Front Cover and Missing Pages

The Annual Report for 2001 was copied and scanned. A few pages were skipped during the scanning process. These missing pages are included here:

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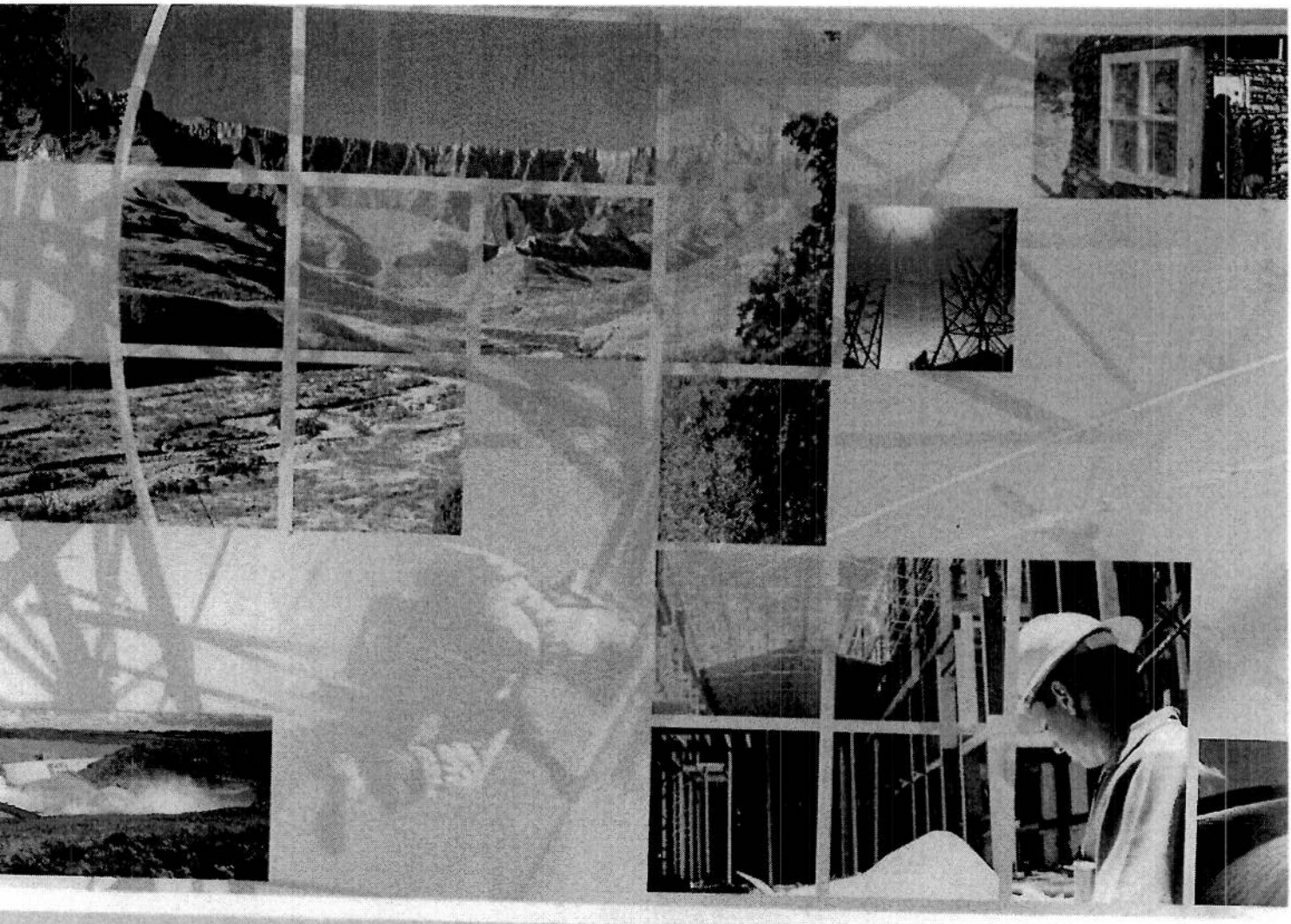
Eskom

Embracing sustainable development

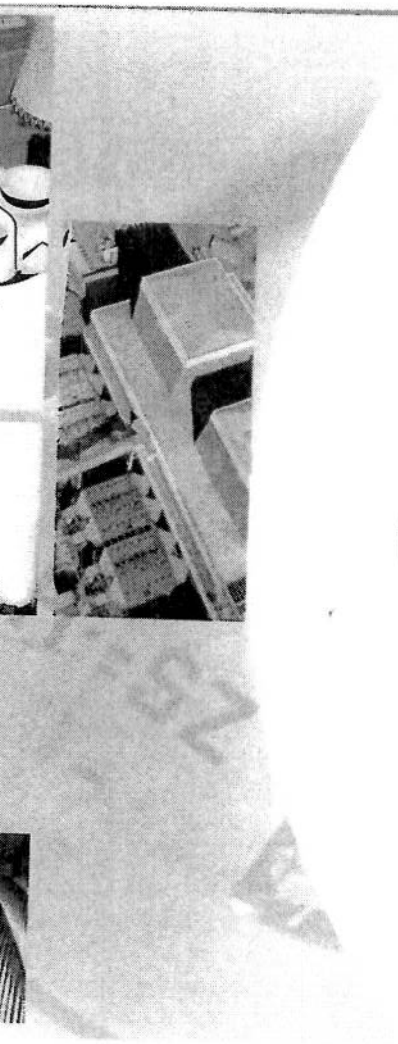
Annual Report
2001



nleashing Africa's energy

kom received the 2001 Power Company of the Year title at the Global Energy ards ceremony in New York. The award was presented in recognition of Eskom's ccess in "providing the world's lowest-cost electricity while at the same time making perior technological innovations, increasing transmission system reliability and veloping economical, efficient and safe methods for combustion of low-grade coal". lear demonstration of what can happen when Africa unleashes its energy.

ntents



Eskom

Key drivers of direction

Strategic intent

Eskom will be the pre-eminent African energy and related services business, of global stature.

Mission

Eskom will grow shareholder value by exceeding its local and international customers' needs for energy and related services.

Strategy

Eskom is positioned as a competitive African energy and related services business

- vigorously promoting economic growth in South Africa, its region and the rest of Africa,
- expanding globally, and
- supporting social and economic objectives in our markets.

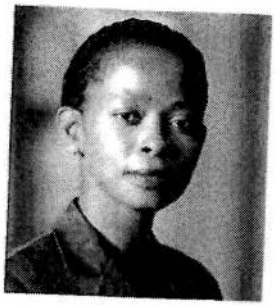
Human Resources

Mpho Letlape (43)
Executive Director

BSc (Computer Science and Psychology) (Fort Hare)
Joined Eskom in 2000
Appointed to the Management Board in 2000

Human resources operations
People development and transformation
Remuneration and benefits
Employee relations
Health and wellness

Transmission



Dolly Mokgatle (45)
Executive Director

BProc (UNIN), LLB (Wits), H Dip Tax Law (Wits)
Joined Eskom in 1991
Appointed to the Management Board in 1996

Customer service
Maintenance, refurbishment and expansion of high-voltage electricity network
System operation and control of transmission network
Transmission network capability
Electricity trading
Market operations
SAPP operations, planning and management interface

Distribution

Jacob Maroga (42)
Executive Director

BSc (Elec) (Wits)
Joined Eskom in 1995
Appointed to the Management Board in 2000

Customer service
Distribution engineering and technology
Electrification
Sales

Resources and Strategy

Dr Steve Lennon (43)
Executive Director

BSc (Chemistry) (Natal), MSc (Eng), PhD (Wits)
Joined Eskom in 1983
Appointed to the Management Board in 2000

Long-term strategic planning
Supply- and demand-side planning
Research and development
Environmental management
Information strategy
Technical audit

The productivity results for the year were as follows:

	Budget 2001 Rm	Actual 2001 Rm	Actual 2000 Rm
Productivity – resource view	179	(21)	20
Primary energy	(46)	26	30
Operating manpower	142	300	302
Other operating expenses	12	(400)	(366
Capital	71	53	54
Productivity – business view	179	(21)	20
Core business	66	(23)	45
Electrification and takeovers	113	–	(45)
Other	–	2	20
Productivity – capacity and efficiency view	179	(21)	20
Capacity utilisation	322	253	339
Efficiency	(143)	(274)	(319)

The budgeted and actual information exclude the impact of voluntary employee separation costs.

During 2001 Eskom recorded a bottom-line productivity improvement of 0,5% (2000: 2,1%) when compared to 2000. It recorded productivit improvements in primary energy, operating manpower and capital. In financial terms, the sum of the improvements in these resource categorie saved the business R379 million (2000: R386 million). Other operating resources recorded negative productivity of R400 million mainly as result of increased maintenance-related activity. The deterioration against budget was as a result of actual sales volumes that were less thai budgeted. Operating employee productivity improved during the year resulting in a positive contribution of R300 million mainly because of th reduction in employee numbers as well as the benefits of the past investment in staff training and development.

The productivity results have been reviewed by the National Productivity Institute (NPI). It included an examination of the structure of th analysis, the appropriateness of quantity and price drivers used, the accuracy of the model and the derivation and presentation of the results In the opinion of the NPI, the productivity statement fairly represents the overall performance of Eskom for 2001 when compared with 2000

Eskom Enterprises

Eskom Enterprises recorded negative productivity of 0,8% or R18 million. The group is in a growth phase with a number of investments that should produce returns in the future.

1.1.4 Maintain financial independence

Except for the funding received from external sources for the electrification of homes and schools as discussed in this report, all other requirements for the funding of Eskom's activities were obtained from South African and overseas debt and from Eskom's own resources

1.1.5 Integrated risk management

Eskom recognised the need for a co-ordinated approach to the management of risk within the Eskom group. Integrated risk management is a process whereby known and possible risks and opportunities to which the organisation may be exposed are identified and evaluated. Significant risks are controlled and/or transferred. Eskom is in the initial stages of integrating risk management into all management processes and will complete implementation during 2002.

Eskom and its subsidiaries have appointed risk co-ordinators to drive risk management within day-to-day business activities. As part of the integrated risk management process major risks are identified and the top ten are forwarded to the Integrated Risk Management Committee.

Eskom

for the year ended 31 December

cal cost accounting practices reflect financial results of prices and costs in effect at the time the underlying transactions occurred. This ch does not account for the fact that the purchasing power of money diminishes during periods of inflation. In an attempt to eliminate ects of changing prices on assets and income, and to ensure that funds needed to maintain the operating capacity are preserved, al costs have been restated by the preparation of current value financial statements based on IAS 15, Information reflecting the effect ging prices.

cting the impact of inflation, Eskom has adjusted the most significant of these effects by revaluing the property, plant and equipment rging the related additional depreciation to the income statement. To the extent that further adjustment is necessary, especially as the effect of inflation on future fuel supplies and maintenance and consumables inventory and the relief provided by funding assets onetary liabilities, additional adjustments have been made.

rtion of the fair value adjustment of foreign financial market assets and liabilities relating to future anticipated transactions is taken to equity. All other adjustments to reflect the fair value of financial market assets and liabilities are included in interest income and expenditure.

owing summary shows the fully adjusted performance and financial position of Eskom prepared in terms of the principles contained 5.

	Eskom	
	2001	2000
	Rm	Rm
arised income statement		
al cost net profit for the year after tax	**2 272**	1 759
adjustments	**(4 795)**	(3 249)
nal depreciation	**(5 066)**	(3 635)
f sales	**(336)**	(263)
g adjustment	**607**	649
adjusted net loss for the year	**(2 523)**	(1 490)

st the inherent cost of an overhaul was capitalised as part of generation plant and equently depreciated over the life of the plant. In terms of IAS 16, Property, plant oment, the cost of a major overhaul is now capitalised as a separate component eciated on a straight-line basis over the estimated useful life of that overhaul normally six years. This change in estimate required that the inherent costs of hauls older than six years be written off in 2001, which accounts for the large in additional depreciation in the current year.

t 31 December

	Historic	Adjustments	Current value	
	2001	2001	2001	2000
	Rm	Rm	Rm	Rm
Summarised balance sheet				
Eskom				
Assets				
Property, plant, equipment and intangible assets	**49 197**	**55 984**	**105 181**	101 266
Non-current and current financial market assets	**12 709**	**–**	**12 709**	9 987
Other non-current assets	**6 421**	**3 210**	**9 631**	9 771
Other current assets	**6 382**	**27**	**6 409**	7 044
	74 709	**59 221**	**133 930**	128 068
Equity and liabilities				
Capital and reserves	**33 361**	**59 221**	**92 582**	85 297
Non-current and current financial market liabilities	**29 397**	**–**	**29 397**	31 782
Other non-current liabilities	**8 280**	**–**	**8 280**	6 236
Other current liabilities	**3 671**	**–**	**3 671**	4 753
	74 709	**59 221**	**133 930**	128 068
Ratios[1]				
Average production price index, %			**8,50**	9,10
Real return on total assets (after taking account of the financial gearing adjustment), %			**1,16**	2,45
Financial gearing adjustment, %			**11,25**	16,64
Debt:equity			**0,18**	0,26
Interest cover			**0,54**	0,95

1. *Calculated on the basis described in the five-year financial review.*

continued

	2001	2000	1999
Statistical overview (continued)			
Environmental indicators			
Relative particulate emissions, kg/MWh sent out	0,31	0,35	0,37
Specific water consumption, l/kWh sent out	1,26	1,21	1,25
Reported legal contraventions counted in the operational sustainability index, number[9]	2	3	9
Customer satisfaction (PreCare/MaxiCare), ratio	8,43	8,82	8,78
Total water consumption, Ml	239 233	228 759	227 288
Coal burnt, kt	94 136	92 289	88 470
Average calorific value, MJ/kg	19,42	19,50	19,53
Average ash content, %	28,8	28,6	28,5
Average sulphur content, %	0,93	0,90	0,96
Overall thermal efficiency, %	34,1	34,4	34,4
Line losses, %	7,2	7,4	6,2
Nitrous oxide (N_2O), t	2 154	2 093	2 010
Carbon dioxide (CO_2), Mt	169,3	161,2	159,4
Sulphur dioxide (SO_2), kt	1 500	1 505	1 506
Nitrogen oxide (NO_x) as NO_2, kt	684	674	673
Particulate emissions, kt	59,64	66,08	67,08
Ash produced, Mt	26,5	24,6	24,3
Ash sold, Mt	1,161	1,126	1,116
Radiation release, mSv[10]	0,0007	0,0005	0,0005
Low-level waste – steel drums, cubic metres	117,04	68,81	70,77
Intermediate-level waste – concrete drums, cubic metres	45,28	27,60	41,21
Spent nuclear fuel, number of elements (cumulative figure)[11]	104 (1 197)	52 (1 093)	104 (1 041)
Employees			
Total number at 31 December[12]	29 969	32 832	34 027
GWh sold per employee	6,054	5,427	5,096
Sales to countries in southern Africa, GWh	6 710	3 872	3 884
Botswana	1 183	986	934
Mozambique	3 899	1 331	68
Namibia	578	640	562
Zimbabwe	371	788	1 564
Lesotho[13]	40	12	55
Swaziland	639	115	701

and 2001 are in terms of the revised definition of the operational sustainability index. Since 1998, other environment-related contraventions are also included. Prior to 1998 only water-incidents were reported.

s have been restated based on the new methodology as approved by the National Nuclear Regulator.

el means nuclear fuel that has been irradiated in, and permanently removed from, the reactor core.

employees of subsidiary companies.

started its own generation in 1999.

for the year ended 31 December

1998	1997	1996	1995	1994	1993	1992
0,36	0,44	0,63	0,70	0,76	0,79	1,03
1,23	1,20	1,21	1,28	1,29	1,41	1,45
9	15	11	–	–	–	–
8,90	9,10	8,72	–	–	–	–
225 280	225 699	216 131	210 612	206 955	217 785	214 202
87 225	90 169	85 401	79 377	76 883	75 926	71 038
19,84	19,68	19,83	19,95	20,09	20,05	20,25
29,1	28,4	27,8	28,7	29,0	28,6	28,1
0,93	0,94	0,97	0,95	0,97	0,87	0,83
34,2	34,5	34,5	34,4	34,4	34,4	34,2
5,9	6,4	5,9	5,9	5,6	5,7	5,6
2 031	2 085	2 004	1 864	1 830	1 830	1 879
163,2	169,0	158,6	147,0	142,9	141,0	132,8
1 583	1 383	1 295	1 198	1 167	1 134	1 074
669	688	647	603	582	582	541
65,21	83,43	112,11	115,32	122,00	122,20	153,23
24,7	23,7	22,2	23,0	22,1	20,9	–
1,180	1,118	0,995	0,942	0,827	0,712	0,634
0,0007	0,0008	0,0008	0,0004	0,0005	0,0004	0,0008
61,25	107,54	109,06	73,29	85,47	100,80	60,90
22,77	23,00	35,69	28,76	43,00	37,65	41,88
52 (937)	104 (885)	104 (781)	52 (677)	52 (625)	104 (573)	52 (469)
37 311	39 241	39 857	39 952	39 760	40 128	42 223
4,595	4,397	4,149	3,843	3,759	3,584	3,271
4 093	6 439	5 554	2 986	2 628	2 590	1 815
689	748	685	340	205	121	100
385	680	596	600	559	510	436
602	1 295	1 100	950	813	999	457
1 521	2 790	2 267	154	164	149	14
209	318	335	324	310	281	241
687	608	571	618	577	530	567

