro account in favorable hydrological years and as an income recorded to the hydro account in less favorable hydrological years. Following the sale of REN, cash movements now

take place between REN and us for reinforcing or drawing against the hydro account that, after REN s separation, is still carried on our

103

#### **Table of Contents**

balance sheet. At December 31, 2003 the hydro account amounted to 387.5 million, an increase of 63.4 million, which includes 71.9 million charged to REN. In 2002 the hydro account decreased by 63.4 million to 324.1 million. This difference was primarily a result of 2003 having been an exceptionally wet year (hydro coefficient of 1.33), while 2002 was a dry year (hydro coefficient of 0.76). To learn more about the effect of hydrological conditions on our business, you should read Item 4. Information on the Company Portugal Generation.

The Portuguese government determines the level of reference of the hydro account based upon the least favorable period of hydrological conditions during the previous 30 years. In doing so, the government determines an amount expected to be adequate to withstand unfavorable hydrological conditions that may occur in the future. The government has determined that the hydro account must not exceed the level of reference. The level of reference of the hydro account was 387.5 million for 2003, 2002 and 2001. In 2003, the hydro account exceeded the reference level causing us to record the excess 19.4 million under non-operating income. In 2002, the hydro account did not exceed the reference level, hence we did not record an excess in non-operating income in 2002.

We record as an annual expense deemed interest credited to the hydro account corresponding to the average interest rate paid on our euro-denominated borrowings for the applicable year. The method of accounting for this deemed interest did not change with the sale of REN. For more information on the hydro account, you should read notes 2(p) and 21 to our consolidated financial statements.

Fuel costs in Spain at Hidrocantábrico amounted to 85.5 million in 2003 compared to 39.3 million in 2002, primarily due to the consolidation effects as noted above. In addition, fuel costs at Hidrocantábrico reflect the start of operations of Castejón s CCGT power plant (October 2002) noted above.

The major components of our costs for other materials are the costs of cables, meters, transformers and other goods for resale, included under the item Raw materials and consumables Other materials. These costs decreased to 162.7 million in 2003 from 216.0 million in 2002. A majority of these costs are credited to Own work capitalized and the remainder is applied to maintenance of the transmission and distribution networks. See Own work capitalized.

Costs for other materials from generation, distribution and supply activities in Portugal represent 70.5% of our costs for other materials. Costs of materials from our generation activity in Portugal decreased 21.1% in 2003 to 3.5 million. Regarding our distribution and supply activities in Portugal, these costs increased 39% to 111.3 million in 2003 from 80.1 million in 2002, because 2002 costs with materials were lower than normal due to stocks write-offs.

Costs of other materials in Spain from Hidrocantábrico increased 4.1 million to 6.3 million in 2003 compared with 2.2 million in 2002. This increase is the result of the consolidation effects noted above.

Costs from other materials in Brazil increased 6.2 million to 10.2 million in 2003 from 4.0 million in 2002. This increase is the result of the above mentioned consolidation effects of Escelsa and Enersul. In 2003, Escelsa and Enersul contributed 5.9 million to our costs with other materials, compared with 1.1 million in 2002.

Cost of sales for telecommunications decreased 46.8 million in 2003 to 6.6 million from 53.4 million in 2002, following the shut down of UMTS operations in December 2002. In addition, the decrease in the cost of sales reflects the completion of a major equipment supply contract in 2002.

Raw materials and consumables relating to our information technology activities decreased 22.7% to 24.5 million in 2003 from 31.6 million in 2002, partially reflecting the economic slowdown of the Portuguese economy that, as mentioned above, affected the information technology revenues.

*Personnel costs.* Personnel costs, which consist mainly of wages and salaries and social security and pension fund contributions, increased 3.5% in 2003 to 646.6 million from 624.8 million in 2002, mainly as a result of the consolidation changes noted above.

104

#### **Table of Contents**

Personnel costs in the Portuguese electricity business increased 3.5% to 517.4 million in 2003 from 500.1 million in 2002 following the 2.7% average salary increase. As a percentage of total personnel costs, electricity business in Portugal remained stable in 2003 and 2002 at 80%. Personnel costs in generation in Portugal increased 0.7% to 120.3 million in 2003 from 119.6 million in 2002 as a result of an increase in average salaries, partially offset by a reduction of 111 employees toward the end of 2003. Personnel costs in distribution and supply increased 4.3% to 397.1 million in 2003 from 380.6 million in 2002 reflecting the increase of pension premiums and the average salary increase.

In Spain, personnel costs at Hidrocantábrico were 37.1 million in 2003 compared to 18.3 million in 2002. This increase is primarily due to the proportional consolidation of twelve months in 2003 compared to seven months in 2002. Additionally, the inclusion of Naturcorp in Hidrocantábrico s accounts since August 2003 also contributed to this increase.

Personnel costs in Brazil increased 61.6% to 64.0 million in 2003 from 39.6 million, primarily due to the full consolidation of Escelsa and Enersul for twelve months in 2003 compared to three months in 2002. In addition, the average salary increase in our Brazilian subsidiaries was approximately 10%, which also contributed to the increase. However, both of these effects were partly offset by the strong depreciation of the Brazilian real against the euro beginning in June 2002.

Personnel costs in our telecommunications activities decreased 43.2% to 51.0 million in 2003 from 89.7 million in 2002, reflecting the discontinuation of the UMTS project toward the end of 2002 and the reduction in the number of employees achieved primarily at the fixed line business in Portugal.

Personnel costs in our information technology activities decreased 12% to 66.4 million in 2003 from 75.5 million in 2002, due to the ongoing staff restructuring process and successful wage negotiations.

Depreciation and amortization. Depreciation and amortization in 2003 increased to 845.6 million from 739.5 million in 2002, primarily due to the consolidation changes noted above.

Depreciation and amortization charges in the Portuguese electricity business increased 3.8%, or 21.4 million, to 583.3 million in 2003 from 561.9 million in 2002 (and as a percentage of our total depreciation and amortization charges, it decreased 69.0% in 2003 compared to 76.0% in 2002). Depreciation and amortization charges in generation increased 2.7% to 234.4 million in 2003 from 228.2 million in 2002. Depreciation and amortization in distribution and supply activities increased 4.6% to 348.9 million in 2003 from 333.6 million in 2002, due to the transfer of an IT system from our IT services provider company, EDINFOR, to EDPD and greater investments made in the distribution network.

In Spain, Hidrocantábrico s contribution to our depreciation and amortization charges increased to 60.1 million in 2003 from 26.9 million in 2002, primarily due to the proportional consolidation of Hidrocantábrico for twelve months in 2003 compared to seven months in 2002. In addition, the inclusion of Naturcorp since August 2003 and the depreciation of the investment made in Castejón CCGT since October 2002 also contributed to this increase.

Depreciation and amortization charges in the Brazilian electricity business increased to 58.3 million in 2003 from 34.2 million in 2002 mainly due to the full consolidation of Escelsa and Enersul for twelve months in 2003 compared to three months in 2002. This increase was partly offset by the depreciation of the Brazilian real against the euro.

Depreciation and amortization charges relating to telecommunication activities increased 8.8% to 72.7 million in 2003 from 66.9 million in 2002 as a result of the acquisition in Spain of cable access rights, primarily during 2002, and the investments made in Portugal in connection with the expansion of the network in 2002 and the acquisition of direct access infrastructure.

105

#### **Table of Contents**

In 2003, depreciation and amortization charges relating to information technology activities increased 28.4% to 24.3 million from 18.9 million in 2002, primarily due to the IT project ISU/Communications that began depreciating in 2003.

Supplies and services. These costs consist of supplies and services provided to us by external suppliers, and include external maintenance and repairs, specialized services, communication, rents, insurance and other services. External maintenance and repairs consists of work on our power plants, substations and transmission and distribution networks that we subcontracted to others. Other specialized services include technical services such as auditing, legal, consulting, and revenue collection. Communication services include telecommunications, postal, delivery and courier services. The cost of these external supplies and services decreased 6.3% to 632.5 million in 2003 from 675.1 million in 2002.

Supplies and services in the Portuguese electricity business increased 1.2% to 285.6 million in 2003 from 282.1 million, and as a percentage of our total supplies and services it increased to 45.2% in 2003 from 41.8% in 2002. Supplies and services relating to generation activity increased 2.0 million to 75.0 million in 2003, benefiting from a reduction in insurance costs, steady maintenance costs and tighter management discipline. Supplies and services relating to distribution and supply activity increased 0.7% to 210.6 million in 2003 due to the transfer of services, which were being performed internally by EDPD, to our shared services company, EDP Valor. This effect was offset by a decrease in maintenance costs due to both the renegotiation of contracts, which are no longer on a retainer basis, and a more efficient use of internal resources.

Supplies and services costs relating to Hidrocantábrico decreased to 33.4 million in 2003 from 41.1 million in 2002, primarily due to the fact that, in 2002 the electricity transmission and distribution tariffs paid by Hidrocantábrico s supply unit were accounted under supplies and services, while in 2003 these tariffs started to be accounted under purchases of electricity.

Supplies and services relating to the electricity business in Brazil increased to 62.2 million in 2003 from 36.0 million in 2002 mainly due to the full consolidation of Escelsa and Enersul for twelve months in 2003 against three months in 2002. In addition, the full operations of the hydro power plant Lajeado beginning in November 2002 and the complete year of the cogenerator Fafen, also contributed to this increase.

Supplies and services in our telecommunications activities decreased 9.7% to 265.3 million in 2003 from 293.7 million in 2002 primarily due to the cost-cutting program. The major savings were in advertising costs, specialized works and fixed network costs.

Supplies and services related to our information technology activities decreased 6.7% to 70.1 million in 2003 from 75.1 million in 2002, mainly as a result of the effect of economic slowdown in the information technology business and the transfer of an information technology asset to our Portuguese electricity distribution unit.

Own work capitalized. Own work capitalized consists of amounts that correspond to costs related to our costs of personnel and materials and other external supplies and services incurred for projects under construction that are capitalized and will be amortized in future periods. These amounts generally consist of consumption of materials, direct internal costs, general administrative overheads and financial charges. Own work capitalized decreased 2.5% to 235.6 million in 2003 from 241.8 million in 2002.

Own work capitalized in the Portuguese electricity business represented 94.7% in 2003 of our total own work capitalized (against 77.7% in 2002). In 2003, it increased 18.7% to 223.0 million from 188.0 million in 2002. Own work capitalized in our generation activity in Portugal increased to 38.2 million in 2003 from 26.2 million in 2002 following the investments in TER CCGT and Venda Nova II hydro power plant.

Own work capitalized in the distribution and supply activities in Portugal increased 14.2% to 184.8 million in 2003 from 161.8 million in 2002 primarily due to higher investments in the distribution grid.

In 2003 and 2002 Hidrocantábrico contributed 4.0 million and 2.7 million to Own work capitalized, respectively primarily due to the proportional consolidation of twelve months in 2003 compared to seven months in 2002.

106

#### **Table of Contents**

Own work capitalized in our telecommunication activities is almost non-existent in 2003 compared to 30.2 million accounted for in 2002. The 2002 figure is related to the UMTS project, which was discontinued by the end of 2003.

Own work capitalized relating to information technology decreased 33.5% to 8.4 million in 2003 due to the fact that 2002 figures reflect the capitalization of costs on the development of an IT system for EDPD, that was completed in the end of 2002.

A table setting forth the components of Own work capitalized for the past three years is provided in note 30 to our consolidated financial statements.

Concession and power-generation rents. Concession and power-generation rental costs, which consist mainly of rents paid by EDPD to municipalities for concessions to distribute low-voltage electricity, increased to 175.6 million in 2003 from 158.2 million in 2002. The amount of rents payable to municipalities for concessions is set by government regulation and is based on the amount of low-voltage electricity consumed in the respective municipal areas each year. The 11.0% increase in concession and power-generation rental costs between 2002 and 2003 is primarily due to the increase in the average concession fee paid by our generation activity to the Portuguese municipalities, from 7.00% to 7.25% of previous year sales, and the 6.3% increase in low voltage, special low voltage and public lighting sales.

*Provisions.* Provisions decreased to 75.7 million in 2003 from 100.6 million in 2002, primarily due to a decrease in provisions for doubtful accounts charges and healthcare liabilities provision charges. This line item is discussed in note 31 to the consolidated financial statements.

We systematically record the provision for doubtful accounts receivable from third parties and municipalities based on the age of the receivables and our collection history. We do not record a provision with respect to accounts receivable from other public entities since historically we have not experienced a problem in collecting these receivables. Accounts receivable are written off when a customer is declared bankrupt by a court of law because we receive the tax benefit of the write-off only when the customer is actually declared bankrupt. Consequently, we have a significant amount of accounts receivable that are fully provided for but have not been written-off. For more information on this provision, you should read note 39(h) to the consolidated financial statements.

Until the end of 2002, increases in provisions for doubtful accounts were reflected in our consolidated statements of income in the line item. Provisions and were included in the determination of operating income while decreases were included in the line item. Other non-operating expenses (income), net below the operating income. Beginning in 2003, at the electricity distribution activity in Portugal, both increases and decreases in provisions for doubtful accounts are included in the line item. Provisions.

Provisions in the Portuguese electricity business decreased to 55.5 million in 2003 from 76.9 million in 2002 (and as a percentage of our total provisions, it decreased 73.4% in 2003 compared to 76.4% in 2002). Provisions in generation increased 1.1 million to 12.7 million in 2003. Provisions in distribution and supply activities decreased to 42.8 million in 2003 from 65.3 million in 2002, due to the accounting of the provision decreases in this line item since 2003, at the distribution business level, as noted above.

Other operating expenses/(income). This item includes primarily taxes other than income taxes and other operating income (net), which decreased to a 10.3 million expense in 2003 from 5.7 million income in 2002. This decrease is partly related to other operating expenses in Brazil, which increased to 18.6 million in 2003 from 6.3 million in 2002 due to the regulatory contributions to the Energy Development Account in 2003, as well as the full consolidation of Escelsa and Enersul for twelve months in 2003 compared to three months in 2002. The

Energy Development Account was created in Brazil largely to promote the competitiveness of some generation technologies, including wind farms, small hydro plants, biomass plants and thermal facilities using natural gas and domestic mineral coal.