Power pools and interconnections

Eskom

Eskom

Major electricity utilities in the world – rated by sales

Company	Country	Sales GWh	Rating by sales
RAO-UES	Russia	588 600	1
EDF	France	397 500	2
Tepco Electric Power Co.	Japan	280 651	3
KEPCO	South Korea	239 535	4
Enel	Italy	222 879[1]	5
PreussenElektra Group	Germany	211 052[2]	6
AEP	USA	206 281	7
Hydro-Québec	Canada	190 100	8
Eskom	**South Africa**	**178 192**	**9**
Southern Company	USA	176 947	10
RWE Energie AG	Germany	170 571	11
Endesa Group	Spain	165 803	12
Tennessee Valley Authority	USA	159 571	13
TXU	USA	151 899	14
Kansai Electric Power Co.	Japan	142 852	15
Ontario Power Generation	Canada	139 800	16
Chubu Electric Power Co.	Japan	123 027	17
Exelon Corp	USA	122 000[3]	18
Entergy Corporation	USA	113 010	19
PowerGen	UK	34 900[4]	20

1. *Including 201 067 GWh from Enel Distribuzione and 21 812 GWh in free market.*
2. *First full year of E.ON (included former Bayernwerk).*
3. *This is an estimate based on Q1-3 for Unicom and Peco. Merger in Q4 makes it difficult to obtain precise numbers.*
4. *Datamonitor estimate.*

• *Source: Data Monitor UK, 2000 figures*

Major electricity utilities in the world – rated by generation capacity

Company	Country	Generation capacity MW	Rating by capacity
RAO-UES	Russia	155 100	1
EDF	France	102 810	2
Electrobrás	Brazil	67 713[1]	3
Tepco Electric Power Co.	Japan	58 843	4
Enel	Italy	56 609	5
KEPCO	South Korea	48 451	6
Eskom	**South Africa**	**41 298**	**7**
AEP	USA	38 103[2]	8
Kansai Electric Power Co.	Japan	37 458	9
Endesa Group	Spain	36 538	10
Exelon Corp	USA	36 135[3]	11
Southern Company	USA	32 806[4]	12
Hydro-Québec	Canada	31 512	13
Chubu Electric Power Co.	Japan	29 640	14
Tennessee Valley Authority	USA	29 469[5]	15
PreussenElektra Group	Germany	29 000[6]	16
PowerGen	UK	27 077[7]	17
Ontario Power Generation	Canada	25 800	18
TXU	USA	23 608[8]	19
RWE Energie AG	Germany	22 073	20
Entergy Corporation	USA	21 580	21

1. *Includes subsidiaries.*
2. *Note merger with CSW means big rise.*
3. *Includes Generation 1 and 49,9% of Sithe and 50% of AmerGen.*
4. *Excludes jointly owned capacity.*
5. *Net winter dependable capacity.*
6. *First full year of E.ON (included former Bayernwerk).*
7. *Includes joint ventures; UK figures include CHP and renewable electricity capacity; US figure includes generation from utility and non-utility business.*
8. *Only includes TXU Electric, excludes TXU Europe and TXU Australia which is approximately 8 000 MW capacity.*

• *Source: Data Monitor UK, 2000 figures.*

Profile of Eskom

The Annual Report 2001 covers the period 1 January 2001 to 31 December 2001. The 2001 report is aimed at a more integrated approach to sustainability reporting, covering aspects of, among others, economic, social and environmental issues. The Eskom Annual Report and Eskom Environmental Report have been combined in terms of international trends of integrated reporting. In 2000 Eskom issued the Eskom Annual Report, Eskom Enterprises Annual Report and the Eskom Environmental Report.

Major products and services

Eskom is a vertically integrated operation that generates, transmits and distributes electricity.

Eskom generates 95% of the electricity used in South Africa.

Eskom Enterprises, the wholly-owned subsidiary of Eskom, together with its subsidiaries, serves as a means by which all the non-regulated activities of Eskom, both inside and outside South Africa, are carried out. Eskom Enterprises' core lines of business are infrastructure development, energy business operations, specialised energy services and the pursuit of key opportunities in related or strategic businesses, such as information technology and telecommunications.

Countries in which operations are located

The operations of Eskom are located in South Africa. Eskom Enterprises has operations on the African continent, with its head office being located in Johannesburg, South Africa, and other offices in Uganda, Nigeria and Mali.

Ownership

The ownership of Eskom vests in the South African government.

Nature of markets and customers served

Electricity is sold to industrial, mining, commercial, agricultural and residential customers and redistributors.

Scale of activities

Eskom, South Africa's electricity utility, is among the top seven utilities in the world in terms of generation capacity, and among the top nine in terms of sales.

Breakdown of sales by country/region

The majority of the sales are in South Africa, with only a small percentage of sales being in the southern African region.

Additional information on economic, environmental and social aspects

Eskom is committed to aligning itself with international sustainability reporting initiatives. Further environmental and social information is available on the Eskom website.

Contact details

Telephone

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Eskom Enterprises Communication:	+27 11 800 2696
Eskom Development Foundation:	+27 11 800 2758
Eskom Environmental helpline:	+27 11 800 4727

E-mail

Eskom Environmental e-mail:	envhelp@eskom.co.za

Websites

www.eskom.co.za/annreport02/	
Eskom Development Foundation:	www.eskom.co.za/csi
Eskom business online:	https://csonline.eskom.co.za

Key statistics

at 31 December

	Group			Eskom		
	2001	2000	1999	**2001**	2000	1999
Financial/business performance indicators						
Total assets, Rm	**76 909**	74 179	71 934	**74 709**	73 353	71 383
Reserves, Rm	**34 148**	30 989	27 496	**33 361**	30 582	27 198
Net financial market liabilities and assets, Rm	**14 708**	20 410	23 341	**16 688**	21 795	24 142
Revenue, Rm	**26 112**	24 459	22 245	**24 983**	23 569	21 568
Net profit for the year after tax, Rm	**2 561**	1 868	2 179	**2 272**	1 759	2 062
Cash flow from operations, Rm	**8 641**	7 661	6 378	**7 797**	7 038	6 040
Average selling price of electricity, cents per kWh[1]				**13,76**	13,23	12,44
Average total cost of electricity sold, cents per kWh[2]				**11,90**	11,44	11,27
Return on total assets, %[3]	**10,89**	10,40	9,00	**10,10**	9,79	8,26
Real (inflation-adjusted) return on total assets, %[3]	**n/a**	n/a	n/a	**1,16**	2,45	1,42
Debt-equity ratio[3]	**0,43**	0,66	0,85	**0,50**	0,71	0,89
Productivity improvement for the year, %				**0,50**	2,10	0,40
Staff employed, number	**33 032**	35 707	35 573	**29 969**	32 832	34 027
Technical/business performance indicators						
Total electricity sold, GWh				**181 511**	178 192	173 422
Coal burnt in power stations, Mt				**94,14**	92,30	88,50
Energy availability factor, %				**92,00**	92,10	91,00
Peak demand on integrated system, MW				**30 599**	29 188	27 813
Nominal capacity, MW[4]				**42 011**	41 298	40 585
Net maximum capacity, MW[4]				**39 810**	39 186	38 517
Power lines (all voltages), km				**316 634**	305 559	294 325
Electricity customers, number (thousands)				**3 275**	3 054	2 856
Environmental/social performance indicators						
Specific water consumption by power stations, l/kWh sent out				**1,26**	1,21	1,25
Relative particulate emissions, kg/MWh sent out				**0,31**	0,35	0,37
Carbon dioxide emissions, Mt				**169,3**	161,2	159,4
Radiation release, mSv[5]				**0,0007**	0,0005	0,0005
Disabling injury incidence rate, index				**0,50**	0,41	0,44
Work-related fatalities, number				**7**	10	11
Employment equity, %				**53,1**	50,7	45,0
Gender equity, %				**21,7**	18,4	15,7
Electrification, number of homes				**209 535**	256 023	299 247

1. *Average price of electricity sold based on total sales.*
2. *Average total cost of electricity sold calculated as operating expenditure and net interest (including fair value adjustment on financial instruments) and based on external sales.*
3. *Calculated on the basis described in the five-year financial review.*
4. *The difference between nominal and net maximum capacity reflects auxiliary power consumption and reduced capacity caused by age of plant and/or low coal quality.*
5. *Indicators have been restated based on the new methodology as approved by the National Nuclear Regulator.*

Five-year financial review

31 December

	Group			Eskom				
	2001	2000	1999	**2001**	2000	1999	1998	1997
	Rm	Rm	Rm	**Rm**	Rm	Rm	Rm	Rm
alance sheet								
on-current assets	**59 643**	61 406	60 483	**59 536**	61 303	60 562	59 619	56 014
urrent assets	**17 266**	12 773	11 451	**15 173**	12 050	10 821	10 356	9 269
otal assets	**76 909**	74 179	71 934	**74 709**	73 353	71 383	69 975	65 283
eserves	**34 148**	30 989	27 496	**33 361**	30 582	27 198	27 971	25 029
on-current liabilities	**26 672**	28 409	31 389	**26 176**	28 266	31 292	29 323	28 033
urrent liabilities	**16 089**	14 781	13 049	**15 172**	14 505	12 893	12 681	12 221
otal equity and liabilities	**76 909**	74 179	71 934	**74 709**	73 353	71 383	69 975	65 283
come statement								
evenue	**26 112**	24 459	22 245	**24 983**	23 569	21 568	21 074	20 448
perating expenditure	**(19 409)**	(17 979)	(16 758)	**(18 791)**	(17 441)	(16 511)	(15 242)	(14 016)
et operating income	**6 703**	6 480	5 487	**6 192**	6 128	5 057	5 832	6 432
terest income	**1 370**	1 057	971	**1 570**	1 310	1 261	1 156	1 008
terest expenditure	**(4 144)**	(4 332)	(4 255)	**(4 154)**	(4 354)	(4 256)	(4 514)	(4 357)
ofit after interest before fair value justment	**3 929**	3 205	2 203	**3 608**	3 084	2 062	2 474	3 083
et fair value (loss)/gain on financial struments	**(157)**	129	–	**(182)**	129	–	–	–
ofit before tax	**3 772**	3 334	2 203	**3 426**	3 213	2 062	2 474	3 083
come tax expense	**(1 211)**	(1 466)	(24)	**(1 154)**	(1 454)	–	–	–
et profit for the year after tax	**2 561**	1 868	2 179	**2 272**	1 759	2 062	2 474	3 083
ash flow								
ash generated by trading operations	**11 209**	9 985	9 463	**10 244**	9 101	8 821	10 229	9 555
et interest received and paid	**(2 498)**	(2 294)	(3 070)	**(2 447)**	(2 063)	(2 781)	(2 721)	(2 766)
come tax paid	**(70)**	(30)	(15)	**–**	–	–	–	–
ash flows from operations	**8 641**	7 661	6 378	**7 797**	7 038	6 040	7 508	6 789
ash utilised in investment activities	**(3 711)**	(3 538)	(4 479)	**(3 384)**	(3 462)	(4 397)	(5 928)	(5 836)
ash effects of financing activities	**(3 491)**	(2 413)	(4 601)	**(4 095)**	(2 423)	(4 285)	(637)	(468)
et increase/(decrease) in cash and sh equivalents for the year	**1 439**	1 710	(2 702)	**318**	1 153	(2 642)	943	485
atios								
arnings protection (profitability dicators)								
eturn on total assets, %[1]	**10,89**	10,40	9,00	**10,10**	9,79	8,26	9,69	11,30
eturn on average equity, %	**7,86**	6,39	8,10	**7,11**	6,09	7,50	9,40	13,10
otal operating expenditure/revenue, %	**60,00**	60,66	59,20	**60,68**	61,32	60,10	56,80	53,70
eal (inflation-adjusted) return on total sets, %	**n/a**	n/a	n/a	**1,16**	2,45	1,42	2,34	3,62
et pre-tax interest coverage	**2,21**	1,91	1,56	**2,10**	1,87	1,53	1,44	1,51
BITDA interest coverage	**3,35**	2,77	2,59	**3,21**	2,69	2,54	2,13	2,11
ash flow protection (cash flow lequacy indicators)								
nds from operations/average tal debt, %	**28,00**	23,00	20,00	**26,00**	21,00	17,00	20,90	26,00
nds from operations/capex, %	**226,20**	234,00	157,30	**227,00**	220,30	151,60	121,80	128,60
nds from operations/net interest verage, %	**3,10**	2,70	2,50	**2,90**	2,50	2,40	2,40	2,30
apital structure								
ebt:equity	**0,43**	0,66	0,85	**0,50**	0,71	0,89	0,89	1,08
terest cover	**2,29**	2,06	1,67	**2,24**	2,10	1,69	1,74	1,92
ther								
lue created per employee, R'000	**485**	428	416	**506**	441	420	381	360

Definitions of ratios

Return on total assets – Net operating income expressed as a percentage of total assets[1]
Return on average equity – Net profit divided by average equity
Total operating expenditure/revenue – Total operating expenditure divided by revenue after making an adjustment for depreciation
Real (inflation-adjusted) return on total assets – Net inflation-adjusted operating income, after taking account of financial gearing adjustment, but before taking into account interest income and interest expenditure, as a percentage of total assets
Net pre-tax interest coverage – Net profit before tax adjusted by interest expenditure divided by the financial market interest expense adjusting for capitalised interest
EBITDA interest coverage – Net operating income adjusted for interest income and depreciation divided by the financial market interest expense adjusting for capitalised interest
Funds from operations/average total debt – Net operating income adjusted for capitalised interest, depreciation and non-cash flow items divided by the average total financial market liabilities
Funds from operations/capex – Net operating income adjusted for capitalised interest, depreciation and non-cash flow items divided by capital utilised in investment activities adjusted for capitalised interest
Funds from operations/net interest coverage – Net operating income adjusted for capitalised interest, depreciation and non-cash flow items divided by interest expenditure adjusted for capitalised interest
Debt:equity – Net financial market assets and liabilities divided by total reserves
Interest cover – Net operating income divided by net interest income and expenditure
Value created per employee – Value created divided by number of employees at 31 December as per value added statement

1. *Total assets are reduced by financial market assets and interest receivable, since Eskom's funding is managed in a single pool of financial market assets and liabilities.*

Value creation and distribution

for the year ended 31 December

Value added is the wealth created by the regulated business through the generation, transmission, distribution and selling of electricity and the non-regulated businesses mainly through the provision of electricity supply and related services outside South Africa and non-regulated supply industry activities.

Value created from the sale of electricity is the excess of turnover over the costs of generation, transmission and distribution, comprising primary energy, materials, services and abnormal items and the excess of turnover over cost of goods and services of non-regulated activities.

The value added statement shows the total wealth created, how it was distributed to meet certain obligations and reward those responsible for its creation, and the portion retained for the continued operation and expansion of businesses.