107

#### **Table of Contents**

#### **Operating margin**

As a result of the factors discussed above, our operating margin increased 39.6% to 905.7 million in 2003 from 648.7 million in 2002. Operating margin from our core electricity business in Portugal increased 12.5% to 731.7 million in 2003 from 650.3 million in 2002, primarily due to a successful costs control program. In Spain, Hidrocantábrico contributed 82.2 million to our consolidated operating margin in 2003 compared to 38.1 million in 2002. In addition to the changes in consolidation noted above, Hidrocantábrico benefited from the first time consolidation of Naturcorp. Operating margin from Brazilian electricity activities increased 65.4 million to 126.8 million in 2003. This increase is partly due to the changes in consolidation related to Escelsa and Enersul noted above. These companies contributed 62.8 million to our operating margin in 2003 compared to 15.2 million in 2002. In addition, Brazilian electricity activities benefited from tariffs increases and recovery in Brazilian consumption. Operating margin from telecommunication activities improved by 86.2 million to a 68.7 million loss in 2003 from a 154.8 million loss in 2002, due to the discontinuation of UMTS operations, an increase in voice traffic, lower interconnection costs and rigorous cost cutting. Operating margin from information technology activities decreased 26.3 million to 9.3 million in 2003 from 35.6 million in 2002 due to the slowdown of the Portuguese economy.

#### Interest and related income/(expenses), net

Our net interest and related income/(expenses) consist of interest and related income and interest and related expenses. These net expenses increased to 359.0 million in 2003 from 222.8 million in 2002 (and increased as a percentage of our total revenues to 5.1% in 2003 compared to 3.5% in 2002). This variation was mainly influenced by the consolidation changes noted above. Hidrocantábrico contributed a 62.4 million net expense in 2003 compared to a 37.7 million net expense in 2002, reflecting the 40% proportional consolidation of Hidrocantábrico since June 2002. From January until May 2002, we accounted for 5.4 million income from the application of the equity method in respect of Hidrocantábrico. Escelsa and Enersul contributed a 8.8 million income in 2003 compared with a 37.3 million income in 2002, reflecting full consolidation of the Escelsa and Enersul since October 2002. This was offset by a 102.9 million expense from the application of the equity method in respect of Escelsa and Enersul, which we accounted for in the period from January to September 2002.

During 2002, we recognized 56.4 million of positive foreign exchange differences on U.S. dollar assets that we acquired for the sole purpose of covering foreign exchange differences on the U.S. dollar debt of our Brazilian subsidiaries. By the end of 2002 we used these U.S. dollar assets in the purchase of approximately 83% of Escelsa s U.S. dollar bond issue. These Escelsa bonds were acquired at below par value, resulting in an 89.2 million financial gain. In 2003, we recognized negative foreign exchange differences of 65.0 million in respect of the Escelsa bonds as a result of the Brazilian real s increase in value against the U.S. dollar.

Net expense from interest on debt increased due to the consolidation changes and to the financial gain registered on Escelsa bonds in 2002, as noted above. This increase was partly offset by lower interest rates associated with our debt in 2003.

Contributions from equity method investees were positively influenced in 2003 as a result of higher contributions from REN and CEM. Investment income decreased 8.2% to a 36.7 million income in 2003 from a 40.0 million income in 2002, due to lower dividends received from BCP.

Amortization of investments (goodwill) increased as a result of the consolidation changes, the acquisition of Naturcorp by Hidrocantábrico and, for the first time in 2003, amortization of a client portfolio acquired by Comunitel.

### Other non-operating income/(expenses)

We had other non-operating expenses of 14.4 million in 2003, compared to other non-operating expenses of 138.9 million in 2002 (which reflected ONI Way s write-off), primarily due to a 56.7 million expense in 2003 related to non-operating provisions net of provision utilizations and a 47.8 million expense associated to costs with human resources rationalization in Portugal. These losses in 2003 were partially offset by non-operating income of

108

#### **Table of Contents**

79.8 million related to the reversal of depreciation of fixed assets that were funded by third parties, mostly related to our Portuguese electricity distribution activity, and 19.4 million related to the hydrological correction mechanism explained above (we did not record such income in 2002).

We recorded a net expense of 56.7 million in 2003 related to non-operating provisions net of provision utilizations compared with a net income of 58.1 million recorded in 2002. The net expense recorded in 2003 reflects a 114.7 million provision for financial assets in order to cover for contingencies and possible devaluations in Brazil and Cape Verde and 72.5 million income related to the reduction of provisions for financial assets and other risks and contingencies. For more information on non-operating provisions net of utilizations you should read note 34 to the consolidated financial statements.

An income item of 79.8 million was registered in 2003, compared to 71.8 million in 2002, for the portion of depreciation due primarily to new electricity connections made in prior years that were financed largely with customer payments. We record the amount of these payments initially as deferred income and as the assets are depreciated over 30 years, a portion of the amount is taken into income and offset by a corresponding charge.

As the primary supplier of low voltage electricity in Portugal, we have in the past been obliged to provide electricity to municipalities for street lighting and other public buildings even in situations where the recipient municipalities were not paying their bills on a timely basis. Although we have not encountered significant collection problems in recent years, prior to 1988 collection problems were encountered with certain municipalities and we still have on our books receivables from municipalities related to electricity and other services provided prior to 1988. These receivables consist of amounts receivable from a small number of municipalities that have not signed a concession agreement with us and with which a payment plan has not been agreed and amounts receivable from municipalities that have signed a concession agreement and have agreed to a deferred payment plan.

#### Provision for income taxes

Our provision for income taxes is determined on the basis of the estimated taxable income for the period. Income taxes provided for in 2003 were 239.3 million compared with 171.2 million in 2002. The reference income tax rate in Portugal was 30% in 2003 and 2002, compared with 32% in 2001. In addition, a municipal surcharge of up to 10% of the base rate is typically levied by the municipality in which the income is earned. Our effective tax rate is different from the reference income tax in Portugal each year due to permanent differences arising mainly from amortization of the goodwill and concession rights, amortization resulting from revaluation of fixed assets and tariff deviations in the electricity business that are not deductible for income tax purposes. Our effective tax rate was 44.8% in 2003, compared with 59.7% in 2002. The effective tax rate in 2003 reflects impairment charges relating to Brazil that were not tax deductible while the 2002 effective tax rate reflects higher charges relating to the write-off of our investment in ONI Way that were not tax deductible. For more information on provision for income taxes, you should read note 35 of our consolidated financial statements.

#### Provision for deferred income taxes

Deferred income taxes are recognized in our consolidated financial statements in accordance with International Accounting Standard 12. Our provision for deferred income tax is determined, using the balance sheet liability method, on the temporary differences between the book values of assets and liabilities and their respective taxable bases. The taxable base of assets and liabilities is determined so as to reflect the consequences of taxation resulting from the way in which we expect, on the balance sheet date, to recover or to pay the recorded amount of our assets and liabilities. In determining deferred tax, the rate used is the one in effect or otherwise applicable on the balance sheet date. Recognized

deferred tax assets are reduced to the recoverable amount that can be compensated against future expected profits. In 2003, our provision for deferred income taxes amounted to a 43.7 million benefit, whereas in 2002 the provision for deferred income taxes amounted to a 0.6 million charge. This difference is mainly explained by the fact that in 2002 we booked the deferred tax effect of a charge, in the amount of 29.6 million, related to the capital gain arising from the acquisition of the Escelsa U.S. dollar bonds below par value; and we also experienced a 5.6 million decrease in the deferred income tax charge related to tariff deviations in the electricity business in Portugal. This difference is also explained by the fact that in 2003 we booked the deferred tax effect of a benefit, in the amount of 8.3 million, related to an extraordinary provision for the investments in Brazil and Cape Verde and associated contingencies.

109

#### **Table of Contents**

#### Consolidated net profit

As a result of the factors discussed above, our consolidated net income for 2003 increased 13.7% to 381.1 million from 335.2 million in 2002.

#### 2002 COMPARED WITH 2001

#### Revenues

Our total revenues in 2002 increased by 13% to 6,386.6 million from 5,650.4 million in 2001, due primarily to the beginning of the proportional (40%) consolidation of Hidrocantábrico (since June 2002) and the full consolidation of Escelsa and Enersul (last three months of 2002). These companies were equity consolidated in 2001. Electricity sales represented approximately 92.0% of our total revenues in 2002 compared with 92.1% of total revenues in 2001.

Sales of electricity. Our total electricity sales in 2002 increased by 13.0% to 5,876.2 million from 5,201.3 million in 2001 mainly due to the consolidation effects mentioned above related to Hidrocantábrico, Escelsa and Enersul and to higher sales from our Portuguese electricity activities.

Electricity sales in Portugal from generation and distribution and supply activities, which represented 83.9% of our total consolidated electricity revenues, increased 8.3% to 4,928.8 million in 2002 from 4,550.5 million in 2001.

Electricity sales revenues from our distribution and supply activities in Portugal increased 6.7% from 3,282.5 million in 2001 to 3,503.4 million in 2002, primarily due to a 2.5% increase in the Portuguese electricity system demand to 36,931 GWh in 2002 from 36,025 GWh in 2001. The 2.5% increase in the Portuguese system demand was mainly due to a normal 3.1% increase in low voltage consumption. Electricity distribution in the PES increased 1.3% to 35,973 GWh in 2002 from 35,505 GWh in 2001, whereas in the Non-Binding Sector, electricity distribution almost doubled to 958 GWh in 2002 from 520 GWh in 2001 due to the fact that some medium voltage consumers opted to become Qualifying Consumers.

In 2002, the aggregate tariff adjustment was 70.5 million. This figure includes an adjustment of 50 million relating to the application of the new tariff regulation in 2002 and an adjustment of 20.5 million relating to the 2000 tariff adjustment reposition. In 2001, the aggregate tariff adjustment was 42.2 million. This figure includes an adjustment of 35.5 million relating to the sharing of EDPD s 1999 profit that is reflected in 2001 tariffs, and an adjustment of 6.7 million relating to a partial recovery of EDPD s 2001 profit as actual revenues were below those estimated in the fixing of 2001 tariffs.

Electricity sales from our generation activity in Portugal increased 12.4% from 1,267.9 million in 2001 to 1,425.4 million in 2002. Approximately 93% of EDP Produção s generation revenues in 2002 were based on long-term PPAs between each of its binding system power plants and REN as the single buyer for the PES. The PPAs include an energy charge component that remunerates EDP Produção s plants operating in the PES for fuel consumption incurred in the production of electricity. Given that 2002 was a dry year when compared with 2001,

EDP Produção s thermal power plants were more utilized, resulting in higher fuel consumption and thus higher revenues from the variable component of the PPAs.

The incorporation of seven months of electricity sales from Hidrocantábrico (40%) in 2002 amounted to 295.1 million. Electricity sales in Brazil increased to 668.6 million in 2002 from 690.5 million in 2001, reflecting the beginning of the consolidation of Escelsa and Enersul in 2002 (last three months of 2002), that mitigated the effect on Bandeirante s accounts of the real devaluation against the euro.

Other sales. Our other sales activities, including sales of steam, ash, information technology products, telecommunications equipment, fixed property and sundry materials, generated revenues of 112.0 million in 2002 compared with 98.0 million in 2001. Apart from the impact of the initial consolidation of Hidrocantábrico, which accounted for an extra 20.0 million in 2002, the biggest contributor to this line item was our telecommunications

110

#### **Table of Contents**

activities, which other sales increased 51.3% from 30.9 million in 2001 to 46.7 million in 2002, as ONI supplied equipment under a major contract. Other sales also include other sales from our generation activity in Portugal that increased 50.9% to 18.7 million in 2002 from 12.4 million in 2001 mainly due to Energin, a cogenerator that sells electricity and steam and that began industrial service in late 2001.

Services rendered. Our revenues from services increased 13.5% to 398.4 million in 2002 from 351.1 million in 2001. The primary reason for this increase was the increased contribution of our telecommunication subsidiaries due to a significant growth of both voice and data services that benefited from the gradual liberalization of short-distance calls (local traffic) in Portugal and from a significant growth in ISP traffic, respectively. The increase in revenues from services provided relating to our information technology activities was due to the continued participation of Edinfor Group companies in the development and installation of SAP-related projects. Revenues from services provided by the electricity activity in Portugal increased 48.7% in 2002 to 51.3 million from 34.5 million in 2001, mainly due to an increase at EDP Energia resulting from the ongoing liberalization process in Portugal. Services provided in Spain by Hidrocantábrico contributed 6.2 million in 2002, following its initial seven-month 40% consolidation of the company.

#### Operating costs and expenses

Our total operating costs and expenses amounted to 5,737.9 million in 2002, up 15.3% from 4,976.8 million in 2001. This increase is due to the consolidation of Hidrocantábrico, Escelsa and Enersul for the first time in 2002 and to higher electricity purchases from our Portuguese electricity distribution and supply activities.

Hidrocantábrico contributed 283.3 million in 2002 (seven months at 40% proportional consolidation), while Escelsa and Enersul contributed 85.6 million in 2002 (three months full consolidation).

In addition to consolidation effects relating to Hidrocantábrico, Escelsa and Enersul, the increase in total operating costs and expenses resulted from higher fuel costs at EDP Produção, following a dry year in which hydro generation was reduced in favor of thermal power, higher electricity purchases at EDPD, due to an increase in electricity demand, and higher costs at ONI due to an increase of the company s activity in 2002. These effects more than offset Bandeirante s lower operating costs that resulted from the Brazilian real depreciation against the euro.

As a percentage of revenues, total operating costs and expenses increased to 89.8% in 2002 from 88.1% in 2001 due primarily to the increased costs of purchased electricity and fuel.

Raw Materials and Consumables. Our raw materials and consumables costs increased by 19.8% to 3,687.1 million in 2002 from 3,078.9 million in 2001, due primarily to increased costs of purchased electricity. Raw materials and consumables in 2002 include contributions of 195.6 million from Hidrocantábrico and 58.6 million from Escelsa and Enersul, in addition to higher fuel costs, resulting from increased utilization of thermal generation, and to higher electricity purchases.

Our costs of purchased electricity increased 19.1% to 3,005.5 million in 2002 from 2,524.3 million in 2001 due to the initial consolidation of Hidrocantábrico, Escelsa and Enersul and to higher costs of electricity purchases from our distribution and supply activities, following an increase of the average tariff charged on power purchased from REN.

Costs of purchased electricity from our generation and distribution and supply activities in Portugal represent 81% of our total electricity purchases in 2002.

Costs of purchased electricity from our generation activity in Portugal increased 33.6 million to 37.3 million in 2002 due to an increase in electricity purchases by small hydro power plants operating in the Non-Binding Sector as 2002 was a dry year and these producers are permitted to purchase electricity, up to their installed capacity, in order to satisfy electricity procurements in the Non-Binding Sector.

111

#### **Table of Contents**

Costs of purchased electricity from our distribution and supply activities increased 15.8% to 2,386.4 million in 2002 from 2,060.3 million in 2001 due both to a 13.6% increase in the average tariff charged on electricity purchased from REN, resulting from an increase in fuel prices, and a 2.5% increase in electricity consumption. For more information on these purchases of electricity, you should read Item 4. Information on the Company Portugal Electricity System Overview The Independent Electricity System and Competition.

In Spain, cost of purchased electricity at Hidrocantábrico, which was fully consolidated for the first time in 2002, amounted to 154.1 million.

Electricity purchases in Brazil decreased 2.2% to 486.5 million in 2002 from 497.4 million in 2001. Escelsa and Enersul, which were fully consolidated for the first time in 2002, contributed 57.5 million to electricity purchases in Brazil in 2002. The decrease in electricity purchases in Brazil in 2002 partly resulted from the depreciation of the Brazilian real against the euro.

Our fuel costs increased by 23.4% to 465.5 million in 2002 from 377.2 million in 2001, reflecting, on the one hand, the general rise in fuel prices, the effects of which were felt to a lesser extent in 2001, and, on the other hand, higher fuel utilization associated with a greater use of thermal generation due to a dry year. Consequently, there was an increase in fuel oil (which is more expensive than coal) in the fuel consumption mix. In 2002, the hydro account decreased by 63.4 million to 324.1 million, which decrease includes 76.1 million charged by REN. In 2001 the hydro account increased by 22 million to 387.5 million. This difference was primarily a result of 2002 having been a dry year (hydro coefficient of 0.76), while 2001 was a wet year with a (hydro coefficient of 1.19). To learn more about the effect of hydrological conditions on our business, you should read. Item 4. Information on the Company Portugal Generation.

The level of reference of the hydro account was 387.5 million for 2002, 2001 and 2000. In 2002, the hydro account did not exceed the reference level, hence we did not record the excess in non-operating income in 2002. In 2001, the hydro account exceeded the reference level, causing a surplus of 47.5 million that was recorded by us as non-operating income in 2001.

In 2002, Hidrocantábrico s fuel costs totaled 39.3 million, following the initial 40% consolidation of the company.

The major components of our costs for other materials are costs of cables, meters, transformers and other goods for resale, included under the item. Raw materials and consumables. Other materials. These costs increased 21.8% to 216.0 million in 2002 from 177.4 million in 2001. A majority of these costs are credited to Own work capitalized and the remainder is applied to maintenance of the transmission and distribution networks. See Own work capitalized.

Costs for other materials from generation, distribution and supply activities in Portugal represent 39.1% of our costs for other materials. Costs for other materials from our generation activity in Portugal increased 12.0% in 2002 to 4.4 million from 3.9 million in 2001. Costs for other materials from distribution and supply activities decreased 25.5% in 2002 to 80.1 million from 107.5 million in 2001 because costs with materials were abnormally low due to stocks write-offs.

Costs of other materials in Spain from Hidrocantábrico were 2.2 million in 2002, reflecting the effect of new consolidations in 2002.

In Brazil, considering only Bandeirante, costs of other materials remained stable at 2.9 million in 2002. Escelsa and Enersul contributed 1.1 million in 2002.

Costs of raw materials and consumables in our telecommunications activities represented 24.7% of our costs of other materials in 2002. These costs increased 32.7 million to 53.4 million in 2002 primarily due to increased costs at ONI Way.

112

### **Table of Contents**

Costs of raw materials and consumables in our information technology activities decreased 7.4% to 31.6 million in 2002 from 34.2 million in 2001, reflecting a 9.3% decrease in sales as EDINFOR focused its activity on services rather than equipment.

Personnel costs. Personnel costs, which consist mainly of wages and salaries and social security and pension fund contributions, increased 5.5% to 624.8 million in 2002 from 592.0 million in 2001. This increase was primarily due to the inclusion of seven months of Hidrocantábrico s personnel costs amounting to 18.3 million and, to a lesser extent, the consolidation of three months of Escelsa and Enersul personnel costs, amounting to 7.8 million.

Personnel costs in the Portuguese electricity business increased 3.7% to 500.1 million in 2002 from 482.1 million following the 3.4% average salary increase. As a percentage of total personnel costs, electricity business in Portugal decreased to 80.0% in 2002 from 81.4% in 2001. Personnel costs in generation increased 5.4% to 119.6 million in 2002 from 113.5 million in 2001. Personnel costs in distribution and supply activities increased 3.2% to 380.6 million in 2002 from 368.6 million in 2001.

In Brazil, considering only Bandeirante, personnel costs decreased 27.6% to 31.8 million in 2002 from 43.9 million primarily due to the depreciation of the real against the euro in 2002.

Personnel costs in our telecommunications activities in 2002 increased 18.0% to 89.7 million from 76.0 million, mainly due to costs incurred with the UMTS project, which was discontinued by the end of 2002.

Personnel costs in our information technology activities increased 15.4% to 75.5 million in 2002 from 65.4 million following the increased demand for information technology services provided by EDINFOR.

Depreciation and amortization. Depreciation and amortization increased to 739.5 million in 2002 from 664.7 million in 2001. The consolidation of Hidrocantábrico in 2002 contributed 26.9 million while Escelsa and Enersul contributed 7.9 million.

Depreciation and amortization in the Portuguese electricity business increased 1.6% to 561.9 million in 2002 from 553.0 million (as a percentage of our total depreciation and amortization charges, it decreased to 76.0% in 2002 compared to 83.2% in 2001). In generation there was an increase in depreciation and amortization of 1.4% to 228.2 million in 2002 from 225.2 million in 2001. In distribution and supply activities the depreciation and amortization charges increased 1.8% to 333.6 million in 2002 from 327.8 million in 2001.

In Brazil, considering only Bandeirante, the depreciation and amortization charges decreased to 26.3 million in 2002 from 35.8 million in 2001 primarily due to the depreciation of the real against the euro in 2002.

Depreciation and amortization charges in telecommunication activities increased 36.8% in 2002 to 66.9 million from 48.9 million in 2001 following the increase in 2002 of the investment level associated with the fixed line business.

Depreciation and amortization charges in information technology activities increased 1.1 million to 18.9 million in 2002 from 17.8 million in 2001

Supplies and services. The cost of supplies and services increased by 3.7% to 675.1 million in 2002 from 651.2 million in 2001, due primarily to the inclusion of seven months of Hidrocantábrico and three months of Escelsa and Enersul. Hidrocantábrico contributed 41.1 million while Escelsa and Enersul contributed 8.4 million.

External supplies and services in the Portuguese electricity business decreased 1.2% to 282.1 million in 2002 from 285.5 million in 2001 (and as a percentage of the consolidated supplies and services decreased to 41.8% in 2002 from 43.8% in 2001). Supplies and services in generation increased 4.8% to 73.0 million in 2002 from 69.6 million in 2001 mainly due to a non-recurring cost with SAP information system charged by EDINFOR and the invoice by our shared services company, EDP Valor, of services that were previously performed in EDP Produção.

113

#### **Table of Contents**

Supplies and services in distribution and supply activities decreased 3.1% to 209.2 million in 2002 from 215.9 million in 2001 due to the positive results of the cost cutting program implemented at the beginning of 2002.

In Brazil, considering only Bandeirante, supplies and services decreased 23.9% to 27.7 million from 36.4 million primarily due to the depreciation of the real against the euro in 2002.

Costs of supplies and services in our telecommunication activities increased 34.1% to 293.7 million in 2002 from 219.1 million in 2001 due to an increase in ONI s activity. Despite this increase, supplies and services increased at much slower pace than revenues following the cost-cutting program implemented in late 2001.

Costs of supplies and services in our information technology activities increased 14.4% to 75.1 million in 2002 from 65.7 million in 2001 following the increased demand for information technology services provided by EDINFOR.

Own work capitalized. Own work capitalized consists of amounts that correspond to costs related to our costs of personnel and materials and other external supplies and services incurred for projects under construction that are capitalized and will be amortized in future periods. These amounts generally consist of consumption of materials, direct internal costs, general administrative overheads and financial charges. Own work capitalized increased to 241.8 million in 2002 from 232.5 million in 2001.

Own work capitalized at the Portuguese electricity business represented 77.7% in 2002 of our total own work capitalized compared to 76.4% in 2001. In 2002, it increased 5.8% to 188.0 million from 177.7 million in 2001. Own work capitalized in generation increased to 26.2 million in 2002 from 23.9 million in 2001 following the investments in TER CCGT and Venda Nova II hydro power plant. Own work capitalized in distribution and supply activities increased 5.2% to 161.8 million in 2003 from 153.8 million primarily related to higher investments in the distribution grid.

The consolidation of the last seven months of Hidrocantábrico in 2002 contributed 2.7 million to our own work capitalized.

A table setting forth the components of Own work capitalized for the past three years is provided in note 30 to the consolidated financial statements.

Concession and power-generation rents. Concession and power-generation rental costs increased in 2002 to 158.2 million from 149.1 million in 2001. The 6.1% increase in concession and power-generation rental costs between 2001 and 2002 is primarily due to the increase in the average concession fee paid to the Portuguese municipalities, from 6.75% to 7.00% on average on previous year s sales, and the 5.4% increase in low voltage, special low voltage and public lighting sales.

*Provisions*. Provisions decreased to 100.6 million in 2002 from 116.0 million in 2001, primarily due to a decrease in provisions for pension liabilities, which was partly offset by an increase in provisions for healthcare liabilities. This line item is discussed in note 31 to the consolidated financial statements.

Until the end of 2002, increases in provisions for doubtful accounts were reflected in our consolidated statements of income in the line item

Provisions and were included in the determination of operating income while decreases were included in the line item Other non-operating
expenses (income), net below the operating income. Provisions for doubtful accounts accounted for 24.4 million in 2002 and 20.5 million in
2001. These line items are discussed below and in notes 8, 31, and 34 to the consolidated financial statements.

Other operating expenses / (income). This item primarily includes taxes other than income taxes and other operating income (net), which decreased to a 5.7 million income in 2002 from a 42.5 million income in 2001. This decrease was due to a reduction in supplementary gains, which consists of reimbursements received for out-of-pocket expenses incurred and is charged to third parties related to information technology and telecommunications services. For more information on these expenses, you should read note 32 to the consolidated financial statements.

114

#### **Operating margin**

As a result of the factors discussed above, our operating margin decreased by 3.7% to 648.7 million in 2002 from 673.5 million in 2001. In our core electricity business in Portugal our operating margin decreased 8.6% to 650.3 million in 2002 from 711.6 million in 2001, primarily due to the regulator s tariff cuts on the use of the distribution grid and commercialization tariffs following the last regulatory review, which was effective as of January 2002. In 2002 Hidrocantábrico contributed 38.1 million to our operating margin. In Brazil, Bandeirante s operating margin decreased 28.6% to 46.1 million in 2002 from 64.6 million in 2001 mainly due to the depreciation of the real against the euro, while Escelsa and Enersul contributed 15.2 million in 2002 to our operating margin. In our telecommunication activities, operating margin decreased 14.0% to a loss of 154.8 million in 2002 from a loss of 135.9 million in 2001 due to costs incurred with the UMTS project. Operating margin in our information technology activities increased 14.2% to 35.6 million in 2002 from 31.1 million in 2001 following the increased demand for information technology services.

#### Interest and related income/(expenses), net

Our net interest expenses increased to 222.8 million in 2002 from 205.3 million in 2001 (but decreased as a percentage of our total revenues to 3.5% in 2002 compared to 3.6% in 2001). This increase was primarily due to a net expense related to interest of 283.1 million in 2002 compared to 214.7 million in 2001, due primarily to an increase in our average debt level that was partially offset by the lower interest rates.

## Other non-operating income/(expenses)

We had other non-operating expenses of 138.9 million in 2002 compared with other non-operating income of 126.0 million in 2001 primarily due to a 222.8 million net loss in 2002 related to net provisions movements. In 2001, we recorded non-operating income of 47.5 million related to the hydrological correction mechanism.

We recorded an income item of 71.8 million in 2002 compared to 63.9 million in 2001 for the portion of depreciation due primarily to new electricity connections made in prior years that were financed largely with customer payments. We record the amount of these payments initially as deferred income and as the assets are depreciated over 30 years, a portion of the amount is taken into income and offset by a corresponding charge.

We recorded a net loss of 222.8 million in 2002 related to net provisions movements compared to a net loss of 41.1 million recorded in 2001. The net loss recorded in 2002 reflects the write off of ONI Way, following the discontinuation of the UMTS project that ONI Way was developing. For more information on net movement of provisions you should read note 31 to the consolidated financial statements.

#### Provision for income taxes

Our provision for income taxes is determined on the basis of the estimated taxable income for the period. Income taxes provided for in 2002 were 171.2 million compared with 244.0 million in 2001. The reference income tax rate in Portugal was 30% in 2002, compared with 32% in

2001 and 2000. In addition, a municipal surcharge of up to 10% of the base rate is typically levied by the municipality in which income is earned. Our effective tax rate is different from the reference income tax in Portugal each year due to permanent differences arising mainly from amortization of the goodwill and concession rights, amortization resulting from revaluation of fixed assets and tariff deviations in the electricity business that are not deductible for income tax purposes. Our effective tax rate was 59.7% in 2002 compared with 41.1% in 2001, primarily due to the fact that the negative impact of the ONI Way write-off following the discontinuation of its UMTS operations in 2002 was not tax deductible. For more information on the provision for income taxes, you should read note 35 of our consolidated financial statements.