	Group		Eskom	
	2001 Rm	2000 Rm	**2001 Rm**	2000 Rm
Value created				
Revenue and staff costs capitalised	**26 294**	24 730	**25 165**	23 840
Less: Cost of primary energy, materials, services and abnormal items	**(10 267)**	(9 453)	**(9 996)**	(9 360)
	16 027	15 277	**15 169**	14 480
Value distributed				
Salaries, wages and other benefits[1]	**5 582**	5 656	**5 345**	5 364
Net interest expense	**2 931**	3 146	**2 766**	2 915
Taxation	**1 211**	1 466	**1 154**	1 454
	9 724	10 268	**9 265**	9 733
Value reinvested in the group to maintain and develop operations				
Depreciation and amortisation of property, plant and equipment and intangible assets	**3 742**	3 141	**3 632**	2 988
Profit for the year after tax	**2 561**	1 868	**2 272**	1 759
	16 027	15 277	**15 169**	14 480

1. *Including capitalised manpower costs amounting to R182 million (2000: R271 million).*

lectricity Council

I Khoza (52)[dfg]

iirman

Honours (UNIN), MA Marketing Management (University of caster) (UK), PMD (Harvard), and IPBM (IMD, Lausanne)

rman of Aka Capital (Pty) Ltd and Akani Leisure (Pty) Ltd. Founding aging Director of Co-ordinated Management Consulting (Pty) Ltd. w and President of the Institute of Directors of Southern Africa and Executive Committee member of the World Business Council for ainable Development and the World Business Action for Sustainable elopment. Board member of Standard Bank Investment Corporation Limited C), JSE Securities Exchange South Africa and Liberty Life, Protea oitality Holdings.

ointed to the Electricity Council in 1997.

1 Baleni (41)[abefg]

oma in Politics and Trade Unionism (White Hall College, England), ificate in Human Resources Management (Unisa), BOT (Lausanne, zerland) (IMD).

inal education co-ordinator of National Union of Mineworkers (NUM).

esenting organised labour.

inted to the Electricity Council in 1997.

Deetlefs (68)[cf]

5 (Pretoria Technical College)

ficate, Energy and Policy Management in association with Minerals Energy Education (Wits). Certificate of Recognition from Research gle Institute in the USA.

rary Life President: South African Association of Municipal Employees ME). Honorary Life President (IMATU). General Executive Member U) Pretoria Metro Branch, Honorary Life Chairman (IMATU) Pretoria).

senting IMATU.

nted to the Electricity Council in 1997.

Dickman (71)[abcf]

) (Hons) (Wits), FIBSA

mic consultant.

enting organised business.

nted to the Electricity Council in 1985.

S E Funde (58)[ef]

MSc (Elec Eng) (Leningrad Polytechnical Institute, St Petersburg)

Chairman of the Independent Development Trust (IDT) and of the TW Kambule Education, Training and Development Trust. Deputy chairperson of the National Institute of Economic Policy (NIEP). President: South African Communications Forum. Director of Murray and Roberts Holdings Limited, Petzetokis African Holdings and of family businesses.

Representing the economic development fraternity.

Appointed to the Electricity Council in 1997.

T S Gcabashe (44)[abcdfg]

BA (Botswana), PED (IMD), MURP (Ball State Univ, USA)

Chief executive of Eskom and chairman of Eskom Enterprises (Pty) Limited.

Representing Management Board.

Appointed to the Electricity Council in 1999.

K J Hlongwane (63)[abde]

BA (ICI University, Texas, USA), BEd (CTS, Cape Town), EDP (Wits)

Executive chairman of Nafhold. Chairman of Greater Africa Properties and Savuna Properties (Pty) Limited. Deputy chairman of Uni-Africa Investments. Director of Medhold Limited, Prosperity Bank Limited, Saambou Bank Limited and Financial Services Board. Member of the Financial Services and Regulation Policy Board, the Unisa Board of Trustees and RAU Council.

Representing organised business.

Appointed to the Electricity Council in 1995.

Dr W J Kok (50)[abe]

DCom (RAU)

Executive Director: Finance (Eskom).

Representing Management Board.

Appointed to the Electricity Council in 1997.

Prof I J Lambrechts (59)[abcef]

DCom (Stell), MBA (Stell)

Professor of Business Management at the University of Stellenbosch.

Representing organised business.

Appointed to the Electricity Council in 1985.

R J Linnell (57)[abf]

BSc (Hons), BSc (Spec Hons) in Geology (London)

Director of Billiton SA Limited, The D Group SA (Pty) Limited and Golden Valley Mines Limited.

Chairman of the Ferro Alloys Producers Association.

Representing the South African Chamber of Mines.

Appointed to the Electricity Council in 2000.

Mrs N Majija (67)[ab]

Teaching Diploma (St Matthew's College), Diploma in Strategic Management, Finance and Corporate Governance

Treasurer of the South African National Civics Organisation (SANCO) (Transkei Region). Chairperson of the Transkei Rural Development Forum (TRDF).

Representing the rural communities.

Appointed to the Electricity Council in 1993.

L J Mngomezulu (35)[cef]

Diploma in Business Management, Diploma: Micro & Macro Economics, BOT (IMD)

Manager: Sedibeng District

Representing South African National Civics Organisation (SANCO).

Appointed to the Electricity Council in 1995.

D B Mostert (64)[abcde]

BSc, BEng (Stell), MBA (PUCHE), AMP (Harvard)

Representing the Steel and Engineering Industries Federation of South Africa (SEIFSA)

Appointed to the Electricity Council in 1990.

Mrs J N Seroke (68)[dg]

BA UED (Rhodes), Post-graduate diploma: Communication (Wits), Policy and Social Studies (Swansea, UK)

Trustee of the Women's Development Foundation. Chairperson of the Commission on Gender Equality.

Representing women's organisations.

Appointed to the Electricity Council in 1995.

C G van Veijeren (67)[c]

BSc (Agric) (Pret)

Director of Land Bank and Chairman of audit team. Member of National Water Advisory Council. Director: Astral Foods, Malelane Citrus Co-op and Onderberg Fruit Processors Co-op.

Representing the agricultural sector.

Appointed to the Electricity Council in 1993.

Eskom's Secretariat

Megawatt Park
PO Box 1091
Johannesburg 2000
South Africa

a *on Finance Committee*
b *on Audit Committee*
c *on Tariffs and Marketing Committee*
d *on Remuneration and Personnel Committee*
e *on Tender Committee*
f *on Regulation and Structure Committee*
g *on Nuclear Safety Oversight Committee*

Management Board portfolios

Eskom

Directors of Eskom's regulated business

Management Board members are appointed by the Electricity Council for the day-to-day management of Eskom.

Thulani S Gcabashe (44)
Chief Executive of Eskom and Chairman of Eskom Enterprises

BA (Botswana), PED (IMD), MURP (Ball State Univ, USA)
Joined Eskom in 1993
Appointed to the Management Board and Electricity Council in 1999

Office of the Chief Executive

Joe Matsau (53)
Executive Director

Dip in Transport Economics
(West Germany)
Dip in Marketing (Helsinki)
Joined Eskom in 1992
Appointed to the Management Board in 1999

Eskom positioning
Policy and assurance
Governance
Regulation

Generation

Ehud Matya (39)
Executive Director

Pr Eng, BSc (Mech) (Wits)
Joined Eskom in 1985
Appointed to the Management Board in 1999

Electricity production
Fuel (coal, nuclear) procurement
Water management
Generation technology
Environmental protection
Nuclear safety assurance

Finance

Dr Willem Kok (50)
Executive Director

DCom (RAU)
Joined Eskom in 1988
Appointed to the Management Board in 1993

Corporate finance
Corporate financial management
Corporate risk services
Corporate taxation
Eskom Finance Company
Financial planning
Treasury
Commercial services
Integrated risk management

Corporate governance

troduction

rporate governance is concerned with structures and ıcesses for decision-making, accountability, control and ıaviour at the top level of organisations. Eskom continues to scribe to the principles of openness, integrity, accountability l responsibility to stakeholders. More importantly, the area of porate governance is one that continually evolves, and Eskom ures that its processes and practices are reviewed on an ;oing basis to ensure compliance with legal obligations, sation of funds in an economic, efficient, and effective manner adherence to good corporate governance practices that are chmarked with international best practices.

ɔm continues to comply with the King Report on Corporate /ernance (1994), the Protocol of Corporate Governance in Public Sector (1997), the Public Finance Management Act of 9 ("the PFMA") and the Eskom Act of 1987 ("the Eskom "). It is in the process of implementing recommendations of draft King II Report (2001).

vnership of Eskom

ownership of Eskom vests in the South African government.

ıareholder compact

ıareholder compact between Eskom and the government as eholder is awaiting signature by the government. It sets out key performance objectives and key performance indicators s) for Eskom, and provides an effective framework to guide relationship between Eskom and its shareholder. It further es to promote and encourage good governance practices in Eskom.

nversion of Eskom

Eskom Conversion Act, Act 13 of 2001, which will come into t on a date to be determined by the Minister of Public rprises by proclamation in the Government Gazette, ides for the conversion of Eskom into a public company, m Holdings Limited. In the interim, Eskom continues to be rned by the Eskom Act.

effect of the conversion will be that:

- ɔom will lodge its articles and memorandum with the gistrar of Companies;
- the two-tier governance structure of the Electricity Council ("Council") and the Management Board ("Board") will be replaced by a board of directors in terms of the Companies Act of 1973;
- the government will be Eskom's shareholder;
- the Eskom Act will be repealed; and
- Eskom will be governed in terms of the Companies Act of 1973 and the PFMA.

Governing bodies

Role of the Council and the Board

Until its conversion, Eskom continues to be governed by the Council and the Board. Although Eskom has a separate supervisory and management board structure, the Council and the Board are considered to be fulfilling the role of directors and have a collective responsibility to act in accordance with directors' fiduciary duties and provide effective corporate governance. The Council is the accounting authority of Eskom in terms of the PFMA. Upon incorporation, the unitary board of directors will assume this role.

The Council is responsible for determining policy and for setting the strategic objectives, agreeing on performance criteria and delegating to the Board the detailed planning and implementation of that policy. It ensures that the proposals and strategies sought to be implemented by the Board are critically examined against the best interests of Eskom and its stakeholders, and that full and effective control is maintained.

The Board is responsible for managing the affairs of Eskom in accordance with the policies and strategic objectives determined by the Council.

Composition of the Council

The members of the Council are appointed by the Minister of Public Enterprises. The terms of office of the current members of Council are due to expire in the first quarter of 2002 and it is envisaged that this will coincide with the conversion of Eskom and the appointment of the new board of directors. Appointments are for a maximum of five years or such shorter period as determined by the Minister at the time of appointment. With the exception of the Board representatives on the Council, all the members of the Council, including the chairman, are non-

executive and are representative of a wide range of stakeholders with a diverse range of experience and professional skills.

The Council meets regularly and monitors executive management's compliance with policy and their achievement against objectives. It follows a structured approach of delegation, reporting and accountability, which includes reliance on various Council committees. The chairman also guides and monitors the input and contribution of the Council members.

Composition of the Board

The Board consists of executive directors appointed by the Council and a chief executive, who is also the chairman of the Board. The chief executive and the executive director of Finance were also appointed as members of Council. The members of the Board, who are all executive, have normal employment contracts with Eskom that set out objectives, KPIs and targets. These are evaluated by the Council on an ongoing basis.

The Board and its committees meet regularly in order to implement and manage the policies established by the Council.

Evaluation and development

In order to ensure that Council and Board members are able to fulfil their roles as directors, they are fully informed on their roles and responsibilities. In particular, with regard to new Council members, an induction programme facilitates an understanding of the operations of Eskom, its business environment and key policies governing its activities, as well as an understanding of their role in terms of the PFMA. They are introduced to senior management, visit various Eskom sites and receive appropriate training regarding their rights, duties and responsibilities. There is also an ongoing programme of education for all Council members, covering topics such as corporate governance, new legislation affecting Eskom and risk management.

Performance evaluations are regularly done for the Board as a whole and for individual members of the Board. The performance of all executive directors is evaluated by the Council Remuneration and Personnel Committee. Members of the Council, as well as the Council as a governance structure, are regularly reviewed by the chairman using a 360° performance evaluation.

Corporate secretariat

The role of the company secretary is fulfilled by the Corporate Counsel and the Corporate Secretariat department. The Council and Board have access to the advice and services of Eskom's secretariat and are entitled to obtain independent professional advice, at Eskom's expense, should they deem this necessary. The Council and Board are assisted by the secretariat to identify key issues that should form the focus of their attention, and also rely on the secretariat to ensure that all these matters are placed on relevant agendas for discussion.

Council and Board committees

A number of Council and Board committees exist in order to assist the Council and Board in discharging their responsibilities. The minutes of these committees are submitted to the Council for noting and approval where required. Specific duties have been delegated to these committees with defined terms of reference. A comprehensive framework, which assists in the control of the decision-making process and the delegation of authority within Eskom, has been approved by the Council.

Public Finance Management Act (PFMA)

The PFMA focuses on financial management with related outputs and responsibilities. Eskom established an ongoing process of awareness, education, instruction and advice on the PFMA to the business.

The directors comply with their fiduciary duties as set out in the Act. Responsibilities of the Council as accounting authority in terms of the PFMA and other regulations include taking appropriate action to ensure:

- efficient, effective and transparent systems of financial and risk management and internal control are in place;
- a system for properly evaluating all major capital projects prior to a final decision on each project, is maintained;
- the implementation of appropriate and effective measures to prevent unauthorised, irregular, fruitless and wasteful expenditure, losses from criminal conduct and expenditure not complying with legislation;
- all revenue due to Eskom is collected;
- the economic and efficient management of available working capital; and
- the definition of objectives and the allocation of resources in an economic, efficient, effective and transparent manner.

Corporate governance

continued

nternal control

The Council has ultimate responsibility for the system of internal control, including an appropriate procurement and provisioning system. The controls throughout Eskom focus on those critical risk areas identified by operational risk management, confirmed by executive management and endorsed by the auditors. Controls relating to these critical risk areas are closely monitored by both management and the auditors, and these controls are augmented by approval frameworks, policies and organisational structures that provide for the division of responsibilities and the careful selection and training of personnel.

The system contains self-monitoring mechanisms and actions are taken to correct deficiencies as they are identified. The system is designed to provide reasonable assurance at appropriate cost that assets are safeguarded, that liabilities are efficiently managed and that transactions are executed and recorded in accordance with Eskom's policies and procedures.

Corporate Audit provides the Audit Committee and executive management with assurance that the internal controls are appropriate to manage the risks that could hinder the achievement of the business objectives. Corporate Audit is fully supported by the Council, the Board and the Audit Committee, with no limitation on accessing information.

ntegrated risk management

Eskom endeavours to minimise risk by ensuring that the appropriate infrastructure, systems, personnel and controls are in place throughout the organisation, and is in the early stages of integrating risk management into management processes.

The Board carries out its responsibility for risk management through the Integrated Risk Management Committee of the Board, which comprises board members and is chaired by the executive director of Finance.

The Integrated Risk Management department, headed by the Corporate Risk Assurance Manager, will be accountable for providing assurance to the Board that the risk management process is in place and will be integrated into day-to-day activities. Risk management will be addressed through risk categories that include, amongst others, financial, technical, environmental, legal, human resources, information, regulatory and strategic risks. As part of the risk management process major risks are being identified and will be referred to the Integrated Risk Management Committee.

Annual financial statements

The Council and the Board of Eskom are responsible for the preparation and integrity of Eskom and group annual financial statements and related financial information included in this annual report. The external auditors are responsible for independently auditing and reporting on the financial statements in conformity with Statements of South African Auditing Standards.

The financial statements are prepared in accordance with International Accounting Standards as well as Statements of Generally Accepted Accounting Practice, and incorporate full and meaningful disclosure in line with Eskom's reporting philosophy. The financial statements are based on appropriate accounting policies and supported by reasonable and prudent judgements and estimates.

Reporting

In order to present a balanced and understandable assessment of its position, Eskom is continually striving to ensure that its reporting and disclosure to stakeholders are relevant, clear and effective. It places great emphasis on reporting on both financial and non-financial matters, as well as addressing both positive and negative aspects of its performance.

Non-financial matters include technical performance, social and economic issues, ethics, safety, health and the environment. Eskom strives to align with international sustainability initiatives including the Global Reporting Initiative Guidelines. The annual report has therefore been revisited in order to strive towards more integrated reporting.

Eskom's predetermined objectives, as well as its performance as measured against financial and non-financial KPIs, are included in the directors' report.

Auditing

The Audit Committee comprises Council members, members of the Finance Committee, co-opted members and the chief

executive, and is chaired by a Council member who is not the chairman of Eskom. The Committee addresses appropriate policies, internal control, internal and external audit matters and such other issues as may be referred to it by the Council.

The Audit Committee meets regularly with management and the internal and external auditors. Committee meetings are also attended by the executive director of Finance, the head of Corporate Audit, the external auditors and relevant corporate officials. The head of Corporate Audit and the external auditors have unrestricted access to the chairman of the Committee and to the chairman and chief executive of Eskom.

The Audit Committee ensures that the annual financial statements and annual report of the Eskom Group are reviewed with management and the external auditors before approval by the Council.

Remuneration

Non-executive members receive fees for their contribution to the Council and the committees on which they serve.

The remuneration of Council members is determined by the Minister of Public Enterprises with the concurrence of the Minister of Finance.

The Council, on the recommendation of the Remuneration and Personnel Committee, approves the remuneration parameters of the Board. The Remuneration and Personnel Committee is chaired by the chairman of the Council and includes four non-executive Council members and the chief executive. The Committee takes account of external market surveys and other relevant information sources in determining levels of remuneration that appropriately reward senior executives for their contribution to Eskom's performance, and makes recommendations in this regard to the Council. The chief executive, whose remuneration is also reviewed by the Remuneration and Personnel Committee in consultation with the Minister, is excluded from the Committee when his own remuneration is dealt with.

The rewards and remuneration of the Board are linked to the value added to Eskom.

Stakeholder relations

In addition to the interests of the government as the majo stakeholder, Eskom recognises the legitimate interests o employees, consumers, suppliers, trade unions and loca communities.

Employee participation

Employees and organised labour participate in the determinatio of Eskom's policies and objectives through a variety of participativ structures established to involve employee representatives in th business of Eskom. Employees also participate in norma management and leadership communication.

Business conduct

Eskom has a written business conduct policy dealing with ethic which was endorsed by the Council and the Board.

The chief executive is the custodian of ethics, with Eskom' Financial Controller the caretaker, across Eskom. The followin process ensures that the business conduct policy is effectivel implemented throughout Eskom:

- Ethics co-ordinators ensure uniformity of application acros Eskom and that all employees are appropriately exposed to an made aware of the business conduct policy.
- A database of all the outside interests declared by senior an executive management is maintained. New contracts ar matched against this database to ensure that there are n conflicts of interest.
- To ensure that there are no conflicts of interest, all employee performing private work must first apply for permission.
- A confidential ethics helpline, on ethical issues as well as for th reporting of possible contraventions, is in place.
- All departments are required to keep a courtesy register i which all gifts given and received above a predetermined valu are recorded.
- Compliance with the business conduct policy is monitored b the Corporate Financial Control department, and is included i the range of audits performed by Corporate Audit.

The focus on the business conduct policy has raised awareness c the need of ethical behaviour across the organisation. Calls to th ethics helpline have resulted in investigations of irregularitie across all groups in Eskom and its subsidiaries.

Corporate governance

continued

Environmental management

The chief executive, as chairman of the Board Environmental Steering Committee, bears responsibility for Eskom's overall environmental performance. Accountability for environmental performance is delegated from the chief executive to the organisation through the relevant executive director. The Corporate Environmental Affairs Manager has delegated authority for assuring due environmental performance. The Corporate Environmental Affairs department oversees overall Eskom policy, performance measurement and reporting with regard to environmental matters through liaison with the Environmental Liaison Committee.

The groups within Eskom, as well as Eskom's subsidiaries, are accountable for the implementation of environmental policies, directives, standards and strategic direction. They have assigned accountabilities for the environment to specific functional areas, which are supported by the inclusion of environmental KPIs in the relevant job compacts.

Environmental representation is also present on other Board committees, including the Capital Investment Committee, the Operations Committee and the Integrated Strategic Electricity Planning Committee.

An annual environmental audit programme is conducted by the Technical Audit department, which also conducts environmental risk assessments and environmental incident investigations. Regular cyclical environmental audits are also carried out on the line groups to address key issues within the groups.

Nuclear

In order to ensure that the nuclear safety assurance function is independent from the electricity production function, Eskom's nuclear infrastructure is separated into two structures. The first is the nuclear business arena, which consists of the nuclear power station (Koeberg) with direct accountability to the executive director of Generation for all aspects of electricity production at the power station, including safety. The second is a nuclear safety and licence compliance assurance function, independently accountable to the executive director of Generation, with its own technical experts and resources.

Eskom has also implemented a three-tier system of nuclear governance in line with international good practice, which comprises the Nuclear Safety Oversight Committee (a committee of the Council), the Nuclear Management Committee (a committee of the Board) and the Nuclear Safety Review Group.

The Nuclear Safety Oversight Committee is chaired by the chairman of the Council and includes a number of international experts. The Committee performs an oversight function to provide assurance that nuclear safety at Eskom's facilities exceeds compliance with minimum regulatory and Eskom standards, while emulating international good practice.

The Nuclear Management Committee is chaired by the chief executive or the executive director of Generation. The Committee's function is to monitor, review, ratify and approve the total Eskom nuclear business in relation to international benchmarks and Eskom's overall business requirements. It further debates and authorises nuclear policy, standards and rules for Eskom.

The Nuclear Safety Review Group is a forum that brings together nuclear expertise from different parts of Eskom for the purpose of meaningfully debating and evaluating nuclear safety issues and making appropriate recommendations to senior management and the higher-tiered committees.

Health and safety

The chief executive ensures achievement of Eskom's safety vision and the execution of its statutory safety duties through the direction provided by the health and safety policy and the Eskom delegation process in terms of the Occupational Health and Safety Act, Act 85 of 1993.

Social

Eskom's social responsibility is carried out through the Eskom Development Foundation, a section 21 company, which is responsible for the integration of all corporate social investment initiatives. The Development Foundation is governed by its board of directors and its management committee, and has full delegated authority to manage grants received from Eskom and its day-to-day activities.

Eskom Enterprises (Pty) Limited

The Eskom Enterprises Group supports and complies with the King Report on Corporate Governance, and the directors endorse its aims of conducting the affairs of the company with the highest standards of corporate practice.

The role of the Eskom Enterprises Board ("Enterprises Board"), which comprises a majority of non-executive directors, is to determine the company's direction and strategy, monitor the achievement of business objectives and to ensure that the company meets its responsibilities to its shareholder. It is further responsible for ensuring that the control environment adequately protects the company's assets against major risks.

The non-executive directors are from varied business backgrounds, and their experience enables them to exercise independent judgement on the Enterprises Board. In addition to monitoring the performance of the executive management of Eskom Enterprises, they also contribute to the company's strategy and policy formulation.

A similar governance structure exists for each subsidiary and joint venture company where the company exercises significant control.

Committees

The Enterprises Board has five principal standing committees, which are governed by written terms of reference. The committees include the Audit Committee, the Finance Committee, the Investment and Procurement Committee, the Remuneration Committee and the Management Committee.

Public Finance Management Act

As a wholly-owned subsidiary of Eskom, Eskom Enterprises complies with the requirements of the PFMA. The Board, as the designated accounting authority, complies with the various duties and responsibilities as prescribed by the PFMA.

Internal control

The Enterprise Board acknowledges that it bears ultimate responsibility for the group's system of internal and financial control. Systems have been designed to provide reasonable, but not absolute, assurance against inaccurate financial information and other irregularities, as well as to ensure the accuracy and integrity of the accounting records.

The Enterprises Board, through the Audit Committee, has reviewed the effectiveness of the systems of internal control for the year under review, and no indication of inappropriate or unsatisfactory conduct has been revealed.

Integrated risk management

The Enterprises Board has approved the integration of risk management into Eskom Enterprises' daily activities. A risk management task group was formed, which will be responsible for the identification of risk areas and for reporting these areas to the Audit Committee and management for resolution.

Business conduct

Employees are required to maintain the highest ethical standards and to ensure that the group's business practices are conducted in a manner that is in all reasonable circumstances above reproach.

Employee participation

Eskom Enterprises has a policy of encouraging employee participation in a wide range of issues, and various participative structures are designed to achieve good employer-employee relationships.

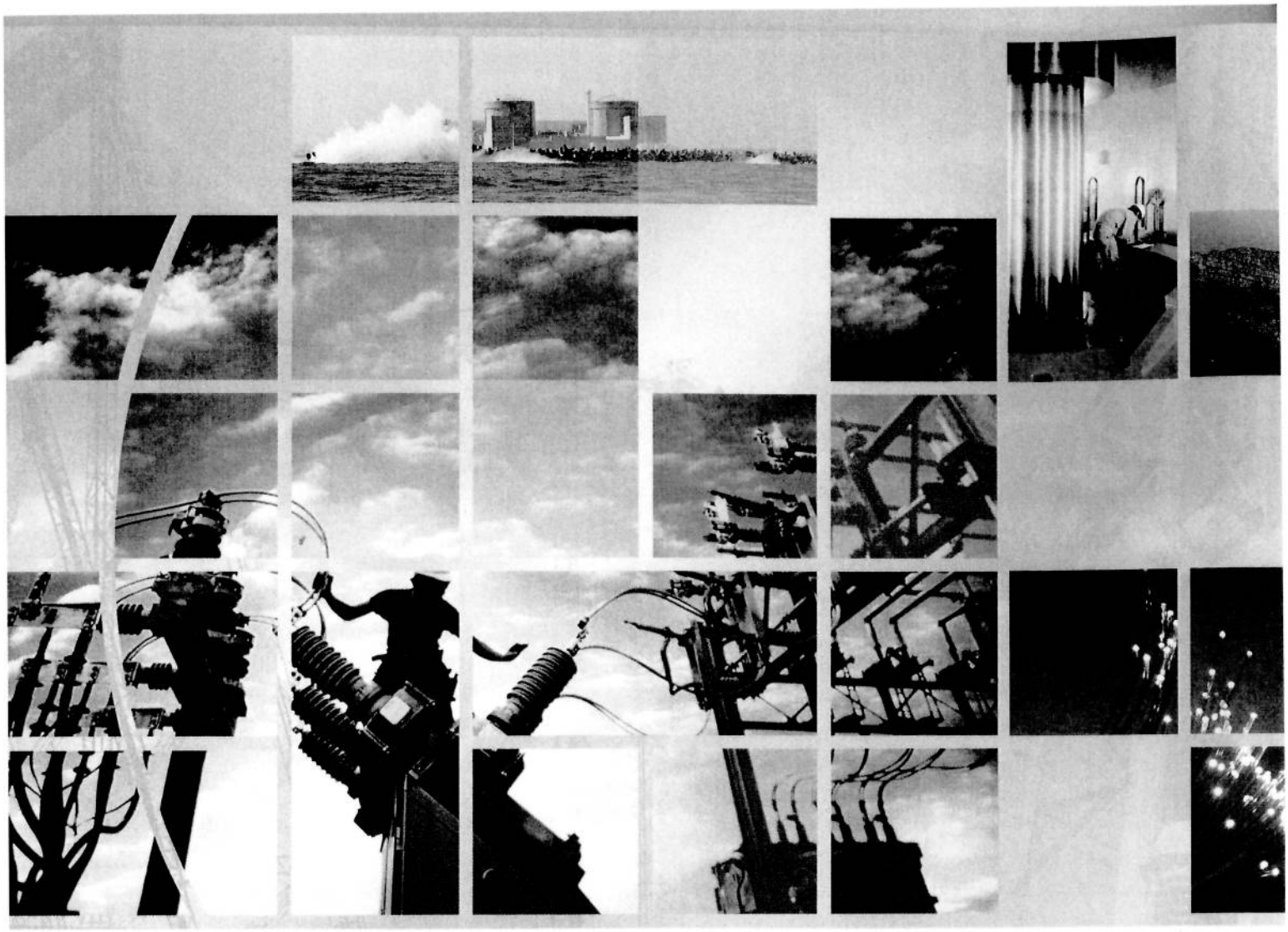
Other Eskom subsidiaries

Eskom's other wholly-owned subsidiaries are governed by independent board structures. The directors are fully accountable to Eskom as shareholder and report to the Finance Committee of the Council.

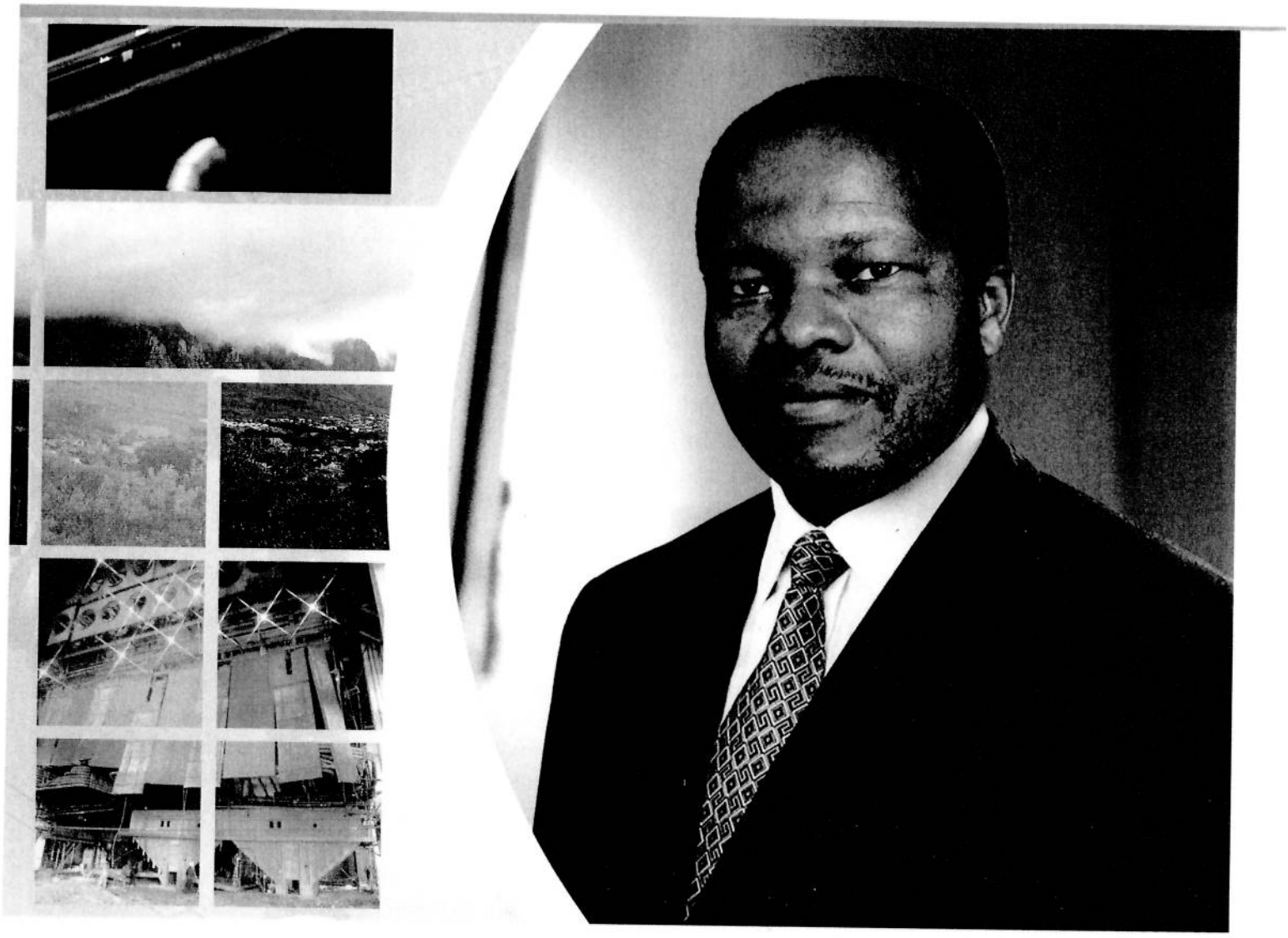
The subsidiaries also comply with the major requirements of the King Report as well as with the requirements of the PFMA.

General

Eskom recognises that corporate governance is a dynamic area and, as such, its systems of corporate governance are reassessed on an ongoing basis to ensure that they remain at world-class standards and continue to be relevant to Eskom's business as it evolves.



Partnerships for sustainable development, the key to success



Chairman's statement

Reuel J Khoza

Introduction

When we ushered in the new millennium in Eskom, we had a vision of transforming the organisation from one focusing only on South Africa to being a global player and the pre-eminent African energy and related services business. And judging by our achievements over the past two years, we are set firmly on that course. Our global focus will, however, begin with the expression of our African personality on the African continent. This resonates well with the African Renaissance vision which inspires confidence that Africa is poised to play a much more meaningful role in all fields of endeavour this century. Consequently, South Africa will be hosting the World Summit on Sustainable Development in 2002. Eskom will be participating in this summit, as it believes it should play its rightful role as a leading organisation. The challenge we are all faced with in global development is to reverse the current negative trends in poor countries, to place them on the development ladder. I believe that one of the primary enablers to sustainable social and economic development lies in the upgrading of the infrastructures of developing countries and the provision of essential services to all sectors of society. The sustainable energy development challenge is particularly formidable in Africa. Today, in excess of 66% of South Africans have access to electricity and are

·man's statement continued

› reap the health, social, economic and environmental benefits energy source, which was denied to so many for so long.