#### Provision for deferred income taxes

Deferred income taxes are recognized in our consolidated financial statements in accordance with International Accounting Standard 12. Our provision for deferred income tax is determined, using the balance sheet liability

115

#### **Table of Contents**

method, on the temporary differences between the book values of assets and liabilities and their respective taxable bases. The taxable base of assets and liabilities is determined so as to reflect the consequences of taxation resulting from the way in which we expect, on the balance sheet date, to recover or to pay the recorded amount of our assets and liabilities. In determining deferred tax, the rate used is the one in effect or otherwise applicable on the balance sheet date. Recognized deferred tax assets are reduced to the recoverable amount that can be compensated against future expected profits. In 2002, our provision for deferred income taxes amounted to a 0.6 million charge, whereas in 2001 the provision for deferred income taxes amounted to a 41.1 million benefit. This difference is mainly due to the additional charge, in 2002, of 13.3 million related to the tariff deviation of the electricity business and to the deferred tax effect of a charge, in the amount of 29.6 million, related to the capital gain arising from the acquisition of the Escelsa U.S. dollar bonds below par value. The remaining differences are mostly explained by tax losses brought forward regarding ONI and Brazil.

#### Consolidated net profit

As a result of the factors discussed above, our consolidated net profit for 2002 decreased 25.6% to 335.2 million from 450.8 million in 2001.

#### LIQUIDITY AND CAPITAL RESOURCES

We manage and control our funding and treasury activities centrally at the EDP, S.A. level, except with respect to ONI and our businesses in Spain and Brazil. At EDP, S.A., the account balances of our subsidiaries are netted in EDP, S.A. s accounts and centralized payments are made for the entire EDP Group. In Portugal, there are no legal or economic restrictions on the ability of our subsidiaries to transfer funds to EDP, S.A. Our subsidiaries in Portugal do not enter into their own financing arrangements except for our cogeneration subsidiary, EDP Cogeração, which finances some of its own projects, ONI and EDINFOR.

Our primary source of liquidity is cash generated from operations. Net cash provided from operating activities was 1,773.6 million in 2003, compared with 897.7 million in 2002 and 1,221.2 million in 2001.

Total cash and equivalents, net of bank overdrafts, at December 31, 2003 were an overdraft position of 308.4 million compared with an overdraft position of 407.3 million at December 31, 2002 and an overdraft position of 468.5 million at December 31, 2001. Cash and cash equivalents are held in euros.

Net cash used in investing activities was 529.1 million in 2003, compared with 1,141.4 million in 2002 and 1,243.0 million in 2001, representing a 53.6% decrease in 2003 and an 8.2% decrease in 2002. The decrease in 2003 compared with 2002 reflects our sale in 2003 of our investment in Iberdrola and Hidrocantábrico s acquisition of Naturcorp and, in 2002, our acquisition of Hidrocantábrico. The decrease in 2002 compared with 2001 reflects the fact that although investment in the acquisition of subsidiaries (mainly Hidrocantábrico) was higher than in the previous year, this was offset to a greater extent by the proceeds from divestments and income from investments and dividends.

Net cash used in financing activities was 1,118.6 million in 2003 compared with net cash from financing activities of 297.2 million in 2002 and net cash used in financing activities of 96.1 million in 2001. The increase in net cash used in financing activities in 2003 was mainly due to debt reduction, partially resulting from the liquidity achieved by the sale of our investment in Iberdrola. The increase in net cash from financing activities in 2002 was due to the issuance of new medium and long-term debt during 2002.

As of December 31, 2003, EDP, S.A. had available committed credit facilities of 1,446 million and a fully underwritten 350 million commercial paper program. Of these short-term credit facilities, 600 million corresponds to a syndicated revolving credit facility expiring in August 2004, which we intend to replace with a new 5 year credit line, and 700 million corresponds to a credit line facility negotiated in March 2003 to be used primarily as a back-up facility for our euro commercial paper program of 1,000,000,000, signed in April 2001. The facility expires in March 2006, or in March 2008 if we decide to exercise the two-year extension option. These credit lines permit drawings of one, two, three and six months at agreed margins over the euro interbank offered rate, or Euribor, based on a rating grid. Management believes that the combination of these negotiated credit lines

116

and commercial paper programs provides an adequate source of liquidity for our operations. Our credit facility agreements do not impose financial ratio requirements and events of default clauses are not based on credit rating, so that their availability is not impacted by downgrades or declines in financial ratios or other measures of financial performance.

Our consolidated indebtedness, including bonds, long-term bank loans, commercial paper and bank overdrafts, was 7,492.7 million at December 31, 2003 compared with 7,994.1 million at December 31, 2002 and 5,799.1 million at December 31, 2001. As part of the strategy of extending the average life of our debt portfolio, in March 2003, we issued 150 million of bonds with a 10-year term, which was placed with a single domestic investor. As of December 31, 2003, debt at EDP, S.A. and EDP Finance B.V. amounted to 5,356.2 million, corresponding to 71.5% of our total debt. Our debt management guidelines continue to be focused on controlling financial costs and reducing our exposure to foreign exchange risk.

In 2000, the reduction of the Portuguese government s ownership to less than a majority interest in our shares and the reduction of our ownership interest to less than a majority interest in REN s shares triggered provisions in some of our debt agreements that provide specified remedies for creditors including provisions in two of our domestic bond issues that permitted bondholders to seek our redemption of the bonds. Under one of these domestic bond issues, a provision was triggered giving bondholders the right to call a meeting of bondholders for the purpose of proposing modifications to the terms of the bond. A meeting was called and, because we did not accept the modifications proposed, bondholders had the right to, within 30 days, require redemption of their bonds. As a result, we were required to redeem 125,000,000 of this 150,000,000 issue at par on July 18, 2001. With respect to the other domestic bond issue, a provision was triggered giving bondholders the right to redeem their bonds at any time, and as of June 4, 2004 we had redeemed 236,938,299 of this 250,000,000 issue at par. We have effectively refinanced the portion of our debt represented by these domestic bonds through a bond issue in March 2001 under our MTN program. In 2000, our MTN program was amended to prevent the REN transaction from triggering any remedies for bondholders of the 1,000,000,000 issue maturing in 2009. As a result of this amendment, the annual interest rate of this issue increased from 6.00% to 6.40%. We obtained or reached agreement on amendments to or waivers of applicable provisions in all of our other debt agreements.

At December 31, 2003, the weighted average interest rate of our indebtedness at EDP, S.A. and EDP Finance B.V. was 3.58%, compared with 3.67% at December 31, 2002. At December 31, 2003, total debt held by EDP, S.A. and EDP Finance B.V. was denominated in euros (or hedged using cross currency swaps), and we therefore do not have currency exchange rate risk relating to this debt. At December 31, 2003, approximately 68% of our total long-term indebtedness at EDP, S.A. and EDP Finance B.V. carried a floating rate, but was hedged against interest rate risk through collar structures. At December 31, 2002, approximately 72.7% of our total long term indebtedness carried a floating rate, the weighted average interest rate of which was 3.47%.

#### TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS

Our contractual obligations and commercial commitments consist primarily of credit facilities, as described above. The following table provides details regarding EDP s contractual and commercial obligations subsequent to December 31, 2003:

#### Payments Due and Amount of Commitment by Expiration Period

(EUR millions)

Total	December 31,	Thereafter				
	2004	2005	2006	2007	2008	

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5,913.6		606.1	924.6	903.5	721.9	2,757.5
1,579.1	1,579.1					
7,492.7	1,579.1	606.1	924.6	903.5	721.9	2,757.5
		·				
584.2	293.9	14.4	0	53.9	0	222.0
			<u>-</u>			
8,076.9	1,873.0	620.5	924.6	957.4	721.9	2,979.5
	7,492.7 584.2	1,579.1     1,579.1       7,492.7     1,579.1       584.2     293.9	1,579.1     1,579.1       7,492.7     1,579.1     606.1       584.2     293.9     14.4	1,579.1     1,579.1       7,492.7     1,579.1     606.1     924.6       584.2     293.9     14.4     0	1,579.1     1,579.1       7,492.7     1,579.1     606.1     924.6     903.5       584.2     293.9     14.4     0     53.9	1,579.1     1,579.1       7,492.7     1,579.1     606.1     924.6     903.5     721.9       584.2     293.9     14.4     0     53.9     0

We believe that cash generated from operations and existing credit facilities is sufficient to meet present working capital needs. We currently expect that our planned capital expenditures and investments will be financed from internally generated funds, existing credit facilities and customer contributions, which may be complemented with medium- or long-term debt financing and equity financing as additional capital expenditure requirements develop. For more information on our planned capital expenditures you should read 
Item 4. Information on the Company History and Business Overview Group capital expenditures and investments.

#### PENSIONS AND BENEFITS

We maintain a defined benefit pension plan for all our active and retired employees included in the Collective Labor Agreement, or the A.C.T., for Portuguese group companies created in 1994 with the restructuring of EDP. Pension benefits are based on the employees—years of service and the compensation level at the end of their employment period, less Portuguese social security benefits. The normal retirement age is 65. However, employees at least 60 years of age with 36 years of service, or employees of any age with 40 years of service, may elect early retirement. Employees electing early retirement are entitled to full pension benefits that are calculated on the same basis as that for employees retiring at the normal retirement age. Our policy has been to make contributions to the plan based on the availability of funds while making the minimum annual contributions required by applicable regulations. Some companies not a part of the A.C.T, such as the Brazilian and Spanish companies, also have complementary social benefits to their own social security systems, either as a defined benefit plan (Bandeirante, for example) or a defined contribution plan (Escelsa and Hidrocantábrico, for example).

We also provide comprehensive medical coverage, in addition to that provided by the Portuguese national health system, for retired employees, including those who have taken early retirement, and their dependents. Additionally, we provide a death benefit to retirees—survivors. We administer the program internally and assume the full cost of funding the program net of employee contributions, amounting to approximately 10% of the total medical expenses covered.

At December 31, 2003, our accrued pension and medical benefit liabilities were 562.3 million compared with 608.2 million at December 31, 2002 and 683.9 million at December 31, 2001. The provisions for medical benefits and pensions in 2003 were 412.6 million and 149.6 million, respectively, amounting to 562.3 million in total, compared with 396.7 million and 211.5 million, respectively, in 2002, amounting to 608.2 million in total, and 377.9 million and 305.9 million, respectively, in 2001, amount to 683.9 million in total. We expect to fund pension fund liabilities from our internal resources.

#### **INFLATION**

Inflation in Portugal, as measured by changes in the Portuguese CPI, averaged 3.3%, 3.6% and 4.4% in 2003, 2002 and 2001, respectively. During the period from 1993 through 2003, changes in the Portuguese CPI averaged 3.7% per annum, ranging from a high of 6.7% in 1993 to a low of 2.2% in 1997.

To reflect the impact of inflation, Portuguese GAAP and regulations permit companies to revalue their fixed assets. Accordingly, we revalued our assets in 1992 based on an assessment of the remaining useful life and modern equivalent asset value of the assets at December 31, 1992. In accordance with Portuguese GAAP, depreciation of fixed assets is computed on the revalued amounts, with depreciation in respect of the original acquisition cost and 60% of the revaluation increment being deductible for corporate income tax purposes. Under U.S. GAAP, fixed assets may not be stated at more than their historical acquisition cost.

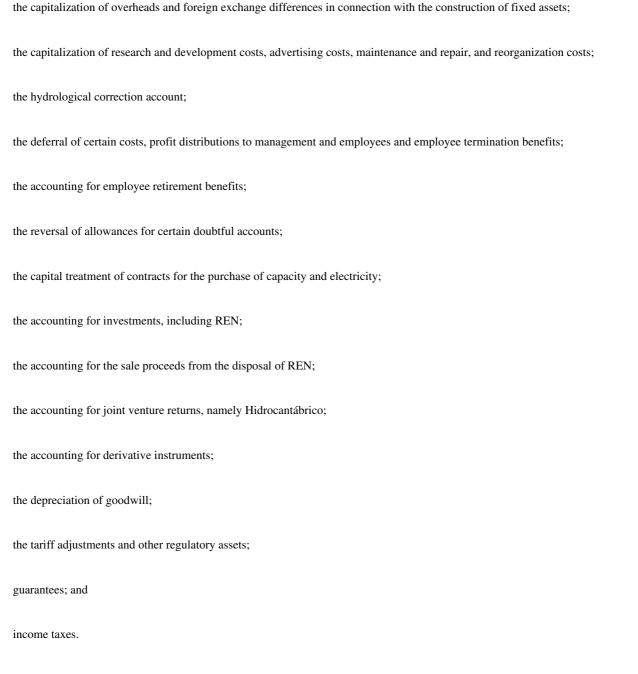
# Edgar Filing: EDP ELECTRICIDADE DE PORTUGAL SA - Form 20-F PORTUGUESE GAAP COMPARED WITH U.S. GAAP

Our financial statements have been prepared in accordance with Portuguese GAAP, which varies in certain significant respects from U.S. GAAP. The principal differences between Portuguese GAAP and U.S. GAAP as they relate to us concern:

the revaluation of fixed assets, as discussed above under Inflation;

118

#### **Table of Contents**



We include in the cost of assets constructed for our own use a portion of our general and administrative overhead. Assets constructed prior to 1995 also include the net foreign exchange differences, both gains and losses, which resulted from loans denominated in non-escudo currencies contracted to fund the capital expenditures. Under U.S. GAAP, these amounts are included in income in the period incurred.

We capitalize and amortize research and development costs, advertising costs, major maintenance and repair costs, and reorganization costs. Under U.S. GAAP, these amounts are included as expenses in the period incurred.

As required by government regulation, we record a provision in the hydrological correction account to smooth the effect on our earnings that results from changes in hydrological conditions. Under U.S. GAAP, the effect of future changes in hydrological conditions would be viewed as a general business risk and accrual would not be permitted.

As part of our profit sharing plan, we customarily distribute a portion of net profit to management and employees. Under Portuguese GAAP, this distribution is reflected in the period in which formal shareholder approval is obtained and is recorded as a reduction of retained earnings or other reserves. U.S. GAAP requires that these distributions be recorded as compensation expense in the period they are earned.

We and some of our subsidiaries have pension obligations, in connection with both defined benefit and defined contribution plans, and also have medical benefits for retired employees. Costs for defined contribution plans are expensed when incurred. Accumulated obligations and annual expenses for medical benefits and defined benefit

119

#### **Table of Contents**

pension plans are determined on actuarial basis. We adopted this policy by implementing IAS 19 in 1999. For the U.S. GAAP reconciliation, we use SFAS 87 and SFAS 106 as from 1995. Thus, differences in accounting for these obligations generally originate from the date of determination of the transition obligation (1989 for U.S. GAAP purposes and 1996 for Portuguese GAAP purposes) and the assumptions relating the adherence rate to the early retirement plan for the period 1999-2003, as well as for the recognition of the additional pension minimum liability.

We reached agreements with several municipalities on the terms for the future settlement of various old accounts receivable, which under Portuguese GAAP and U.S. GAAP were fully provided in the past. We reversed a portion of the allowance for doubtful accounts related to these old accounts receivable in 1999 and 2000, but not after those periods. Under U.S. GAAP, the benefit from the recovery of these accounts receivable may only be recorded when the amounts are actually received.

We constructed and sold the Pego and Tapada de Outeiro power plants in 1993 and 1998, respectively. Before 1999, at the time of the sales, REN signed PPAs with the producers in the Binding Sector by which the capacity and electricity of the plants were fully contracted to the Binding Sector represented by REN. Under the PPAs, REN is required to make specified minimum payments whether or not it is able to take delivery of the electricity. As permitted under Portuguese GAAP, REN recorded the sales of the power plants and it also recorded the minimum contracted payments as an expense of the respective periods. U.S. GAAP would require the sales to be treated as sale lease-back transactions and the power purchase agreements to be recorded as capital leases. Prior to the sale of REN to the Portuguese government, the contracts with Tejo Energia and Turbogás were recorded in this manner. Currently, the most relevant PPAs are those that REN has entered into with CPPE power plants.

Under Portuguese GAAP, we carry investments in publicly traded equity securities, other than those of subsidiaries and those that are accounted for under the equity method, at market. Changes in the carrying value other than those resulting from permanent impairment are reflected in equity. Under U.S. GAAP, these securities would be stated at fair value and the changes therein, net of income taxes, would be recorded in a separate component of shareholders—equity and included in the determination of comprehensive income. Our investment in REN and equity in earnings of REN are affected by certain accounting differences between U.S. GAAP and Portuguese GAAP. The differences affecting our investment in REN and equity in earning of REN include: revaluation of fixed assets, overheads capitalized, deferred costs, employee termination benefits, distribution to management and employees, power purchase agreements and deferred income taxes.

Under Portuguese GAAP, since the sale proceeds from the disposal of our 70% interest in REN were equal to the net book value of the interest sold, no gain or loss was recorded on the transaction. Under U.S. GAAP, the net book value of the interest sold would be reduced as a result of the accounting differences between Portuguese GAAP and U.S. GAAP; therefore, the proceeds received from the disposal of REN would exceed the net book value of the interest disposed, resulting in a gain on disposal and the remaining investment in REN would be reduced accordingly. The gain on the disposal, in the amount of 342,045,810, and the related deferred tax in the amount of 120,400,126, would be charged directly to shareholders equity (with a net effect of 221,645,684).

Our 40% holdings in the voting rights of Hidrocantábrico plus the existing shareholders—agreement allowed the investment to be consolidated as a joint venture on a proportionate basis under Portuguese GAAP. Under U.S. GAAP this investment would be accounted for under the equity method. Hidrocantábrico—s shareholders equity and net income have been adjusted to U.S. GAAP before applying the equity method to our accounts

Until 2002, derivative financial instruments were not recognized in the financial statements under Portuguese GAAP. Under U.S. GAAP, derivative financial instruments would be recognized in the balance sheet at market value. For instruments that do not qualify for hedge accounting under FAS 133, as implemented on January 1, 2001, the movements in the market value are included in our net profit. Upon adoption of FAS 133 on January 1, 2001, no transition adjustment was recorded as all derivatives existing at that date were previously recorded

at fair market value in the balance sheet for U.S. GAAP. The derivative financial instruments held by us at December 31, 2000, 2001 and 2002 were not designated hedges and thus movements in their fair value would be recognized in net income. As of the date of our adoption of IAS 39 in 2003, in our Portuguese GAAP consolidated financial statements derivative financial instruments are recognized in our consolidated balance sheet at market value, and those that do not quality for hedge accounting are included in our net profit.

120

#### **Table of Contents**

From January 1, 2002, U.S. GAAP requires that goodwill, including previously existing goodwill, and intangible assets with indefinite useful lives are not amortized but are tested for impairment annually. Concession rights continue to be amortized, as these are intangible assets with finite lives. Goodwill amortization charged to the consolidated profit and loss account was adjusted for U.S. GAAP purposes in the amount of 11.9 million in 2002 and 54.4 million in 2003.

Prior to 1999, the sales price of electricity in Portugal was based upon a negotiated price between the government and us. Tariffs were generally based on operating costs incurred during a year associated with average hydrological conditions. However, there were no specific guidelines in place that ensured that we would recover actual costs incurred. On January 1, 1999, and again on January 1, 2002, new tariff regimes were introduced that established formulae for the calculation of the selling price of electricity in Portugal. These tariffs at current market conditions allow us to recover actual costs incurred. However, not all of the criteria necessary to adopt the U.S. GAAP accounting for regulated industries exist. Therefore, U.S. GAAP requirements applicable to regulated industries have not been applied. On January 1, 2002, the regulator implemented alternative revenue programs that allow us to increase tariffs in future periods to recover allowable revenues. Future tariff increases have been recorded in the current year for Portuguese GAAP and are reversed under U.S. GAAP.

Guarantees related to our operations with bank loans and other operational activities that have no accounting recording under Portuguese GAAP must be adjusted and presented as liabilities for U.S. GAAP purposes. These adjusted amounts are related to the purchase of electricity and the receipt of some subsidies from the government.

Under Portuguese GAAP, prior to 1999, it was acceptable to recognize income tax expense based upon the estimated current income tax liability on the current year s earnings. When income and expense recognition for income tax purposes does not occur in the same period as income and expense recognition for financial reporting purposes, the resulting temporary difference was not considered in the computation of the income tax expense for the period. Under U.S. GAAP, income taxes are provided using the liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences attributable to differences between the financial statement carrying amount of assets and liabilities and their tax bases. A valuation allowance is provided based on the expected realization of these deferred tax assets.

In 1999, we implemented International Accounting Standard 12 (Revised), *Income Taxes*, which requires income taxes to be provided for using the liability method and is substantially consistent with the method under U.S. GAAP.

Our net profit in 2003 under U.S. GAAP amounted to 498.0 million and 299.9 million in 2002 compared with 381.1 million in 2003 and 335.2 million in 2002, respectively, under Portuguese GAAP. Our shareholders equity under U.S. GAAP was 3,497.3 million at December 31, 2003 and 3,886.3 million at December 31, 2002, compared with 5,298.0 million and 5,494.2 million, respectively, under Portuguese GAAP.

See note 39 to our audited consolidated financial statements for the significant adjustments to net income and shareholders equity that would have been required if U.S. GAAP rather than Portuguese GAAP had been applied in the financial statements.

#### IMPACT OF RECENTLY ISSUED U.S. ACCOUNTING STANDARDS

In January 2003, the FASB issued FASB Interpretation No. 46, (FIN 46), *Consolidation of Variable Interest Entities*. FIN 46 was revised in December 2003 and has been interpreted in various FASB staff positions. FIN 46 is effective immediately for all variable interests in variable interest entities (VIE) created after January 31, 2003. For VIEs created before that date, the requirements are effective for us from January 1,

2004. FIN 46 requires certain transitional disclosures to be made immediately if it is reasonably possible that an entity will consolidate or disclose information about VIEs when FIN 46 becomes effective. FIN 46 defines a VIE as an entity where either the total equity investment at risk is not sufficient to permit the entity to finance its activities, without additional subordinated financial support; or the equity investors lack any one of the following: (1) the ability to make decisions about an entity s activities; (2) the obligation to absorb losses of the entity; or (3) the right to receive residual returns of the entity. VIEs are required to be consolidated by the primary beneficiary, which is the party that absorbs the majority of the entity s expected losses, expected gains, or both. It is not expected that this standard will have a material impact on our U.S. GAAP financial statements.

121

#### **Table of Contents**

In April 2003, the FASB issued SFAS 149 Amendment of Statement 133 on Derivative Instruments and Hedging Activities. This statement amends and clarifies financial accounting and reporting for derivative instruments, including certain derivative instruments embedded in other contracts (collectively referred to as derivatives) and for hedging activities under FASB Statement No. 133, Accounting for In April 2003, the FASB issued SFAS 149, Amendment of Statement 133 on Derivative Instruments and Hedging Activities. This statement is effective prospectively for contracts entered into or modified after June 30, 2003 and prospectively for hedging relationships designated after June 30, 2003. Adoption of this statement has not had a material impact on our U.S. GAAP financial statements.

In May 2003, the FASB issued FAS 150, Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity. FAS 150 is effective prospectively for financial instruments entered into or modified after May 31, 2003, and otherwise is effective at the beginning of the first interim period beginning after June 15, 2003. FAS 150 requires that certain financial instruments, previously accounted for as equity, be classified as liabilities. This statement must be implemented by reporting the cumulative effect of a change in an accounting principle for financial instruments created before the issuance date of the statement and still existing at the beginning of the interim period of adoption. Following adoption of this statement, certain financial instruments have been reclassified from minority interests to liabilities. This statement is not expected to have a material impact on our financial statements.

In December 2003, the FASB issued a revision to SFAS No. 132, *Employers Disclosures about Pensions and Other Retirement Benefits*, which requires enhanced disclosures about our defined benefit pension plans. The revised standard will become effective for our U.S. GAAP financial statements for 2004. Adoption of this statement has not had, and is not expected to have, a material impact on our U.S. GAAP financial statements, although additional disclosures have been added.

In November 2003, the Emerging Issues Task Force (EITF) reached a consensus on certain additional disclosure requirements in connection with holding losses on investment securities (EITF 03-1- *The Meaning of Other-Than-Temporary Impairment and its Application to Certain Investments*). This standard is not expected to have a material impact on our U.S. GAAP financial statements.

Item 6. Directors, Senior Management and Employees

#### **BOARD OF DIRECTORS**

Our board of directors manages our affairs and monitors the daily operation of our activities in accordance with Portuguese law and our Articles of Association. Executive officers are in charge of our various administrative departments and report directly to our board of directors. Our operating companies are each managed by their respective boards of directors who report ultimately to our board of directors.

Under Portuguese law, the board of directors has the power to perform any and all acts necessary or desirable for the furtherance of our purposes, with the exception of any acts that under Portuguese law or our Articles of Association are subject to the express approval of shareholders at a general meeting. Pursuant to our Articles of Association the shareholders may in a general meeting appoint a board composed of an uneven number of members with a minimum of 5 and a maximum of 15 members. One of the directors can be elected separately by a minimum of 10% of the shareholders that voted against the list of proposed directors by, in the same shareholders meeting, voting for a new director that automatically substitutes the last person on the list of proposed directors. Currently, the board of directors consists of a Chairman and twelve other directors elected by a simple majority of the votes cast at a general meeting.

Pursuant to our Articles of Association, which provide that the board of directors may delegate day-to-day management responsibilities to an executive committee composed of an uneven number of directors, the board of directors has appointed an executive committee and established the following guidelines for the executive committee:

to globally define our policies on our different areas of activity, the coordination of activities among EDP Group companies, and the management of our holdings; and

122

#### **Table of Contents**

to submit to the board of directors for a decision only those matters that executive committee finds to be of suitable importance.

The executive committee is not authorized to:

appoint new directors,

convene general meetings of shareholders,

approve our annual report and accounts in order to submit them to a general meeting of shareholders,

approve plans and annual or multi-year budgets nor monitor their execution,

approve our quarterly accounts,

move our principal office, or

prepare plans for a merger, spin-off, transformation or sale of our group companies; and

hold meetings, as convened by its chairman usually once a week, at which non-Executive Committee members may be present.

The current executive committee was appointed in May 2003, although its composition may change in order to fill vacancies, and is currently composed of the following five directors: Mr. João Talone, our Chief Executive Officer, Mr. Rui Miguel Horta e Costa, Mr. Arnaldo Pedro Figueirôa Navarro Machado, Mr. Jorge Manuel Oliveira Godinho and Mr. Pedro Manuel Bastos Mendes Rezende.

In July 2003, the board of directors created an audit committee composed of three directors. Following the withdrawal of Mr. António de Almeida, the initial President of this committee, Mr. José Manuel Trindade Neves Adelino was appointed President. Mr. Luís Filipe Rolim de Azevedo Coutinho and Mr. António Afonso de Pinto Galvão Lucas are also members of the audit committee. The members of the audit committee are qualified as independent directors under CMVM Regulation no. 11/2003 of December 2, 2003.

The audit committee has, among others, the following main functions:

supervises compliance with and proper application of prevailing accounting principles and standards, in conjunction with the work of the Registered Chartered Accountant (*Fiscal Único*) and of the external auditors;

analyzes the quarterly, semi-annual and annual financial information, draws up non-binding initial reports on this information for appraisal by the board of directors, which may include recommendations on the provision of information to shareholders; and

submits proposals in connection with the appointment of the external auditor and its remuneration to the board of directors, monitors the activity of the external auditor and checks consistency and adequacy of expenditure with the external auditor and its efficiency.

Our remuneration committee is composed of three members, which are shareholders elected at our general meeting of shareholders, as provided for in Portuguese law and in article 24 of our Articles of Association. This committee has the capacity to determine the remuneration of our board of directors and of our other corporate bodies, including retirement plans. The current members of the remuneration committee are Mr. Vasco de Mello

123

(Chairman), Mr. Ruy de Albuquerque and Mr. Plácido Pires. Neither the law nor our Articles of Association impose or provide for a charter or regulation to be approved in relation to the organization or activity of the remuneration committee.

The board of directors has the exclusive authority to represent us in transactions with third parties, but may delegate these powers. The board of directors has no power to amend or repeal the Articles of Association, which may only be amended or repealed by the shareholders in a general meeting by a resolution adopted by two-thirds of the votes cast, representing, on a first call, a quorum of at least one-third of our share capital, as set forth in Portuguese law.