›mitant with its endeavour to grow, Eskom is fully dedicated ·livery for the national economy as well as to the tioning of Eskom as an African and even a global player. , through Eskom Enterprises, currently has a presence in 30 countries on the continent. This presence takes the nainly, of joint-venture partnerships as well as operations ıanagement contracts, plant refurbishments and overall ›und situations with regard to certain utilities. In a very real Eskom is a partner with other African utilities on the ent in improving economies and advancing socio-economic pment. We do this by both literally and metaphorically g light and energy to our continent.

region, Eskom has continued to play a pivotal role in the rn African Power Pool (SAPP), particularly with regard to ›ositioning of SAPP in line with global trends of liberalising roducing competition into electricity markets. One of the achievements in SAPP was the roll out of the Short Term Market (STEM). STEM became fully functional in April 2001, g all members of the SAPP to participate. The key players rently Botswana Power Corporation (BPC), Nampower of a, and Zimbabwe Electricity Supply Authority (ZESA). is trading on both sides of this market as buyer and seller.

more, Eskom, through Eskom Enterprises is, on a selective th local partners, participating in economic activity in places ield as India, Turkey, Chile and the Philippines.

›gressive African continent

is not content with operating in a pocket of relative e in South Africa while it is surrounded by a sea of on the rest of the continent. Therefore the organisation believes that it has to begin to play its role and work in partnership with its counterparts to improve economic conditions for all of Africa's citizens. Moreover, the organisation believes that it is now possible to conceptualise a different Africa – an Africa whose time has come:

- An Africa more excited by its future than by its past
- An Africa whose scope for growth is limited only by its imagination
- An Africa that has successfully translated its concepts of humanity and communal relations into vibrant co-operative models of governmental, institutional and individual relations
- An Africa whose intellectuals are nurtured by indigenous founding principles and insatiable enquiry
- An Africa that redefines the term "emergent" from one of condescension and derision to one of economic, political and cultural vibrancy, and technological prowess

Some Africans are locked into a state of despondency, believing that their earlier dreams and aspirations have become unattainable. Let us rather take a leaf out of the book of the Far East economies.

As recently as the Second World War they were virtually unknown in other parts of the world, yet today they are the envy of some of the most powerful economic forces in the world. When will the world begin to envy Africa? It will envy Africa when Africa begins to harness and galvanise its collective energies for growth and development to produce the substantial economic success of which it is capable.

The challenge of African business leadership

For all this to happen, Africa needs leadership. It needs leadership that understands that Africa will be the instrument of its own salvation. Further, it needs business leadership:

- whose defining features are probity, humility, integrity, compassion and humanity;

- that demonstrates competence, tenacity and a sense of efficacy;
- that practises introspection and self-renewal;
- that strongly believes that the locus of control for Africa's future is within Africa herself;
- that does not consume seed capital, but invests for the generations to come; and above all else
- that is visionary!

Financial performance

The visionary nature of Eskom's leadership has always enabled it to plan strategically and to stay on top of economic adversities.

That is why the financial performance of the organisation was remarkable in the year under review. It is very gratifying to report that the financial health of the organisation has continued to strengthen.

Despite another tough trading year and depressed commodity markets, net profit after tax was substantially higher than previous years. This was achieved through strong cost control, ongoing focus on productivity improvements and sound financial management. During the year, debt was further reduced to the point that, at year-end, the debt-equity ratio was at a new all-time low of 0,5 for the regulated business.

Globalisation and sustainable development

It is incumbent upon Eskom to use some of the funds we have generated to contribute to sustainable development on a global scale. We live in an interdependent world. We cannot remain immune from the influence of the global forces at play.

Over the past few years, we have hosted many an international conference in this country. True to this commitment, Eskom is fully poised for the upcoming United Nations World Summit on Sustainable Development to be hosted in South Africa. A major outcome of the World Summit should be the mobilisation of global, political and community co-operation around a global partnership for sustainability.

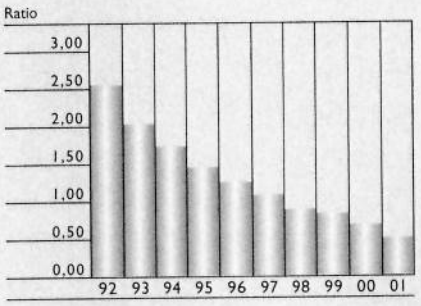
A key thrust is the legacy projects which are intended to underpin the principles of NEPAD (New Partnerships for African Development).

The concept of a legacy for South Africa, Africa and the world is embedded in two approaches. The first is a challenge to the

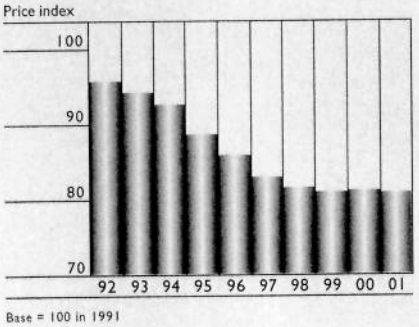
In order to position the organisation for challenges of the future, government plans are well advanced to restructure Eskom through the Eskom Conversion Act.

Summit delegates to factor into the Summit outcome landmark projects to realise policies and objectives, especially in the least developed regions in the world. These projects are proposed to be on a scale similar to Eskom's vision for an interconnected energy grid for Africa. These types of projects would provide the impetus for sustainable development, given the necessary support. The second approach is directly related to the number of participants anticipated to descend on Johannesburg for the Summit. Cynics will point to the extraordinary energy and material footprint of this meeting. A global effort is under way to

Eskom debt:equity



Electricity tariff increase
Deflated by average consumer price index



Base = 100 in 1991

an's statement continued

rojects in South Africa towards a carbon (CO_2) and eutral Summit using some of the core debates at the as a foundation. This would be a global legacy that hat specific projects are implemented across Africa and to be replicated in all developing countries.

responsibility

hrough Eskom Development Foundation, is already in hip with various communities in South Africa, supporting isinesses, community development, rural schools and ation programmes. The Development Foundation assists ities to make things happen at local level. Projects that employment and wealth are up and running. This is a to encourage communities and the nation at large to in a sustainable way into the future.

n Conversion Act

- to position the organisation for these and other es of the future, government plans are well advanced to ure Eskom through the Eskom Conversion Act. The prime e of the Act is to convert Eskom into a company in terms ompanies Act.

board of directors will replace the current structure, m Act will be repealed and the government will be the der.

n benefits that will be achieved with the conversion of nto a company are:

n will be brought in line with a governance model that is by the business sector in general, as well as other public prises.

model will be well understood by the international nunity and will facilitate Eskom's entry into global markets.

- Fiduciary responsibilities will be more clearly defined and at the same time will allow functional responsibilities to take place.
- Eskom will be able to pay dividends to its shareholder. Eskom as it currently exists is unable to pay a dividend to the government, and this will therefore unlock value for the government as our shareholder.

Moreover, Eskom's developmental role will not be neglected.

Global awards

The resounding successes scored by Eskom both at home and abroad did not go unnoticed by the South African and international business communities.

At the Global Energy Awards ceremony held in New York in December 2001, Eskom was presented with the award for Power Company of the Year, and was also a finalist in the categories of:

- Pre-Commercial Technology Development of the Year;
- Most Successful Strategy Shift of the Year; and
- Chief Executive of the Year.

The award was received by our Chief Executive, Thulani Gcabashe.

Eskom received this award for its successful development and implementation of a strategic plan that optimises performance, growth, and an aggressively proactive approach to a radically altered business environment. The judges were looking for a company that had truly integrated its technological and marketing skills to provide a blueprint for the future of a newly reinvented industry.

May Eskom's management continue to be deserving of such accolades.

Future challenges

A future electricity industry beckons on the horizon. The greatest challenge is for Eskom to be prepared by aligning its restructuring programme with the nature of the industry of the future. A new governing structure will also come into being in the midst of these developments. The challenge will be to steer the organisation along the path charted by the present polity – to the proverbial promised land.

Acknowledgements

It is gratifying to note that we have achieved so very much in such a short space of time with the Minister of Public Enterprises, Mr Jeff Radebe. Under his wise guidance, the restructuring of Eskom is well under way.

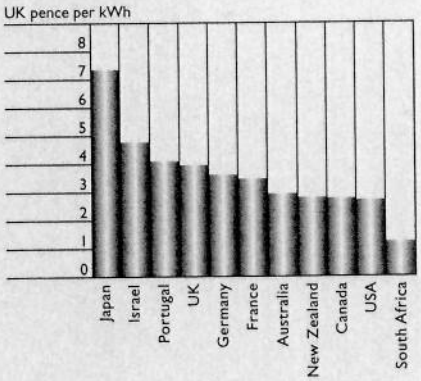
The Minister of Minerals and Energy, Ms Phumzile Mlambo-Ngcuka, has also identified new strategies to restructure the energy industry. We are greatly encouraged by her contribution.

Once again, the wisdom of my colleagues in the Electricity Council has contributed so very much to our efforts over this past year.

Chief Executive Thulani Gcabashe and all members of the Management Board deserve considerable credit for their imaginative leadership and direction. Eskom employees also played their part in ensuring that their organisation remained a leading player in the market and the world. With the industry and the ingenuity of all these role players, Eskom is firmly set on the road to sustainable development.

Reuel J Khoza
Chairman

World industrial electricity prices from a representative utility in each country

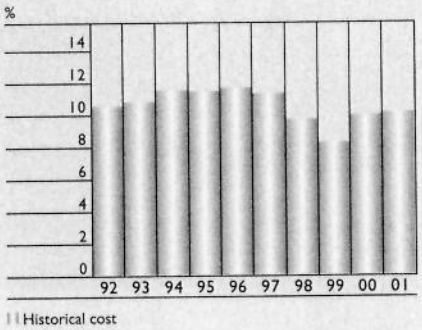


Price per kWh*, including local taxes but excluding recoverable VAT, from a representative utility in each country for a typical 2,5 MW, 40% load factor supply as at **1 January 2001**. Relative purchasing power of the respective currencies is not reflected in these values.

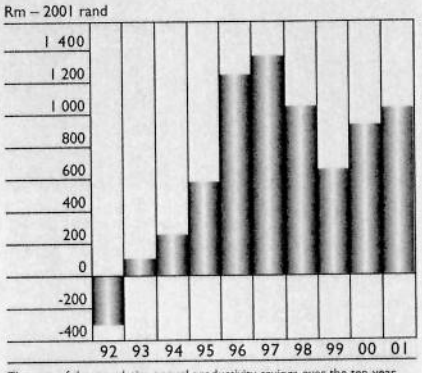
* Converted, using **29 December 2000** exchange rates, to UK pence per kilowatt-hour.

Source: Extract from
© *Electricity Association Services Limited, International Electricity Prices* – Issue 28

Eskom rate of return on total assets

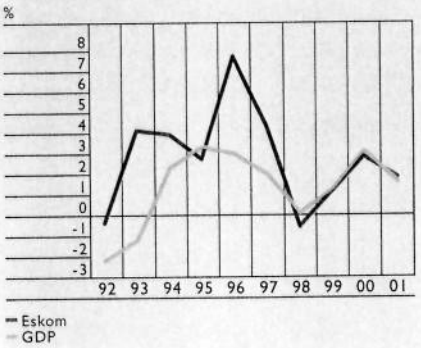


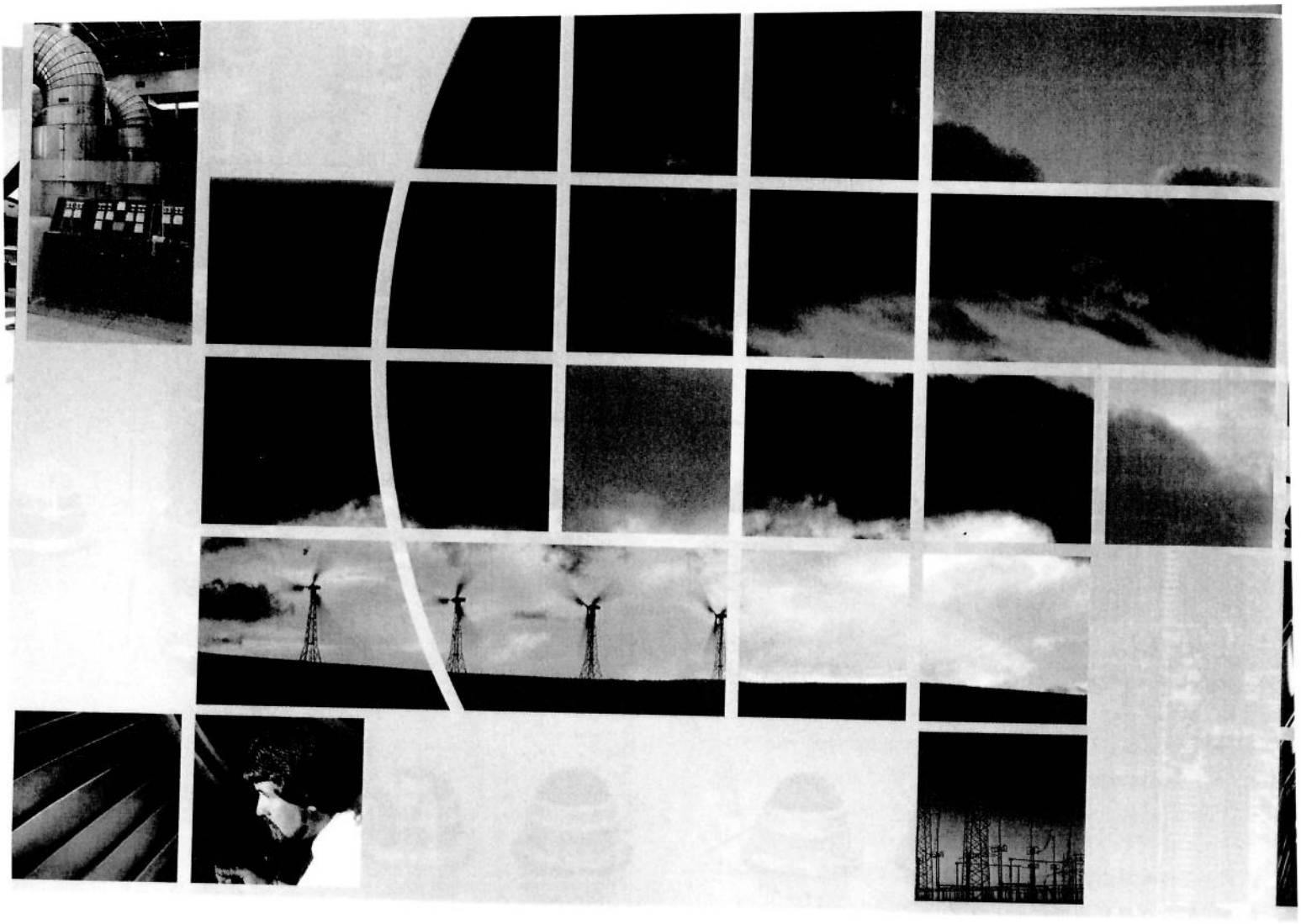
Eskom productivity improvement for all resources