The term of office of the board of directors is three calendar years, renewable, with the year of election or appointment being considered as a full calendar year. Directors may be removed at any time, with or without cause, by the general meeting of shareholders. Vacancies that occur on the board of directors may be filled by the board, with the term of the new director being coterminous with that of the substituted director. Directors filling board vacancies pursuant to designation by the board of directors must be submitted for ratification at the first general meeting of shareholders subsequent to the substitution. Our directors do not have service contracts with us or our subsidiaries that provide for benefits upon termination of employment. According to its internal regulations, the board of directors must convene once a month, and a majority of directors must be present to constitute a quorum. A director may be represented at a meeting only by another director by proxy given in writing for the meeting in question, and no more than one director can be represented by proxy at a particular meeting. Directors have equal voting rights, and all resolutions of the board of directors are adopted by a majority of the votes cast. The Chairman has the deciding vote in the event of a tie.

Pursuant to our Articles of Association, the shareholders at a general meeting appoint the remuneration committee, which is a committee of shareholders that determines the compensation of directors and directors benefits.

Under Portuguese law, a director must act diligently and with due care, always seeking to promote the company s interest while taking due account of the interests of shareholders and employees. A director will be liable to the company, the company s shareholders and third parties for any damages caused by a breach of these duties.

The members of our board of directors, their principal past affiliations, information on their business experience and principal business activities outside of us and selected other information are set forth below:

			Year originally
Name	Age	Position	elected
Mr. Francisco de la Fuente Sánchez	62	Chairman	2000
Mr. João Ramalho Talone	52	Chief Executive Officer	2003
Mr. Rui Miguel Horta e Costa	43	Chief Financial Officer	2000
Mr. José Manuel Trindade Neves Adelino	50	Director	2003
Mr. Luis Fernando de Mira Amaral	58	Director	2004
Mr. José Manuel Gonçalves de Morais Cabral	57	Director	2003
Mr. Luis Filipe Rolim de Azevedo Coutinho	43	Director	2003
Mr. Jorge Manuel Oliveira Godinho	51	Director	2003
Mr. António Afonso de Pinto Galvão Lucas			
Mr. Arnaldo Pedro Figueirôa Navarro Machado	58	Director	2002
Mr. Vítor Ângelo Mendes da Costa Martins	57	Director	2003
Mr. Pedro Manuel Bastos Mendes Rezende	43	Director	2003
Mr. Paulo de Azevedo Pereira da Silva	43	Director	2003

*Mr. Francisco de la Fuente Sánchez* is Chairman of our board of directors and has been on our board of directors since January 1997. In addition, Mr. Francisco Sánchez is Chairman of the board of directors of ONI SGPS, member of the board of Hidrocantábrico and member of the Superior Council of Banco Comercial Português. Mr. Francisco Sánchez served as Chairman and CEO of EDP, S.A. between 2000 and 2003, Chairman of EDP Produção and EDPD between 2002 and 2003, and Chairman of EDP Energia and EDP Valor between 2001 and

124

2003. From 1997 to 1998, Mr. Francisco Sánchez was a member of the board of directors of EN, CENEL, LTE and SLE and between 1998 and 2001, he was Chairman of CERJ and EDP - Cogeração, Vice-Chairman of Bandeirante, and a member of the board of directors of EDP Internacional. Mr. Francisco Sánchez also served as member of the boards of directors of LTE and Hidrotejo from 1994 to 1996. He was General Manager of one of our distribution divisions from 1990 to 1994 and Central Commercial Manager of EDP from 1988 to 1989. He was assistant to our board of directors from 1987 to 1988. Mr. Francisco Sánchez holds a degree in electrotechnical engineering from Instituto Superior Técnico de Lisboa.

Mr. João Ramalho Talone was appointed our Chief Executive Officer in May 2003. In addition Mr. Talone is Chairman of the board of directors of EDP Produção and EDPD and a member of the board of directors of ONI SGPS and Hidrocantábrico. In April 2003, he was elected deputy-chairman of the board of directors of Lusotur. Until 2002, Mr. Talone served as Chairman and CEO of the Executive Board of Directors of Eureko (appointed in September 1999), member of the Board of Directors of BCP Banco Commercial Português, S.A. (appointed in 1991) and Chairman of Seguros & Pensões (appointed in 1995). In January 2003, by appointment of the Council of Ministers, he was charged with rethinking the corporate strategy of the national energy sector. Between December 2002 and January 2003, he headed the project to terminate IPE Instituto de Participações do Estado, a state owned company holding the Republic of Portugal s interests in several of its subsidiaries. Mr. Talone is a member of the Board of Directors of Association de Génève (international insurance forum), to which he was elected in June 1995. In 1988-89, he was a guest lecturer at the Universidade Nova de Lisboa in the International Business area. Mr. Talone holds a degree in civil engineering from Instituto Superior Técnico de Lisboa, an MBA from Universidade Nova de Lisboa in association with the Wharton School of Pennsylvania and has completed the Higher Management Course at the National Institute for Industrial Research and the Advanced Management Program at Harvard Business School.

Mr. Rui Miguel Horta e Costa was appointed to our board of directors in May 2000 and re-elected in May 2003. Mr. Horta e Costa is also a member of the boards of directors of Hidrocantábrico, GALP, EDPD, EDP Produção and ONI. Mr. Horta e Costa is also our chief financial officer. He served as Executive Director of UBS Warburg in London from 1995 to 2000, and from 1990 to 1995, he was a member of the board of directors of Grupo Jorge de Mello. Mr. Horta e Costa was Resident Vice-President of Citibank Portugal from 1989 to 1990, and from 1987 to 1989 he served in the positions of Director of Banco Finantia and assistant of the board of directors for the same bank. From 1986 to 1987, he was Account Manager for MDM Sociedade de Investimentos. Mr. Horta e Costa holds a degree in economics from Universidade Católica Portuguesa, as well as an MBA in management from the University of Minnesota.

Mr. José Manuel Trindade Neves Adelino was appointed to our board of directors in May 2003. He has been a full Professor of Finance at Universidade Nova de Lisboa since 1995. He is also a member of the National Education Council and of the board of the Deposit Insurance Fund, and he belongs to the strategic councils of Portugal Telecom and CTT-Correios de Portugal. He was a non-executive member of the board of Banco Português do Atlântico and has acted as a consultant to several companies and government organizations in his areas of expertise. Mr. Neves Adelino holds a degree in Finance from Universidade Técnica de Lisboa and a graduate degree in Business Administration (DBA) from the Kent State University, USA.

Mr. Luís Fernando Mira Amaral was appointed to our board of directors in 2004. He is presently CEO of Caixa Geral de Depósitos. From 1997 to 1998 he was a member of the European Union Competitiveness Advisory Board and prior to that he was Portuguese Minister of Industry and Energy from 1987 to 1995 and Portuguese Minister of Labor and Social Security from 1985 to 1987. Mr. Mira Amaral was also member of the board of directors of Cimpor and BPI and CEO of Banco de Fomento de Angola. Mr. Mira Amaral holds a degree in electrical engineering from Instituto Superior Técnico and a masters degree in economics from Universidade Nova de Lisboa. He also attended the Graduate School of Business Executive Program at Stanford University.

Mr. José Manuel Gonçalves de Morais Cabral was appointed to our board of directors in May 2003. He is also Director of Efacec Capital, SGPS, S.A. and José de Mello Participações II, SGPS, S.A., and Senior Manager of José de Mello Serviços, Lda. From 1995 to 1999, he served as Director and CEO of Lisnave, S.A. Previously, he was Director of IPE, S.A. between 1992 and 1994, and Director of Celbi, S.A. between 1993 and 1995. From 1989 to 1992, he served as Chairman of Air Atlantis, S.A., and between 1970 and 1989, he was Controller and CFO of METAL Portuguesa, S.A. Mr. Morais Cabral holds a degree in Economics from I.S.C.E.F., Lisbon.

#### **Table of Contents**

Mr. Luis Filipe Rolim de Azevedo Coutinho was appointed to our board of directors in May 2003. He is also Senior Adviser of the Holding of Grupo Abrantina, as well as Professor in Economics at Universidade Nova de Lisboa. Between 1984 and 2002, he served as Senior Advisor at José Bento Pedroso & Filhos, Lda., I.P.E., Grupo V.I/B.T.A., Grupo Abrantina, Bank of Portugal, Lisbon Municipality, Calouste Gulbenkian Foundation Portuguese and Finance Secretary of State. He was a member of the boards of directors of several companies of Abrantina Group and CFO of Valora Serviços de Apoio à Emissão Monetária. He holds a degree in Management from Universidade Católica Portuguesa and an MBA from Universidade Nova de Lisboa.

Mr. Jorge Manuel Oliveira Godinho was appointed to our board of directors in May 2003. From March 2001 to May 2003, Mr. Godinho was President of the Executive Committee at EDINFOR-Sistemas Informáticos, S.A., and Chairman at Ace-Holding, SGPS, S.A. Between 1998 and 2000 he was Adviser of the Board of Electricidade de Portugal, S.A., Executive Member of the Board of OPTEP and Vice-Chairman of the Board of Optimus. Between 1991 and 1998, Mr. Godinho was Chairman of the Board of Portucel SGPS, Portucel Industrial and Portucel Florestal. From 1985 to 1990, he served as Secretary of State for Fisheries. He was also chairman of the board of directors of Docapesca, deputy-chairman of the Portuguese Industrial Association and member of the Social Security Financial Management Institute, the National Scientific and Technological Research Board, the Forum for Competitiveness, Efacec Capital SGPS, S.A. and the Fund for the Internationalization of the Portuguese Economy. He was Assistant and Senior Lecturer at the Instituto Superior Técnico. Mr. Godinho holds a degree in Engineering from Instituto Superior Técnico and an MBA from Universidade Nova de Lisboa.

Mr. António Afonso de Pinto Galvão Lucas was appointed to our board of directors in 2004. He is presently Chairman of the board of directors of EPM - Sociedade Gestora de Participações Sociais, S.A. and of its subsidiaries Fábrica Cerâmica de Valadares S.A., Valadares España S.A. and CCS Serviços de Gestão Lda., companies operating in the ceramics sector. Also in this sector, he is Chairman of the board of directors of Secla. Previously, he was manager and director of the CUF Group and SAPEC Group. He was also director of CIP Portuguese Industry Confederation and is currently the President of APICER Portuguese Ceramics Association and member of the Superior/Consultive Councils of AEP Portuguese Entrepreneurship Association, COTEC Association for Inovation, Forum for Competitiveness and ERSE Energy Services Regulator. Mr. Galvão Lucas holds a degree in industrial-chemical engineering from Instituto Superior Técnico.

Mr. Arnaldo Pedro Figueirôa Navarro Machado was appointed to our board of directors in May 2002 and he is presently the Chief Executive Officer of EDPD - Energia. Mr. Navarro Machado served as Chief Executive Officer of Sociedade Central de Cervejas from 2000 to 2002. He acted as member of the board of directors of HLC - Engenharia de Gestão e Projectos, S.A. between 1998 and 2000. In the EDP Group he has served as Vice-Chairman of the board of directors of EDP, S.A. from 1992 to 1998, Chairman of the board of directors of MRH - Mudança e Recursos Humanos, S.A. in 1997 and 1998, member and Chairman of the board of directors of INTERNEL - Electricidade de Portugal Internacional, S.A. from 1992 to 1998 and of CPPE, S.A. between 1994 and 1997, member of the board of directors of CERJ from 1996 to 1998, of INVESTCO - Veículo de Investimento de Empreendimento and of Hidroeléctrica do Lajeado in Brazil during 1998, of OPTEP from 1997 to 1998, of Turbogás from 1995 to 1998 and of EDP, S.A. in 1991 and 1992. Prior to this, he has served as member of the Management Council of Sociedade Central de Cervejas from 1988 to 1991, as Chairman of the board of directors of Sociedade da Água de Luso, S.A. during January 1990 and as member of the board of directors of Setenave from 1984 to 1988. Mr. Navarro Machado holds a degree in Naval Engineering from the University of the Stracholyde, Glasgow.

Mr. Vítor Ângelo Mendes da Costa Martins was appointed to our board of directors in May 2003. Mr. Vítor Martins is also Senior Adviser of CITIGROUP, a position that he has held since 1997, as well as a member of the Management Committee of the IEEI - Instituto de Estudos Estratégicos Internacionais, member of the Strategic Board of the Notre Europe Jacques Delors Association and member of the Advisory Board of the Forum de Administradores de Empresas. From 1999 to 2002, he was Chairman of Jazztel Portugal, and between 1996 and 2002, he was a member of the Advisory Committee of Public Markets of the European Committee. Previously, he served as Secretary of State for Europeans Affairs from 1985 to 1995. Mr. Vítor Martins holds a degree in Management from ISEG, Lisbon.

Mr. Pedro Manuel Bastos Mendes Rezende was appointed to our board of directors in May 2003. In addition to serving as a member of the board of directors of EDP, he is also serving as President of the Executive Committee of

EDP Produção and Chairman of its subsidiaries, as well as a board member of EDP Energia, EDPD and Hidrocantábrico. Since 1990, Mr. Pedro Bastos Rezende has been a member of The Boston Consulting Group, where he served in the Madrid office until 1995 and in the Lisbon office thereafter. He was elected Partner and Director in May 1997 and has co-led the Lisbon office since then. He was also the local leader of the Energy Practice Area. From 1985 to 1989, he was Head of the Testing Department for VALEO Clutch Division in Spain. Mr. Pedro Bastos Rezende holds a degree in Industrial Mechanical Engineering from ICAI Madrid, Spain and an MBA from Insead Fontainebleau, France.

Mr. Paulo de Azevedo Pereira da Silva was appointed to our board of directors in May 2003. He is also General Manager of BCP Banco Comercial Português, S.A., Director of LEASEFACTOR S.G.P.S., Chairman of the Board of Directors of BCP LEASING and Director of CREDIBANCO Banco de Crédito Pessoal. Mr. Paulo Azevedo holds a degree in Economics from the Faculdade de Economia do Porto.

#### SENIOR MANAGEMENT

We have twenty-five Executive Officers who are in charge of various business and administrative departments at the holding company level of EDP and report directly to the board of directors. Selected information is set forth below for the executive officers in charge of a principal business function.

		Year of	
Name	Age	Appointment	Position
<del></del>			
Mr. António Pedro Alfaia de Carvalho	58	2004	General Secretary
Mr. António José Marrachinho Soares	43	1998	Alternate General Secretary
Mr. António José Silva Coutinho	35	2003	Head of Energy Planning Office
Mr. António Manuel Barreto Pita de Abreu	54	2003	General Manager
Mr. António Manuel Neves de Carvalho	54	2000	Head of Environment Office
Mr. António Maria Ramos da Silva Vidigal	54	2003	Head of Risk Management Office
Mr. António Martins da Costa	49	2003	General Manager
Mr. António Pacheco de Castro	45	1994	Head of Iberian Articulation Office
Mr. António Pedro Alfaia de Carvalho	58	1998	Head of Legal Office
Mr. Carlos Alves Pereira	38	2003	Head of Business Analysis Office
Mr. Eugénio André Purificação Carvalho	50	2001	Head of Human Resources Office
Mr. Horácio Manuel Piriquito Casimiro	43	2003	Head of Communication and Image Office
Mr. João Manuel Manso Neto	46	2003	General Manager
Mr. Joaquim Armando Ferreira Silva Filipe	55	2003	General Manager
Mr. Joaquim Pedro de Macedo Santos	50	2003	Head of Brazil Articulation Office
Mr. Jorge Manuel Ribeirinho Soares Machado	60	2003	General Manager
Mr. José Manuel Ferrari Bigares Careto	41	2003	Head of Gas Project
Mr. José Avelino Abreu Aguiar	56	2000	Head of Information Systems Office
Ms. Magda Abdool Magid Vakil	41	1998	Head of Financial Management Office
Ms. Maria Joana Mano Pinto Simões	43	2000	Head of Regulation and Tariff Office
Mr. Miguel Ribeiro Ferreira	36	2003	Head of Planning and Control, Consolidation
			and Tax Office
Ms. Paula Pinto da Fonseca	43	2003	Head of Quality Office
Mr. Pedro Manuel Carreto Pires João	34	2000	Head of Investor Relations Office
Mr. Stephan Godinho Lopes Morais	30	2003	Chief of Staff, Cabinet of the CEO
Mr. Vitor Manuel Silva Leitão	50	2000	Head of Internal Audit Office
Mr. Vasco Manuel de Castro Coucello	52	2003	General Manager

*Mr. António Pedro Alfaia de Carvalho* was appointed head of our legal office in May 1998, where he has been a legal counselor since 1979. He also served as our company secretary between July 1997 to July 2000, and again since February 2004 to the present. Mr. de Carvalho holds a law degree from Faculdade de Direito de Lisboa.

*Mr. António José Marrachinho Soares* has been our alternate company secretary since April 1998. Between 1994 and 2000, Mr. Soares was assistant to the board of directors and the head of the secretariat of the board. Mr. Soares holds a law degree from Faculdade de Direito de Lisboa and post-graduate degree in securities law, as

127

#### **Table of Contents**

well as a post-graduate degree in public regulation from Universidade de Coimbra CEDIPRE, Centro de Estudos de Direito Público e Regulação.

*Mr. António José da Silva Coutinho* was appointed head of energy planning in November 2003. From 1997 to 2003, he has worked as a business consultant for The Boston Consulting Group, focused mainly on the Energy Practice Area. Before joining BCG, he worked for four years in a civil engineering firm as a structural designer. Mr. Coutinho holds a BSc in civil engineering and MSc in Operational Research from Lisbon s Instituto Superior Técnico.

Mr. António Manuel Barreto Pita de Abreu is currently General Manager of EDP, Chairman of EDINFOR, ACE and MRH, Vice-President of Turbogás, S.A. and Member of the Board of Directors of Electricidade dos Açores, S.A. He was Member of the Board of Directors of EDP (2000-2003), Chairman of EDP Produção and CPPE, Member of the Board of Directors of EDINFOR and EDPD, Chairman of TER, EDP Cogeração and TERGEN, Member of the Board of Directors of 093x (2000-2002), Chairman of REN (2000), Member of the Board of Directors of Sãvida (2000-2001) and MRH (2000-2001), Chairman of Onitelecom (1998-2000), Oni Açores, Onisolutions (1999-2000) and Edinet (1997-1999), Member of the Board of Directors of Optep (1997-1998), Executive Director of REN (1994-1997), Director of DORE-Direcção Operacional da Rede Eléctrica (1991-1994) and had several roles in EDP s divisions in charge of the Portuguese National Grid (1977-1991).

*Mr. António Manuel Neves de Carvalho* was appointed head of our environmental office in September 2000. He also served as REN s director responsible for the systems and equipment department from 1994 to 2000 and as an assistant executive officer in the systems department from 1991 to 1994. Mr. Carvalho holds a degree in telecommunications and electronics engineering from Instituto Superior Técnico de Lisboa.

Mr. António Maria Ramos da Silva Vidigal was appointed Chief Risk Officer in June 2003. Previously, he served as CEO of OniWay, a 3G start-up mobile operator, after having participated as Executive Board Member of Optimus Telecomunicações from the company launch to June 2000. Mr. Vidigal joined the EDP Group in 1976. He was Executive Board Member of EDP, S.A. from 1992 to 1997, and acted as Chairman, CEO or Board Member in subsidiaries encompassing IT, Power Distribution, Power Plant Engineering, Hidro Power Plant Operation and Telecommunications. Mr. Vidigal holds a degree in Power Systems Engineering from Instituto Superior Técnico de Lisboa, and completed complementary studies in Computer Science at Universidade Nova de Lisboa and in Management at AESE in Lisbon.

Mr. António Martins da Costa is currently the CEO of EDP Brazil and Chairman of the Board of Directors of the respective controlled companies of energy generation, distribution and trading. Having started his professional career in 1976 as a lecturer at the University, he joined EDP in 1981 and later, in 1989, moved to the financial sector, assuming the position of General Manager and Executive Board Member of insurance companies, pension funds and asset management operations of Banco Comercial Português (Portugal) and Eureko BC (Holland). Since 1999, he was also the vice-president of the Management Board of PZU (Poland). He holds a degree in Civil Engineering and an MBA from the University of Oporto, and has completed executive education studies at INSEAD (Fontainebleau), AESE (University of Navarra) and Wharton School (Philadelphia, USA).

*Mr. António Pacheco de Castro* was appointed General Manager in June 2003. He has served as head of strategic planning since September 2000. Between 1997 and 2000, Mr. Castro served as the executive officer responsible for our investor relations office. Mr. Castro also served as an assistant manager of our strategic planning office from 1995 to 1997. Mr. Castro holds a management degree and an MBA from Lisbon s Instituto Superior de Economia.

Mr. Carlos Alves Pereira was appointed head of the business analysis office in October 2003, after serving as Assistant to the Board of Directors (2002-2003). He served as head of Corporate Finance and Project Finance for Portugal in Argentaria Banca de Inversiones (1996-2002). Prior to that, he worked for 4 years in Jorge de Mello s Group where he served as Associate Director for the Financial Area of the holding company

Nutrinveste (1994- 1996) and as Senior Analyst of Corporate Finance in Incofina. From 1988 to 1990, he was a Financial Analyst at the fund manager company Gestifundo. Mr. Pereira holds a management degree from Lisbon s Universidade Católica Portuguesa and an MBA from Insead.

128

#### **Table of Contents**

*Mr. Eugénio André Purificação Carvalho* was appointed head of our human resources office in July 2001. He was also head of CPPE s human resources office between 1998 and 2001. He served as assistant executive officer of REN s commercial department between 1993 and 1998, and he also served as an electrical engineer in power control systems from 1979 to 1993. Mr. Carvalho holds a degree in telecommunications and electronics engineering from Instituto Superior Técnico de Lisboa, and a post graduate degree in Industrial Management from Lisbon s Instituto Superior de Ciências do Trabalho e da Empresa.

*Mr. João Manuel Manso Neto* joined EDP in July 2003 as General Manager. He is a member of the Board of EDP Produção, being responsible for Trading. Before joining EDP, he worked in banking since 1981, mainly in what is now the BCP Group (in Portugal and in Poland), where he was General Manager in charge of several areas, including Treasury and Capital Market and Large Corporate Clients. Mr. Neto holds a degree in economics from Instituto Superior de Economia de Lisboa, a post graduate degree in European economy from Universidade Católica de Lisboa and a masters degree in economics from Universidade Nova de Lisboa. Until 1993, he also taught economics in Universidade Nova de Lisboa.

*Mr. Joaquim Armando Ferreira Silva Filipe* was appointed General Manager of EDP in June 2003. He is also CEO of Bandeirante Energia since January 2002 and a member of the Boards of Directors of EDP Brazil, Bandeirante Energia, Escelsa, Enersul and Iven. He holds a degree in electrical engineering from the University of Oporto.

Mr. Horácio Manuel Piriquito Casimiro was appointed head of our communication and image office in May 2003. He served as head of corporate communication at GALP between 2001 and 2003. From 1997 to 2001 he was a member of the board of five companies in the Media Capital Group. From 1995 to 2001 he held the senior management position at three publications (Semanário Económico, Valor and Fortunas & Negócios). From 1996 to 2000, he was a member of the board of Rádio Comercial and Rádio Nostalgia. From 1990 to 1991 he was the assistant to the Minister of Finance and the Minister of Agriculture. Mr. Piriquito holds a management degree from Universidade Livre de Lisboa.

*Mr. Joaquim Pedro de Macedo Santos* was appointed head of the Brazil link office in July 2003 and, since December 2003, he is member of the Board of Directors of Enernova. From 2001 to 2003, he was head of strategic planning in EDINFOR and member of the Board of Directors of subsidiaries Copidata and Mecaresopre. From 1998 to 2001, he was responsible for strategic planning and control in OPTEP and, prior to that, he was head of department in ERSE (1996-1998), head of EDP s strategic planning department (1994-1996) and, from 1980 to 1994, he had other several experiences in EDP. From 1976 to 1980, he was an electrical and instrumentation specialist in Quimigal. Mr. Santos holds a degree in electrical engineering from Lisbon s Instituto Superior Técnico and has an MBA from Universidade Nova de Lisboa.

*Mr. Jorge Manuel Ribeirinho Soares Machado* was appointed General Manager in June 2003. He is Executive Vice-President of EDP Produção, S.A. since July 2001, CEO of CPPE, S.A. since January 2004 and Board Member of EDP Produção EM, S.A. since July 2002. He has been Board Member of CPPE since January 1995 and Chairman of Enernova, S.A. between 1993 and 1995. From 1987 to 1994 he has been Central Planning Manager of EDP. Mr. Machado holds a civil engineering degree from Faculdade de Engenharia da Universidade do Porto and has been professor of the same faculty between 1971 and 1984.

Mr. José Manuel Ferrari Bigares Careto was appointed coordinator of the gas project in May 2003. Prior to that he served as Executive Board Member of OniWay. He also served in the Sonae Group, from 1998 to 1999, as head of the Customers Affairs and Regulatory Affairs Departments of Optimus and, from 1999 to 2000, as Executive Board Member of Novis. From 1989 to 1996, he served as Head of the Studies and Planning Department of ICP Instituto das Comunicações de Portugal and from 1986 to 1989 as responsible of the planning and statistics area of CTT- Correios de Portugal. Mr. Ferrari Careto holds an economics degree from Universidade Nova de Lisboa.

*Mr. José Avelino Abreu Aguiar* was appointed head of our information systems office in July 2000. He has also served as an executive officer at EDINFOR since 1991. Mr. Aguiar holds a degree in electrotechnical engineering from Faculdade de Engenharia at Oporto University and a management degree (PADE) at AESE.

129

#### **Table of Contents**

Ms. Magda Abdool Magid Vakil was appointed head of our financial management office in July 1998. Between 1994 and 1997, she served as a loan officer in the European Investment Bank in Luxembourg and between 1988 and 1994 as a senior manager of corporate banking in the Royal Bank of Canada in London. Ms. Vakil holds a degree in economics from the University of Kent, Canterbury.

*Ms. Maria Joana Mano Pinto Simões* was appointed head of our regulation and tariffs office in July 2000. She also served as an assistant director of our strategic planning department from 1998 to 2000. Ms. Simões holds a degree in electrotechnical engineering from Instituto Superior Técnico de Lisboa and has an MBA from Universidade Nova de Lisboa.

*Mr. Miguel Ribeiro Ferreira* was appointed head of our planning and control, consolidation and tax office in August 2003. From August 2001 to July 2003 he was head of treasury, consolidation, planning and control, accounting and tax issues of Novabase Group. From April 1993 to July 2001 he was responsible for BCP Group s consolidation and financial reporting. From September 1991 to March 1993, he served as an Audit Junior Staff at Price Waterhouse Audit Department. Mr. Ribeiro Ferreira holds a management degree from Lisbon s Instituto Superior de Gestão and post-graduate degree in advanced corporate finance from Universidade Católica Portuguesa, Lisbon.

Ms. Ana Paula Pinto Fonseca Morais was appointed as head of our quality office in November 2003. Between July 2000 and June 2003 she was the head of our public relations office. From 1995 through to 1999, she served as the Public Relations Officer for the Portuguese Health Minister and between 1990 and 1995 she held the position of Executive Officer for Marketing and Communication in IAPMEI (Institute of Medium and Small sized companies). Ms. Fonseca holds a degree in sociology from Universidade Nova de Lisboa.

*Mr. Pedro Manuel Carreto Pires João* was appointed head of our investor relations office in June 2000. From 1999 to 2000, he served as an equity sales manager at BCI in Oporto. He also served as an associate director at Banco Bozano Simonsen in London between 1997 and 1999 and as an equity research associate at Goldman Sachs International in London between 1996 and 1997. Mr. Pires holds a management degree from Lisbon s Instituto Superior de Gestão and an MBA from the London Business School.

*Mr. Stephan Godinho Lopes Morais* was appointed Chief of Staff for the CEO in May 2003. During 2002 and 2003 he was a Consultant for the Portuguese government for the Restructuring of the State Holding Company IPE, and for the Reorganization of the National Energy Sector. In 1999 and 2000 he was a Senior Consultant with Arthur Andersen Business Consulting in London. Between 1996 and 1999 he was a Consultant with Halcrow Management Sciences London, working on utility privatizations. Mr. Morais holds a degree in civil engineering from Instituto Superior Técnico, Lisbon and an MBA from Harvard Business School.