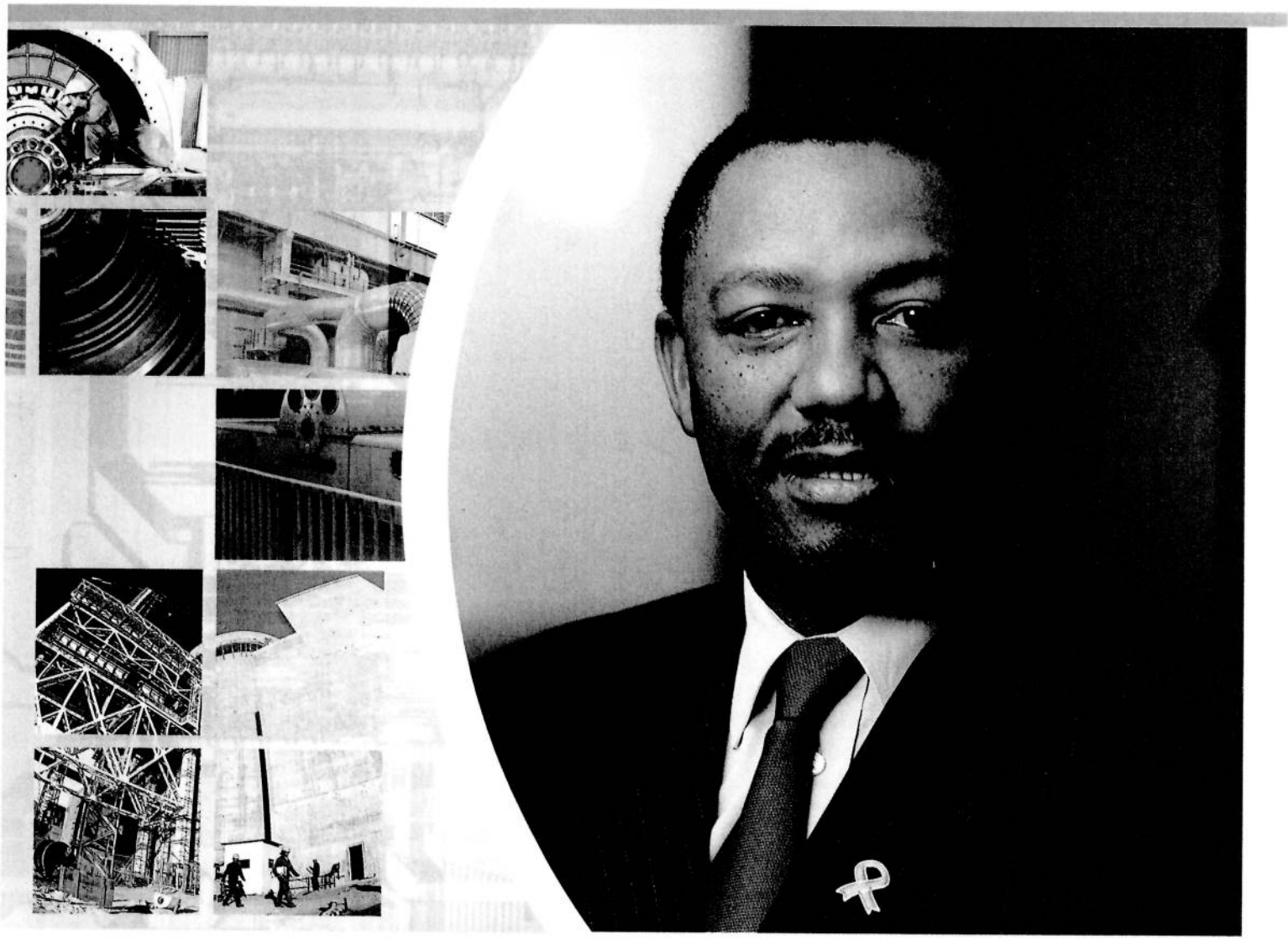
The sum of the cumulative annual productivity savings over the ten-year period amounted to R6 867 million.

Real GDP growth versus Eskom sales (GWh) growth





Energising Africa for sustainable development, expanding globally



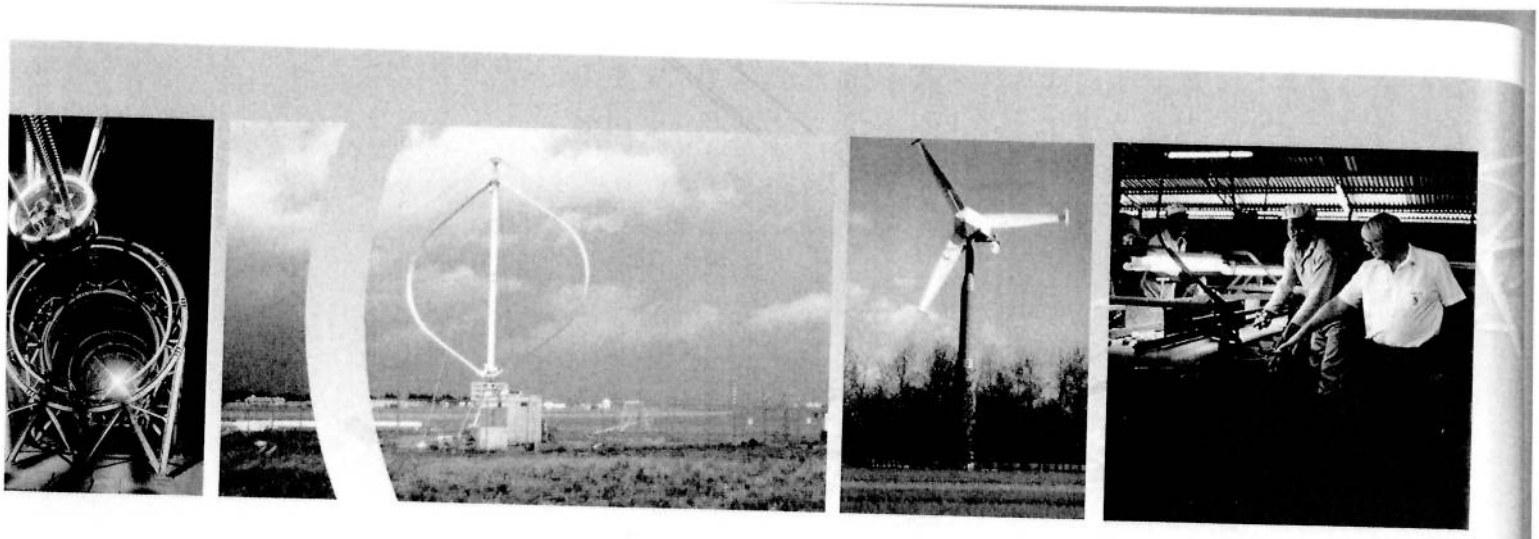
Chief Executive's report

Thulani S Gcabashe

Introduction

As we reflect on the year that has passed, we are aware of the profound global developments that are upon us. South Africa will be hosting the World Summit on Sustainable Development in August and September 2002. Another exciting development is the launch of the New Partnership for Africa's Development (NEPAD), which mobilises the continent towards greater accountability and self-reliance. Through NEPAD, we intend that the institutional and economic relations between the north and south should be re-engineered. The vision espoused in NEPAD is one of sustainable development supported by three broad pillars – economic development, social development and environmental protection.

Eskom has started to play a meaningful role in advancing this vision. We are doing our utmost to energise and revitalise the continent. This is in line with President Mbeki's African Renaissance vision, and in pursuance of his declaration of this century as the "African Century".



We have kept the home fires burning, and we have played our role as an input sector to various economic activities in South Africa. Our service is critical to our industries realising their production targets and efficiencies. It also has a positive impact on the quality of life of our people. By bringing electricity to more people we have enabled them to redirect their energies towards more productive activities.

The past year, once again, saw us achieving numerous successes:

- We connected the three-millionth customer, resident in Thaba 'Nchu in the Free State.
- The availability and reliability of the generating plant once again exceeded international best quartile performance.
- A record peak demand of 30 599 MW was recorded on 24 July 2001.
- The sixth unit of Majuba Power Station was successfully commissioned.

Our employees worked hard to maintain a high quality of supply to our customers at all times, even through the unusual snowfall in KwaZulu-Natal and the rainstorms in the Eastern Cape.

The financial policy

Amid these achievements, Eskom reaffirmed its commitment to a financial policy that ultimately attains market returns through continued productivity improvement and stable, gradual and predictable price increases.

However, changes in the electricity supply industry (ESI) and the anticipated requirement for new generating capacity within the next six years, have made it necessary that the financial policy be reviewed to include the realisation of market-related returns. This will be done in a phased and systematic manner.

Business performance

In our view, a sound financial policy is a prerequisite to excellent business performance. For the past six years Eskom has been the second most admired brand in the country. By their impressive performance in 2001, both the regulated and non-regulated businesses of Eskom remained deserving of this accolade. Eskom continued to be run on sound business principles, and these results bear this out.

The regulated business performed exceptionally well during the year under review, as is reflected by the after-tax net profit of R2,3 billion (R1,8 billion in 2000). Trading conditions were tough, as reflected in the lower than anticipated GDP growth. Our sales were accordingly, negatively impacted – recording a growth of only 1,8%. The declining ferrochrome market was the largest contributor to this outcome. Nonetheless, strong financial management and an ongoing focus on costs and productivity improvement enabled us to compensate for the lower than expected revenue. Furthermore, excellent treasury management reduced our interest and finance charges to the extent that our profit before tax and fair value adjustment was R266 million better than budget and R524 million higher than in 2000.

As a consequence of the sound financial performance, the balance sheet benefited, and together with the debt repayment, our debt-equity ratio improved further to 0,5.

We did experience problems with debt collection in certain areas, but this is currently being addressed through intensive interaction with the communities concerned. We have made adequate provisions against the possibility of non-payment.

Safety

Eskom takes very seriously its responsibilities for the safety of its employees in the workplace. A number of initiatives and interventions have been put in place which are having a positive impact. The number of incidents of both injuries and fatalities reduced again this year and can be ascribed to the management interventions mentioned above.

Numerous public safety awareness campaigns have also been initiated in an endeavour to reduce the number of public contact

incidents. These have taken amongst others the form of national radio and TV campaigns and awareness talks at schools.

Human resources

Eskom remains committed to the development of its employees in pursuit of the achievement of its strategic intent and continuous business performance.

To this end, various initiatives are in place to ensure the sustainability of our human resources. These will be continually aligned to meet future needs.

In 2001 the most critical of these initiatives were:

- Skills management
- Rewards strategy
- HIV/AIDS impact management
- Transformational leadership
- Resilience to change

Wage negotiations in 2001 ended in a strike by the trade unions. The strike was well managed by both parties and lasted only three days. There were no disruptions in services as the parties abided by the Minimum Services Agreement signed by Eskom and its recognised trade unions.

Both Eskom and the trade unions remain committed to maintaining an effective relationship.

New technologies

Some of our achievements can be attributed to a continuous research into new technologies. Eskom's research and development programme is strongly driven by the operational needs of the business. A "technology roadmap" has been designed, taking into account the long-term strategic and environmental drivers of the southern and South African power sector. This is aligned with Eskom's strategic intent to leverage technology and apply it competitively.

In this regard, considerable progress has been made in undertaking a portfolio of research activities aimed at improving technical performance, managing environmental impacts, adding value for customers and developing new business opportunities.

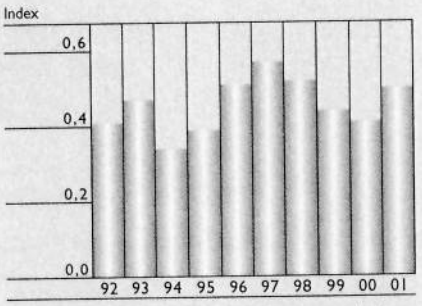
Regarding electricity supply and demand, demand-side management (DSM) research has resulted in a DSM Implementation Programme, to start in 2002. In addition, considerable progress has been made in supply-side technologies.

Eskom's research and development programme is strongly driven by the operational needs of the organisation and its technology roadmap, which incorporates the longer-term strategic and environmental drivers of the southern and South African power sector.

A detailed feasibility study for the PBMR (pebble bed modular reactor) was completed, and good progress was made with the environmental impact assessment and nuclear licensing. A final decision on the building of a PBMR demonstration unit will be made in 2002.

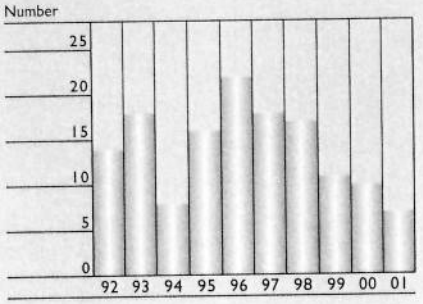
Planning for a large-scale wind demonstration facility has been completed and wind turbines will be erected in 2002, depending on the outcome of the pilot project.

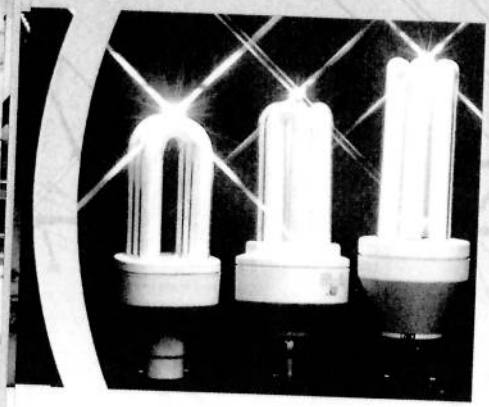
Eskom disabling injury incidence rate

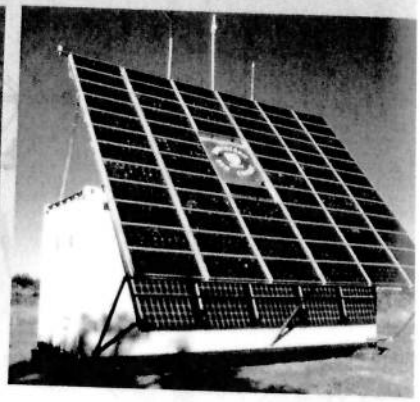


Disabling injury incidence rate (DIIR) expresses the percentage of employees that suffered a disabling injury over a 12-month period.

Eskom fatalities







Good progress has also been made with solar thermal, coal and natural gas technologies.

Unveiling the Roadmap

Eskom has chosen a growth and diversification strategy that will include the delivery of products and services in chosen markets, and in partnership with other utilities.

Our vision has been translated into a broader range of energy product and service offerings, which will be made available to our customers over the next few years. A new Business Model is in the making.

The Eskom Roadmap has been developed to guide the business as it essentially transforms from a vertically integrated utility to a diversified, competitive business operating in global markets. The main focus of the Eskom Roadmap is the optimisation of resources for the effective implementation of our diversification strategy.

EDI/ESI restructuring

For the past couple of years we have been planning and preparing for changes in the electricity supply industry – we are therefore well prepared for a dynamic environment. Eskom is directly impacted by the government's initiatives to restructure state-owned enterprises, the electricity supply industry (ESI), and the electricity distribution industry (EDI).

The incorporation of Eskom as a company in terms of the Eskom Conversion Act has been finalised. This will see Eskom incorporated as a company, with a new Board of Directors. This Board of Directors will replace the Electricity Council. Generation, Transmission and Distribution will be set up as operating divisions of the new Eskom Holdings Limited. The incorporation will not impact on Eskom's agreements with customers.

The government has agreed to an implementation strategy positioning the Generation group for a competitive market and preparing the Transmission group for the future ESI. Activities supporting these initiatives included:

- the creation of Generation clusters with a view to establishing the necessary conditions and capacity for a competitive market
- the restructuring of Transmission to create a wires and system operator business, as well as an independent market operator;
- the Distribution group, working closely with the government and other stakeholders, preparing for integration in a restructured EDI; and
- a simulation process to test a wholesale electricity pricing system (WEPS) that was initiated in 2001 as a first step towards unbundled pricing for qualifying customers. The government, based on the market model of its choice, will phase in the formal introduction of WEPS and contestability to the qualifying customers.

Globalisation and world-class performance

The organisation is mindful of the developments taking place within a globalising world. Eskom's strategic intent envisages, among other things, pre-eminence in Africa as well as global stature. World-class, sustainable businesses have multinational markets and operations, and this is the path Eskom has chosen.

At home, Eskom actively supports the structured liberalisation of its markets to promote fair competition and alignment with exemplary international environmental and social practices.

Eskom seeks to optimise operational efficiencies and has embarked on an internal restructuring programme. New generation clusters have been created to stimulate competition. It is also actively involved in the restructuring of the EDI and participates in the southern African power pool. Eskom's excellent plant and network performance is world class and at present is one of the lowest-cost producers of electricity in the world, and yet has maintained its financial health. Over time it will gradually move towards market-related returns thus integrating with the global village.

Eskom

Beyond our borders, Eskom through Eskom Enterprises, is rapidly becoming a preferred partner of many businesses in many countries. This is mainly due to diversification into a variety of energy and related products and services, building on a reputation for engineering and operational excellence and having an understanding of conditions in developing economies.

A new brand strategy and a new brand identity

While Eskom has been engaging in all these endeavours, it has been exploring a new identity to carry it into the future. To ensure that the value of the Eskom brand is retained and maximised, the organisation adopted a monolithic brand strategy in 2001. This strategy will see Eskom divisions presenting one visual interface and a common set of brand values to all Eskom markets.

In support of Eskom's strategic intent and the monolithic brand strategy, the organisation's corporate identity was also revised during 2001, and the new logo will be implemented during 2002. The new corporate identity, together with a set of brand muscles, will inform all future communication strategies and will underpin the organisation's desired market image, i.e.