*Mr. Vitor Manuel Silva Leitão* is currently head of our internal audit office and was head of our information systems office between 1995 and 2000. He was also an assistant manager in the accounting department from 1990 to 1995. Mr. Leitão holds a degree in mechanical and production engineering from Instituto Superior Técnico de Lisboa and an MBA from Universidade Nova, Lisbon.

Mr. Vasco Coucello was appointed General Manager in June 2003. He has served as head of the unit responsible for the supply to corporate clients in the liberalized market since the beginning of 2000 (EDP Energia). During the 1990s he served as General Manager for Energy in the Portuguese Administration. In the early 1990s he was head of the strategic planning and management information department within the planning directorate of EDP. Internationally, he served as Vice-President of the European Energy Charter Bureau and head of the Standing Group on the Oil Market in the International Energy Agency. Mr. Coucello holds a civil engineering degree from Instituto Superior Técnico and an MBA from Universidade Nova, Lisbon.

# Edgar Filing: EDP ELECTRICIDADE DE PORTUGAL SA - Form 20-F COMPENSATION OF DIRECTORS AND SENIOR MANAGEMENT

Aggregate compensation paid in 2003 by us to our directors and executive officers was approximately 3.7 million and 10.8 million, respectively. Our 2003 Portuguese annual report to shareholders includes, for the first time, individual compensation for the chairman of our board of directors and for our chief executive officer.

130

The amounts of individual compensation disclosed for 2003 relate to the period from May 22, 2003, the date of our 2003 general meeting of shareholders, to December 31, 2003. During this period, we paid 357,995 to Mr. Francisco Sánchez, Chairman of our board of directors, and 368,464 to Mr. João Talone, our Chief Executive Officer and Chairman of the executive committee of our board of directors.

#### SHARE OWNERSHIP

As of December 31, 2003, the directors and executive officers listed in Item 6 as a group owned less than 1% of our outstanding ordinary shares (not including ordinary shares held by any entity with which any of the directors or executive officers are affiliated).

	Number of
Members of the Board of Directors	Shares*
Mr. Francisco de la Fuente Sánchez	10,373
Mr. João Ramalho Talone	1,905
Mr. Rui Miguel de Oliveira Horta e Costa	3,762
Mr. José Manuel Trindade Neves Adelino	895
Mr. Luis Fernando de Mira Amaral	3,636
Mr. José Manuel Gonçalves de Morais Cabral	715
Mr. Luís Filipe Rolim de Azevedo Coutinho	0
Mr. Jorge Manuel Oliveira Godinho	30,393
Mr. António Afonso de Pinto Galvão Lucas	0
Mr. Arnaldo Pedro Figueirôa Navarro Machado	9,680
Mr. Vítor Ângelo Mendes da Costa Martins	767
Mr. Pedro Manuel Bastos Mendes Rezende	0
Mr. Paulo Azevedo Pereira da Silva	5,986

<sup>\*</sup> Number of Shares reflects aggregate shares held by Directors and the Directors family members.

On July 28, 2003, we acquired 311,095 treasury shares to grant as annual performance bonuses to our management team.

The directors and executive officers listed in Item 6 have also been granted an aggregate of 2,286,250 stock options under our stock option plans. We have adopted two stock options plans:

A plan for members of the board of directors, initially comprising a total of 1,750,000 ordinary shares, which were increased to 2,450,000 ordinary shares at the general shareholders meeting on May 10, 2000. This plan is managed by disinterested persons who are not employees of EDP or its subsidiaries.

A plan for members of the boards of directors of our operating companies and senior officers of EDP and its subsidiaries comprising a total of 16,250,000 ordinary shares. Awards of options under this plan are determined in the sole discretion of the board of directors of EDP.

Under both plans, the exercise price of each option equals the market price of our stock on the date of grant and an option s maximum term is 5 years. A summary of the status of our two fixed stock option plans as of December 31, 2002 and 2003, and changes during the years then ended

on those dates is presented below:

	Shares available for grant	Shares available for grant		
	under 1999 option plans	Option activity	exercise price	
Balance December 31, 2001	16,413,750			
Options forfeited				
Options granted				
Balance December 31, 2002	16,413,750	2,286,250	3.43	
Options forfeited <sup>(1)</sup>		(353,992)		
Options granted <sup>(2)</sup>	(980,000)	490,000		
Balance December 31, 2003	15,433,750	2,422,258	3.36	

131

#### **Table of Contents**

The following table summarizes information about stock options outstanding and exercisable as of December 31, 2003.

#### Weighted average

Options outstanding	Weighted average exercise price	remaining contractual life	Options exercisable
2,422,258	3.36	1.3 years	0

#### **EMPLOYEES**

As of December 31, 2003, we had 17,618 employees in active service, of which approximately 439 held senior managerial positions, taking into account employees of EDP in Portugal in addition to employees of EDINFOR, EDP Brazil and Hidrocantábrico. In recent years, we have pursued a policy in our core electricity business of staff reductions and workforce rationalization, which has resulted in a steady reduction in permanent staff levels. The table below shows our employment levels at the dates indicated.

	December 31,				
1999	2000	2001	2002	2003	
13,550	12,864	11,709	12,445	17,261	
333	402	362	388	357	
13,883	13,266	12,071	12,833	17,618	

We experienced 4.9% absenteeism in 2003, compared with 6.1% absenteeism in 2002 and 6.2% absenteeism in 2001.

The following table sets forth our employees as of December 31, 2003:

	EDP Portugal	EDINFOR	ONI	EDP Brazil	Hidrocantábrico	EDP Group
B1 - 11 - 1	<u> </u>			2.514	(50	10.520
Distribution	6,334			3,514	672	10,520
Generation	1,983			139	471	2,593
EDP, S.A.	311					311
Other	870	1,615	1,178	105	426	4,194
Total	9,498	1,615	1,178	3,758	1,569	17,618

<sup>(1)</sup> Option forfeited includes options not exercised within the required period and option forfeited by departing plan participants.

<sup>(2)</sup> The number of options to be granted for 2004 has not yet been determined.

Approximately 59.9% of our employees are members of a union. Our non-management employees in Portugal are represented by 30 unions, of which six represent the majority of employees. Most of the unions are members of one of the two principal confederations in Portugal: CGTP-Intersindical and UGT. Our non-management employees in Spain are represented by five unions and our non-management employees in Brazil are represented by five unions. The unions assume responsibility for annually negotiating salary levels, negotiating the collective bargaining agreements and ensuring that the collective bargaining agreements are correctly applied. In May 2000, we reached agreement with all of the unions representing our employees in Portugal on a new collective bargaining agreement which provides for, among other things, higher entry level compensation across professional categories and greater opportunities for seniority-related compensation increases within individual professional categories. A related agreement provides for a 4.0% salary increase for 2001 and a 3.5% increase for 2002 and a 2.8% increase for 2003. Future increases will be negotiated on an annual basis. The weighted average salary increase in 2003 for employees in our group companies, including EDINFOR, ONI, EDP Brazil and Hidrocantábrico, was 4.6%.

From 1988 through 2003, we have experienced twelve strikes, four of which lasted only 24 hours each, and two of which lasted 48 hours each. Six of the seven strikes concerned salary negotiations, our privatization or our restructuring.

132

#### **Table of Contents**

In 2001, there was one strike concerning employee s rights, salaries and the maintenance of the public social security system. The strike involved a total of 35 workers and 140 hours of strike time (number of persons per strike multiplied by the number of hours of each strike).

In 2002, there were 3 strikes, concerning employee s rights, salary negotiations, the maintenance of the National Wealth Service and the Public Social Security system, protests against new labor laws approval and against installation closing. One of these strikes was a national strike and in all there were 2,639 workers involved and 25,530 hours of strike time (number of persons per strike multiplied by the number of hours of each strike).

In 2003, there were two strikes concerning salary negotiations, new labor laws and the defense of workers rights recognized in the Collective Work Agreement. These strikes involved 528 workers and 3,526 hours of strike time (number of persons per strike multiplied by the number of hours of each strike).

In 2003, there were no strikes by our Spanish or Brazilian employees.

#### EMPLOYEE BENEFITS

Our employees are entitled to participate in a profit sharing program. In 2003, approximately 25.1 million was distributed to our labor force (excluding EDINFOR and ONI businesses) as profit sharing. We maintain defined benefit pension plans for all employees of the companies that have subscribed to the Collective Labor Agreement in Portugal and Brazil. These pension plans are supplemental to the pension provided to retirees by the social security systems. As of December 31, 2003, the value of the underlying pension funds totaled 816.5 million, and the pension expense in 2003 was 72.2 million. For further information about our pension and benefit plans, see Item 5. Operating and Financial Review and Prospects Pensions and benefits and notes 2(o), 18, and 31 to our consolidated financial statements. Our directors and senior officers are also eligible for stock option plans, described in Share Ownership.

Our employees are eligible to participate in a complementary health plan that supplements benefits from the National Health Service. Currently, the health plan covers approximately 100% of our people among the existing labor force, retired people, pensioners and relatives. In addition, employees receive personal accident insurance that covers death and invalidity, as well as a death subsidy complement.

#### Item 7. Major Shareholders and Related Party Transactions

#### MAJOR SHAREHOLDERS

The Portuguese government, directly or through PARPUBLICA Participações Públicas, S.G.P.S., S.A., (formally known as PARTEST) a corporation wholly-owned by the Portuguese government, which was formed in 1991 for the purposes of holding the Republic s interest in a number of enterprises in various industries, at April 29, 2004 owned approximately 26.1% of our outstanding ordinary shares. Through Caixa Geral de Depósitos, a state-owned bank, the Portuguese government owns an additional 4.84% of our ordinary shares. The Portuguese government s ownership of EDP ordinary shares declined from approximately 70% in 1997 to the current level as a result of the offering of our ordinary shares in successive stages of our privatization.

The following table sets forth information concerning the ownership of our ordinary shares as of April 29, 2004, by the Portuguese government and by our officers and directors as a group (not including ordinary shares held by any entity with which any such officers or directors are affiliated). Other than as set out in the following table, we are not aware of any shareholder owning more than 5.0% of our ordinary shares.

	Number of Ordinary	Percentage of Outstanding
Name of owner	Shares owned	Ordinary Shares
Republic of Portugal	783,074,076	26.1%
Banco Comercial Português	151,635,713	5.05%
All directors and executive officers as a group	Approximately 230,000	<1%

#### **Table of Contents**

In addition to the shareholders listed above and Caixa Geral de Depósitos, which owns 145,187,830, or approximately 4.84%, of our ordinary shares, other significant EDP shareholders include Iberdrola, which in May 2002 announced that it had acquired additional ordinary shares and as of April 29, 2004 owns 150,000,000, or 5%, of our ordinary shares and Brisa, which indirectly owns 60,002,297, or approximately 2%, of our ordinary shares.

As of April 29, 2004, approximately 0.05% of the ordinary shares were represented by ADSs that were held by three holders of record, including The Depositary Trust Company. The number of ADSs outstanding was 1,498,120 at April 29, 2004.

#### RELATED PARTY TRANSACTIONS

Mr. Jardim Gonçalves, a director of EDP until May 2003, is presently the Chairman of BCP s board of directors. Following the departure of Mr. Jardim Gonçalves, Mr. Paulo de Azevedo Pereira da Silva, the general manager of BCP and a director of various companies of the BCP group, became a member of our board of directors. In March 2000, we and BCP entered into a strategic alliance, pursuant to which Mr. Gonçalves was elected to our board of directors as a non-executive director, we have acquired 4.25% of BCP s outstanding shares and BCP has acquired approximately 5% of our outstanding shares. In March 2003, we subscribed to a share capital increase of BCP, bringing our stake to 4.36%. In the ordinary course of business, we and BCP enter into customary commercial banking transactions, such as deposits and loans.

Mr. Luis Fernando de Mira Amaral, a director of EDP following the departure of Mr. António de Sousa, is presently the Chairman of the executive committee of Caixa Geral de Depósitos board of directors. Caixa Geral de Depósitos owns 4.84% of our ordinary shares. In the ordinary course of business, we and CGD enter into customary commercial banking transactions, such as deposits and loans.

On May 9, 2001, we entered into an agreement for a strategic alliance in the telecommunications sector with BCP, GALP and Brisa. Brisa became a shareholder of ONI in exchange for its 100% stake in Brisatel, which owned 4% of ONI Way. As a result of the agreement, EDP holds 56% of the share capital of ONI and Brisa holds 17%, while BCP and GALP hold the remaining 22.8% and 4.2%, respectively. Within the context of the strategic alliance, Brisa proposed two members of ONI s board of directors and they were subsequently elected by the shareholders of ONI. Mr. José Manuel Gonçalves de Morais Cabral, a director of EDP, is a director of various companies within the José de Mello Group, which owns a significant interest in Brisa. Brisa owns approximately 2% of our ordinary shares.

#### INTERESTS OF EXPERTS AND COUNSEL

Not applicable.

Item 8. Financial Information

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Please refer to Item 18. Financial Statements and pages F-1 through F-70 of this annual report.

134

#### OTHER FINANCIAL INFORMATION

#### LEGAL PROCEEDINGS

We experience a number of claims and legal and arbitral proceedings incidental to the normal conduct of our business. Management does not believe that liabilities related to such claims and proceedings are likely to be, individually or in the aggregate, material to our consolidated financial condition.

#### DIVIDENDS AND DIVIDEND POLICY

We have declared dividends each year since 1991, when we became a corporation. The following table shows our dividends per share based on 3,000,000,000 ordinary shares outstanding in the years indicated:

	1999	2000	2001	2002	2003
					_
Dividends per ordinary share (in euro) <sup>(1)</sup>	0.14	0.14	0.11	0.09	0.09
Dividends per ordinary share (in U.S. dollars) <sup>(2)</sup>	0.13	0.12	0.10	0.11	0.11

<sup>(1)</sup> For 1999 and 2000, escudos are translated into euro at the fixed rate of exchange established at the commencement of the third stage of European Monetary Union on January 1, 1999 by the European Council of Ministers between the euro and escudo of PTE 200.482 = 1.00.

<sup>(2)</sup> Translated at the prevailing rate of exchange at the date of payment, which for 2003 was \$ 1.1975 = 1.00.