- we are African, and proudly so;
- we are world-class, globally competitive leaders;
- we are ready to embrace partnerships and strong alliances;
- we are agile, quick to identify and explore opportunities; and
- we are driven by ingenuity with integrity.

Our challenge is to keep running the business effectively while at the same time concentrating on delivering our product in the most cost-efficient manner.

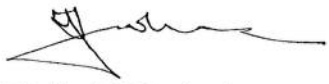
I believe we can venture forth to meet the challenges of the day and the call of the future with confidence, because our values and capabilities will see us through.

Acknowledgements

In conclusion, I would like to thank the Chairman and members of the Electricity Council for their invaluable guidance and support during the year. I also congratulate the Chairman on becoming the 12th recipient of the Leadership in Practice (LIP) award from the Unisa School of Business Leadership. This was in recognition of his visionary leadership in positioning Eskom as an internationally acclaimed enterprise, bringing electricity and economic development to the African continent. We are all proud of these achievements. My thanks also go to the board of the National Electricity Regulator (NER) for the continued spirit of co-operation between Eskom and the NER. My colleagues on the Management Board were remarkable in their dedication and determination to make Eskom a winning organisation this year. My fellow directors and I are also immensely appreciative of all the efforts of Eskom employees and their commitment and determination to keeping us ahead. Their combined efforts have demonstrated the truth in the expression that "people are the soul of a business".

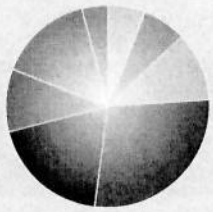
Our vision has been translated into a broader range of energy product and service offerings, which will be made available to our customers over the next few years.

Together, we shall travel the road of sustainable development.



Thulani S Gcabashe
Chief Executive

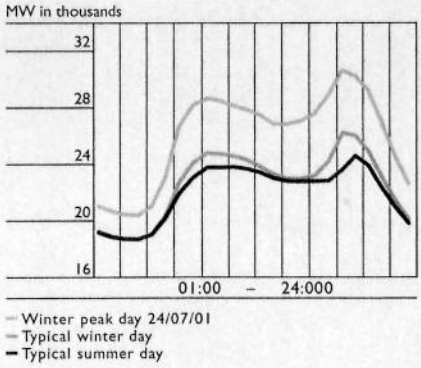
Eskom research programmes expressed as a percentage of total research cost



Research management	6%
Future technology	7%
Environmental	11%
Transmission and distribution related	28%
Generation related	19%
Business and market technology	10%
Integrated energy systems	15%
End use	4%

Excludes cost spent on PBMR

Electricity demand patterns



Consolidated annual financial statements

Eskom

for the year ended 31 Decembe

Contents

Currency of financial statements

The financial statements are expressed in South African rand (R).
The following are approximate values of R1,00 at 31 December for selected currencies:

	2001	2000
French franc	**0,61**	0,93
German mark	**0,18**	0,28
Pound sterling	**0,06**	0,09
Swiss franc	**0,14**	0,22
Japanese yen	**10,17**	15,17
US dollar	**0,08**	0,13
Euro	**0,09**	0,14

Approval of annual financial statements

Eskom

The group annual financial statements for the year ended 31 December 2001, set out on pages 31 to 123, have been approved by the Management Board and Electricity Council and signed on their behalf on 28 February 2002 by

Reuel J Khoza
Chairman of the
Electricity Council

Thulani S Gcabashe
Chief Executive of Eskom,
Chairman of the Management Board
and Member of the Electricity Council

Report of the independent auditors

To the Minister of Public Enterprises

We have audited the annual financial statements and the group annual financial statements of Eskom set out on pages 31 to 121 for the year ended 31 December 2001. The group financial statements are the responsibility of Eskom's accounting authority. Our responsibility is to express an opinion on these financial statements based on our audit.

Scope

We conducted our audit in accordance with Statements of South African Auditing Standards issued by the South African Institute of Chartered Accountants. These standards require that we plan and perform the audit to obtain reasonable assurance that the financial statements are free of material misstatement. The audit was also planned and performed to obtain reasonable assurance that our duties in terms of sections 60 and 61 of the Public Finance Management Act of 1999, as amended, have been complied with. An audit includes:

- examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements;
- assessing the accounting principles used and significant estimates made by management; and
- evaluating the overall financial statement presentation.

We believe that our audit provides a reasonable basis for our opinion.

Audit opinion

In our opinion:

- the financial statements fairly present, in all material respects, the financial position of Eskom and the group at 31 December 2001, and the results of their operations and cash flows for the year then ended, in accordance with South African Statements of Generally Accepted Accounting Practice issued by the Accounting Practices Board of The South African Institute of Chartered Accountants and International Accounting Standards issued by the International Accounting Standards Board applied on a basis consistent with that of the previous year; and in the manner required by the applicable sections of the Companies Act of 1973 in South Africa, the Eskom Act of 1987 and the Public Finance Management Act of 1999, as amended;
- the performance information of Eskom furnished in terms of section 55(2)(a) of the Public Finance Management Act, of 1999, as amended, fairly presents in all material respects Eskom's performance for the year ended 31 December 2001 against predetermined objectives, and is, where applicable, consistent with that of the preceding year; and
- the transactions of Eskom and the group that had come to our attention during the course of our audit were in all material respects in accordance with mandatory functions of Eskom, as determined by law or otherwise.

We have examined the inflation-adjusted financial information set out on pages 122 to 123. In our opinion, the statements have been properly prepared on the basis set out in the notes thereto.

Deloitte & Touche

Deloitte & Touche
Registered Accountants and Auditors
Chartered Accountants (SA)

KPMG Inc

KPMG Inc
Registered Accountants and Auditors
Chartered Accountants (SA)

Nkonki Sizwe Ntsaluba

Nkonki Sizwe Ntsaluba
Registered Accountants and Auditors
Chartered Accountants (SA)

Johannesburg
28 February 2002

eport of the Audit Committee

) Eskom

ort of the Audit Committee in terms of regulations 27(1)(7)(b) and (c) of the Public Finance Management Act of 1999, nended.

ecution of its duties during the past financial year, the Audit Committee has:
ewed the procedures for identifying business risks and controlling their impact on Eskom;
ewed Eskom's policies and procedures for detecting and preventing fraud;
ewed the operational effectiveness of Eskom's policies, systems and procedures;
sidered whether the independence, objectives, organisation, staffing plans, financial budgets, audit plans and standing of the internal audit tion provide adequate support to enable the Committee to meet its objectives;
ewed the results of the work performed by the internal audit function regarding financial reporting, corporate governance, internal control any significant investigations and management response;
ewed the co-ordination between the internal audit function and the external auditors and dealt with any issues of material or significant ute or concern;
ewed such significant transactions not directly related to Eskom's normal business as the Committee deemed appropriate;
ewed such significant cases of employee conflicts of interest, misconduct or fraud, or any other unethical activity by employees or Eskom;
ewed the controls over significant financial and certain operational risks;
ewed any other relevant matters referred to it by the Management Board;
ewed the quality of financial information;
ewed the annual report and financial statements taken as a whole to ensure they present a balanced and understandable assessment of position, performance and prospects of Eskom and the group;
ewed the external auditors' report;
ussed problems and reservations arising from the external audit, and any matters the external auditors wished to discuss (in the absence, re requested by the Committee, of executive directors and any other person who is not a member of the Committee);
ewed the external auditors' management letter and management's response; and
ewed the credibility, independence and objectivity of the external auditors, taking into account their audit fees.

e weaknesses were identified in internal controls, corrective action has been taken to eliminate or reduce the concomitant risks. dingly, in our opinion, the internal controls of Eskom operated effectively throughout the year under review to ensure Eskom's assets safeguarded, proper accounting records were maintained and resources were utilised efficiently.

ving our review of the group annual financial statements for the year ended 31 December 2001, we are of the opinion that, in all material cts, they comply with the relevant provisions of the Public Finance Management Act of 1999, as amended, and Statements of South African rally Accepted Accounting Practice and International Accounting Standards, and that they fairly present the results of the operations, cash ınd financial position of Eskom and the group. We therefore recommend the financial statements as submitted be approved.

ehalf of the Audit Committee

llongwane
man
bruary 2002

atement by Corporate Counsel

atisfied that Eskom has in all material respects complied with its statutory obligations for the year ended 31 December 2001.

lam
orate Counsel
bruary 2002

Directors' report

Eskom

Introduction

This report addresses the performance of the Eskom group and includes relevant statutory information in terms of the Public Finance Management Act, Act 1 of 1999, as amended by Act 29 of 1999 (PFMA). Although Eskom is not yet incorporated as a company, Eskom's reporting also complies with the Companies Act, Act 61 of 1973. In addition to ensuring compliance with the relevant legislation, Eskom's focus is to ensure good governance practices by making disclosure that is material, relevant and clear to all stakeholders. As evident in this report, Eskom strives towards a balance of financial, technical, social and environmental performance.

The Electricity Council and the Management Board fulfil the role of directors and the Electricity Council acts as the accounting authority in terms of the PFMA. The directors have pleasure in presenting their report and the audited group financial statements for the year ended 31 December 2001. In the opinion of the directors, the financial statements fairly present the financial position of Eskom and the group at 31 December 2001 and the results of its operations and cash flow information for the year then ended.

The directors have no reason to believe that the business as a whole and as presently constituted will not be a going concern in the year ahead. They are also of the opinion that Eskom complies, in all significant respects, with the provisions of the PFMA.

Eskom is listed as a Schedule 2 public entity in terms of the PFMA. The Act also applies to subsidiaries and entities under the ownership control of Eskom as they are also classified as Schedule 2 public entities.

Function and objectives of the business

Nature of the business

Eskom generates, transmits and distributes electricity to industrial, mining, commercial, agricultural and residential customers, and to redistributors. Eskom is operationally regulated in terms of licences granted by the National Electricity Regulator (NER) in terms of the Electricity Act, Act 41 of 1987 and the National Nuclear Regulator. Through Eskom Enterprises (Pty) Limited, Eskom also pursues non-regulated businesses in the energy and related services sector.

The objective of Eskom is to provide the means and systems by which the electricity needs of the consumer may be satisfied in the most cost-effective manner, subject to resource constraints and the national interest, and to perform such other functions as may be assigned to it by or under the Eskom Act, Act 40 of 1987, or the Electricity Act.

The core businesses of the main subsidiaries include non-regulated electricity supply industry activities, the provision of electricity supply and related services outside South Africa, the granting of home loans to employees and the management and insurance of the relevant risks of Eskom, and social investment initiatives.

Objectives

Regulated business (Eskom)

A medium-term, three-year business plan setting out Eskom's strategic direction, as well as critical key indicators to manage the business effectively, has been developed in consultation with key stakeholders, using input from all business units. The Electricity Council and the Management Board approve the business plan including the predetermined strategic and operational objectives. Key performance indicators linked to these objectives are included in the budget, as well as in the draft shareholder compact with the government.

Annual budgets are prepared based on the strategic direction set out in the medium-term business plan. The preliminary authorised 2001 budget, which included key performance indicators (KPIs), was approved at the end of 2000 and finalised early in 2001 as a result of certain information arising from the 2000 final results. The KPIs are used to measure performance against the budget and are reported to the Electricity Council and the Management Board on a monthly basis in the Eskom and line group (divisional) business reports. Eskom's objectives are included in the line group objectives with relevant KPIs, and are communicated and measured at all appropriate staff levels. These objectives and indicators are discussed in detail in this directors' report.

Non-regulated business (Eskom Enterprises (Pty) Limited)

A medium-term business plan setting out the strategic direction of the Eskom Enterprises group, as well as critical KPIs to manage the business effectively, was developed in consultation with key stakeholders using input from all divisions and subsidiaries. The Eskom Electricity Council and the Eskom Enterprises Board approved the medium-term business plan, including the annual budget. The objectives, which include KPIs for the year, have been included in a shareholder compact with Eskom and the performance against the KPIs is discussed in this directors' report.

Other subsidiaries

Other subsidiaries also prepare business plans that incorporate objectives and KPIs that are approved by their respective boards of directors.

High-level performance for the year

An overview of the Eskom group business performance against the objectives is contained in the table on the following page. The detailed performance is described in the remainder of the report.

m group high-level performance

Objectives	Key performance indicators	Regulated – Eskom Targets	Regulated – Eskom Performance results
Financial			
Financial performance			
• Maintain financial viability over the long term	• Profit after interest before fair value adjustment, Rm	R3 342m	Exceeded – R3 608m
	• Net profit for the year after tax, Rm	R2 122m	Exceeded – R2 272m
	• Debt-equity ratio	<0,6	Ratio – 0,5
	• Return on equity, %	n/a	n/a
	• Sales (GWh) growth, %	2,4%	Growth – 1,8%
	• Sales (Rm) growth, %	6,1%	Growth – 6,0%
	• Solvency margin	n/a	n/a
• Operating and capital resources are used economically, efficiently and effectively	• Productivity improvement for the year, %	2,5%	Improvement – 0,5%
	• Total electricity cost, R/MWh	R120,08	Better than target – R118,98
	• Operating costs as a percentage of net premium income, %	n/a	n/a
• Maintain financial independence	• Financial independence maintained; resources accessed without recourse to the government	Yes	Sustained
• Reduce the real cost of claims by 20% between 2001 and 2005	• Cumulative real reduction, %	n/a	n/a
Black economic empowerment			
• Encourage black and women enterprise development	• Procurement expenditure and supply of services, both capital and operating, on black economic empowerment, Rm	R2 689m[1] including VAT	Exceeded – R3 636m including VAT (spent R1 139m with Eyesizwe Coal)
	• Develop a process that supports women economic empowerment	n/a	Policy framework developed and approved
	• Procurement expenditure on discretionary purchases, %	n/a	n/a
Maintain good governance			
• Improve discipline, governance and accountability to support the strategic intent and new business model	• Shareholder compact approved and implemented	Yes	Ready for signature
	• Effective governance structures and processes implemented	Yes	In place
	• Internal controls are in place, and they are effective	Yes	No material breakdown occurred during period under review
	• Training provided on Public Finance Management Act	Yes	Ongoing

les R913m for coal purchases from Eyesizwe Coal (Pty) Limited.

Non-regulated – Eskom Enterprises		Eskom Finance Company		Escap	
Targets	Performance results	Targets	Performance results	Targets	Performance results
R103m	Exceeded – R130m	R26m	Achieved – R26m	n/a	n/a
R71m	Exceeded – R108m	R17m	Achieved – R18m	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
10%	Exceeded – 11%	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
15%	Achieved – 15%	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
2,8%	Negative – 0,8%	n/a	n/a	>40%	Exceeded – 79%
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
				<15%	Exceeded – 11,5%
Yes	Sustained	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	4% reduction per annum over 5 years	Exceeded – 8,6%
R132m including VAT	Exceeded – R313m including VAT	R14m (61% of controllable expenses)	Spent – R5m (59% of controllable expenses)	n/a	n/a
n/a	n/a	n/a	n/a		
n/a	n/a	n/a	n/a	>25%	Exceeded – 80%
Yes	In place	Yes	To be updated and formalised	Yes	To be updated and formalised
Yes	In place	Yes	In place	Yes	In place
Yes	No material breakdown occurred during period under review	Yes	No material breakdown occurred during period under review	Yes	No material breakdown occurred during period under review
Yes	Ongoing	Yes	Ongoing	Yes	Ongoing

Eskom group high-level performance (continued)

	Objectives	Key performance indicators	Regulated – Eskom Targets	Regulated – Eskom Performance results
1.4	**Information systems**			
	• Align the information systems strategy with the changing Eskom business model and the implementation thereof	• Conclusion of enabling agreement and related service level agreements between Eskom Regulated and Ariviakom (Pty) Ltd	Second quarter 2001	In place
		• Review and align information system strategy to support transformation	December 2001	Strategy aligned
	• Implement an integrated and co-ordinated eBusiness strategy	• Introduce e-business initiatives and implement an e-business program office to support these initiatives	December 2001	In progress
1.5	**Research, development and demonstration**			
	• Improve business processes by further research and development	• Amount spent on research, development and demonstration, Rm	R146m	Spent – R284m
		• Value added, return on investment	5:1	Achieved – estimated 5:1
		• Major pilot projects planned and/or completed	Yes	Major pilot projects planned and completed
1.6	**Restructure for growth**			
	• Restructure Eskom to support the strategic intent	• Completion of incorporation	Yes	Ongoing
		• Holding and subsidiary company structure defined and implemented	Yes	Ongoing
		• Prepare for the separation of Distribution into Regional Electricity Distributors	Yes	Ongoing
		• Position Generation for competition	Yes	Ongoing
		• Prepare Transmission for the future electricity industry	Yes	Ongoing
		• All implications of restructuring and transformation on human resources related issues considered and action plans, processes and guidelines developed	Yes	Ongoing
		• Appropriate communication with stakeholders, in particular negotiations with lenders	Yes	Ongoing
	• Broaden the revenue mix through diversification of markets, products and services	• Eskom external sales, %	n/a	n/a
		• Eskom Enterprises annual investment in new business, Rm	n/a	n/a

Non-regulated – Eskom Enterprises		Eskom Finance Company		Escap	
Targets	Performance results	Targets	Performance results	Targets	Performance results
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
35%	Achieved – 35%	n/a	n/a	n/a	n/a
R500m	Invested – R387m	n/a	n/a	n/a	n/a

Eskom group high-level performance (continued)

Objectives	Key performance indicators	Targets	Regulated – Eskom Performance results
2. Customer			
2.1 Customer management			
• Improve the perception of customers regarding Eskom	• Customer satisfaction levels, PreCare and MaxiCare indicators	8,00	Achieved – 8,03
• Improve the perception of customers	• EFC customer feedback surveys	n/a	n/a
	• Feedback from service level agreement reviews	n/a	n/a
2.2 Electricity tariff increases			
• Price changes over the long term are gradual, predictable and stable, and make provision for new capacity investment in 2006	• Real annual average price increase, %	2002 increase above expected CPI	Achieved
2.3 Technical performance			
• Maintain excellent technical performance	• Sustainability index consisting of 20 relevant measures, %	80,0% (Minimum threshold)	Exceeded – 82,4%
	• Generation plant performance		
	– Energy availability factor, %	90,0%	Exceeded – 92,0%
	– Unplanned automatic grid separations, number	1,7	Better than target – 1,5
	• Distribution system performance		
	Distribution quality of supply:		
	– Waveform quality, voltage regulation	Compliance with NER limit in 95,0% of sites measured	Achieved – 95,8%
	– Disturbance performance, Type Z dips		Achieved – 98,5%
	• Transmission system performance		
	Supply interruptions:		
	– With severity greater than or equal to one system minute, number	0	Not achieved – 2
	– System minutes, minutes per year	6,2	Not achieved – 17,5[1]

1. *A force majeur interruption occurred in KwaZulu-Natal in September resulting in the loss of 6,8 system minutes. In October, 5,7 system minutes were lost caused by a fault trip at Koeberg Power Station resulting in the isolation of the Western Cape transmission grid as no alternative generation plant was available.*

Non-regulated – Eskom Enterprises		Eskom Finance Company		Escap	
Targets	Performance results	Targets	Performance results	Targets	Performance results
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	>70%	Feedback – 81%	n/a	n/a
n/a	n/a	n/a	n/a	Feedback rated good	82% rated good
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a

Eskom group high-level performance (continued)

	Objectives	Key performance indicators	Targets	Regulated – Eskom Performance results
2.4	**Safety**			
	• Improve safety performance	• Disabling injury incidence rate, less than target	0,40	Not achieved – 0,5[1]
		• Work-related fatalities, number	Striving for 0. Less than previous years, with a downward trend	Actual – 7 (2000: 10)
		• Public fatalities, number		Not achieved – 40 (2000: 29)
2.5	**Electrification**			
	• Electrify an additional 600 000 homes between 2000 and the end of 2002	• Homes electrified during 2001, number	2001: 186 370	Exceeded – 209 535
3.	**Sustainable environment**			
	• Monitor Eskom's impact on the environment	Indicators, amongst others, the following:		
		• Reported legal contraventions counted in the sustainability index, number	0	Reported 2 incidents
		• Specific water consumption, ℓ/kWh sent out	≤1,26	Achieved – 1,26
		• Relative particulate emissions, kg/MWh sent out	0,33	Better than target – 0,31
		• Radiation exposure, mSv per annum	0,25	Better than target – 0,0007
	• Implement environmental management systems in compliance with SABS ISO 14001 at group level by the end of 2002	• Group-specific action plans approved and in process of implementation	Yes	On track

1. *Non-achievement mainly due to historical incidents of hearing loss now being reported.*

Non-regulated – Eskom Enterprises		Eskom Finance Company		Escap	
Targets	Performance results	Targets	Performance results	Targets	Performance results
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
Yes	On track	n/a	n/a	n/a	n/a

Eskom group high-level performance (continued)

Objectives	Key performance indicators	Regulated – Eskom Targets	Regulated – Eskom Performance results
4. Human resources alignment			
• Align human resources management to support the strategic intent	• Implement a human resources sustainability index, %	Eskom-wide reporting in place	Operational, needs refinement
	• The necessary skills for current and future needs are managed and retained	Succession plans in place	Ongoing
	• Reward systems updated, developed and implemented	In place	In progress
	• Transformational leadership development programme successfully implemented	In place	Ongoing
	• Human resources policies (remuneration, learning, employment, industrial relations, wellness) reviewed and updated	Updated policies	Policies reviewed and updated
	• Skills levy refund, %	Recovered maximum of 70%	Recovered – 100% of grants
• Maintain consultative processes and structures	• Consultative processes and structures in place	In place	In place
• Managing the impact of HIV/AIDS	• Response strategies to HIV/AIDS surveillance and financial impact studies findings implemented	In place	Ongoing
• Implement employment equity	• Black management, professional and supervisory staff employed at 31 December, %	Above 50,7%	Exceeded – 53,1%
	• Women management, professional and supervisory staff employed at 31 December, %	20%	Exceeded – 21,7%
	• Develop and implement a disability-friendly policy	n/a	Policy approved, implementation in progress
• Ensure that people are ready for change (business resilience)	• Leadership empowered to manage change	Ongoing	Ongoing

Non-regulated – Eskom Enterprises		Eskom Finance Company		Escap	
Targets	Performance results	Targets	Performance results	Targets	Performance results
n/a	n/a	n/a	n/a	n/a	n/a
Succession plans in place	Ongoing	In place	Ongoing	n/a	n/a
In place	In progress	n/a	n/a	n/a	n/a
n/a	n/a	In place	Ongoing	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
Recovered maximum of 70% In place	Recovered – 100% of grants In place	Recovered maximum of 70% In place	Recovered – 100% of grants In place	n/a	n/a
In place	Ongoing	In place	Ongoing	n/a	n/a
				n/a	n/a
42%	Exceeded – 43%	50%	Exceeded – 52%	n/a	n/a
13%	Achieved – 13%	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a

Eskom

continued

1. Financial

1.1 Financial performance

1.1.1 High-level performance of regulated business (Eskom)

The financial performance for the year can be summarised as follows:

	Budget 2001	Actual 2001	Actual 2000
Sales, GWh			
Total external sales	**184 353**	**181 185**	177 924
International	**6 228**	**6 996**	4 095
Commodity-linked pricing agreements	**14 630**	**13 797**	20 785
Other distribution	**163 495**	**160 392**	153 044
External sales (GWh) growth, %	**3,6**[1]	**1,8**	2,8
External sales (Rm) growth, %	**8,1**[1]	**6,0**	9,3
Revenue, Rm			
External revenue	**25 439**	**24 938**	23 532
International	**503**	**645**	400
Commodity-linked pricing agreements	**1 730**	**1 668**	2 260
Other distribution	**23 206**	**22 625**	20 872
Internal revenue	**40**	**45**	37
Total revenue	**25 479**	**24 983**	23 569
Other results			
Operating expenditure, Rm	**19 597**	**18 791**	17 441
Interest income, Rm	**n/a**[2]	**1 570**	1 310
Interest expenditure, Rm	**n/a**[2]	**4 154**	4 354
Average total cost of electricity, rand per MWh[3]	**120,08**	**118,98**	114,41
Profit after interest before fair value adjustment on historical cost basis, Rm	**3 342**	**3 608**	3 084
Net fair value (loss)/gain on financial instruments, Rm	**n/a**[4]	**(182)**	129
Net profit for the year after tax on historical cost basis, Rm	**2 122**	**2 272**	1 759
Net loss on inflation-adjusted basis, Rm	**n/a**[4]	**(2 523)**	(1 490)
Debt-equity ratio	**<0,60**	**0,50**	0,68
Real (inflation-adjusted) rate of return, %	**n/a**[4]	**1,16**	2,45

A sound performance by the regulated business resulted in the profit after interest before fair value adjustment on a historical basis of R3 608 million. This excellent result was achieved in difficult trading conditions which negatively impacted sales volumes, resulting in sales growth of 1,8%. However, strong financial management and an ongoing focus on productivity improvement enabled the organisation largely to negate the negative impact of the low sales growth.

The lower sales growth was impacted by the slower global economic growth, lower growth in the South African economy and the falling demand for ferrochrome. To an extent, Eskom sales were also negatively impacted by increased generation by independent power producers.

1. *Budgeted sales (GWh) growth of 3,6% and sales (Rm) growth of 8,1% on 2000 base, but adjusted to a target of 2,4% and 6,1% respectively, in line with more realistic and accurate information.*
2. *Net interest income and expenditure budget: R2 540 million.*
3. *Based on external sales.*
4. *No targets set.*

Operating costs per unit sold were contained within consumer inflation despite the negative impact of the high medical aid inflation which impacts not only the current contribution to medical aids, but also Eskom's provision for post-retirement medical aid benefits.

As the balance sheet strengthened and the debt reduced, so Eskom received the benefit of lower interest and finance charges. Proactive and prudent action taken resulted in Eskom reaping the benefits in the volatile financial markets during the last quarter of 2001.

In terms of International Accounting Standards, Eskom applies fair values to certain financial instruments, and as a consequence a charge to the income statement of R182 million arose. A deferred tax charge of R1 154 million has been debited to the income statement. This resulted in a net profit after tax and after the fair value adjustment of R2 272 million.

Valuation of assets

Although cross-subsidisation exists between certain customer categories depending on the electricity consumption levels of customers, geographical location and voltage supply levels, Eskom fully recovers all costs of supplying electricity to its customer base as a whole and earns a positive return on assets. On this basis, the directors believe that no adjustment is required to the value of assets relating to any particular customer category.

The directors believe that there is no need to raise a provision for impairment of certain classes of property, plant and equipment in the current year. Depending on how the electricity distribution industry (EDI) restructuring takes place, it might be necessary for Eskom to raise a provision for impairment in future years.

Revenue management

The trade receivables at year-end are summarised as follows:

	Actual 2001 Rm	Actual 2000 Rm
Trade receivables		
Local receivables	**2 606**	2 667
Soweto, takeovers and suspense accounts	**4 360**	4 687
Other	**1 251**	1 573
	3 109	3 114
International receivables	**169**	180
Provision for doubtful debts, including interest	**(1 923)**	(2 200)
Doubtful and bad debts		
	169	234
Local trade receivables	**195**	203
International trade receivables	**(39)**	(10)
Other receivables	**13**	41

To assist local authorities with bulk debt accumulated prior to 30 June 1995, Eskom in the previous years offered local authorities a dispensation whereby these arrears would be written off provided current accounts were paid in full. This has had a very positive impact on payment levels. Steps are being taken against those local authorities that have not met their commitments.

Management of credit risk

Credit risk is minimised through obtaining deposits and guarantees from customers and a process of moving towards cash upfront through prepaid vendors. The book debts for large and small power customers are reviewed regularly for overdue accounts. Written warnings are issued on overdue accounts. All customers that are overdue and for whom no payment is forthcoming are highlighted systematically for disconnection.

Failure to settle the overdue debt results in the customer being disconnected. Eskom follows a cost-effective legal process to recover all long-outstanding debt.

1.1.2 High-level performance of subsidiaries

The discussion below covers all the significant Eskom subsidiaries.

Eskom Enterprises (Pty) Limited

Eskom Enterprises was registered in 1999 to accommodate all the non-regulated energy-related activities of Eskom in South Africa and all its other energy-related activities outside South Africa.

Eskom Enterprises (Pty) Limited and its subsidiaries, associate companies and joint ventures, leverage the competencies and facilities of Eskom and focus on the following lines of business:

- Infrastructure development, which includes asset creation, project management, consulting services, and research and development
- Management contracts for energy business operations, operating, maintenance and refurbishment contracts and the acquisition of operating entities
- Specialised energy utility services and equity investment in related services
- Related strategic businesses, including telecommunications and information technology
- Primary energy provision

The operating results of the Eskom Enterprises group for the year are summarised as follows:

	Target 2001 Rm	**Actual 2001 Rm**	Actual 2000 Rm
Revenue	**2 377**	**2 371**	2 068
Eskom	**1 546**	**1 553**	1 501
Non-Eskom	**831**	**818**	567
Profit before interest	**105**	**89**	32
Interest	**(2)**	**16**	(2)
Net profit after interest before fair value gain	**103**	**105**	30
Fair value gain on financial instruments	**–**	**25**	–
Net profit before taxation	**103**	**130**	30
Taxation	**(32)**	**(22)**	(13)
Net profit for the year after tax	**71**	**108**	17
Return on equity on historical basis, %	**10**	**11**	8
Sales (Rm) growth, %	**15**	**15**	28
Non-Eskom sales as percentage of total sales, %	**35**	**35**	27
Annual investment in new business, Rm	**500**	**387**	45

The group achieved a satisfactory before-tax return on equity of 11% against the target of 10%. The main factors affecting the return are the lower margin on sales to Eskom which currently comprises the bulk of the sales, and the low return on the investment in Ariviakom (Pty) Limited.

Eskom Finance Company (Pty) Limited

Eskom Finance Company (Pty) Limited grants home loans to the Eskom group employees at favourable interest rates to enable employees to have access to accommodation.

The operating results for the year are summarised as follows:

	Budget 2001 Rm	Actual 2001 Rm	Actual 2000 Rm
Interest income	358	336	337
Interest expenditure	(325)	(303)	(315)
Net interest income	33	33	22
Sundry income less administration costs	(7)	(7)	(9)
Profit before tax	26	26	13
Income tax expense	(9)	(8)	–
Net profit for the year after tax	17	18	13

During 2001, the total value added to Eskom and its employees was R42 million (2000: R41 million). The value added represents the total cost savings and the benefits enjoyed by Eskom and its employees by engaging Eskom Finance Company (Pty) Limited in home ownership administration and the granting of home loans to Eskom employees.

Escap Limited

Escap Limited was created in 1993 to reduce Eskom's overall cost of risk management and insurance. It formed part of Eskom's risk financing strategy to formalise the insurance function and act as a vehicle within which formal reserves and additional insurance capacity could be created.

The operating results for the year are summarised as follows:

	Budget 2001 Rm	Actual 2001 Rm	Actual 2000 Rm
Premium income	396	386	363
Reinsurance premium expenditure	(38)	(23)	(25)
Net premium income	358	363	338
Insurance expenditure	(427)	(369)	(376)
Underwriting loss	(69)	(6)	(38)
Investment income	72	83	65
Income tax expense	(1)	(33)	(3)
Net profit for the year after tax	2	44	24
Solvency margin, %	>40	79	46
Operating costs as percentage of net premium income, %	<15	11,5	11,3
Cumulative real reduction in costs of claims, %	4,0	8,6	n/a[1]

Escap has negotiated a loss ratio protection policy with Gallium Insurance Company Limited, a wholly owned insurance subsidiary of Eskom, to limit the value of claims for which Escap will be liable.

In terms of the Insurance Act of 1998, short-term insurers are required to maintain a solvency ratio of at least 15%. The Financial Services Board investigates short-term insurers whose solvency ratio is lower than 25%. Escap solvency ratio was 79% at the end of 2001.

1. *Reduction in real costs of claims by 20% between 2001 and 2005.*

Gallium Insurance Company Limited

Gallium Insurance Company Limited, a wholly owned insurance subsidiary of Eskom incorporated in the Isle of Man, was established in 1995 to provide capacity to Eskom and Escap for catastrophe risks and risks for which insurance cover is not available. Gallium retains risks for its net account, which is prudent in relation to its financial resources, and purchases reinsurance as appropriate from international markets.

The operating results for the year are summarised as follows:

	Budget 2001 Rm	Actual 2001 Rm	Actual 2000 Rm
Premium income	**175**	**175**	198
Reinsurance premium expenditure	**(12)**	**(39)**	(23)
Net premium income	**163**	**136**	175
Insurance expenditure	**(127)**	**(85)**	(123)
Commission and other income	**37**	**54**	45
Underwriting profit	**73**	**105**	97
Investment income	**25**	**26**	15
Net profit for the year	**98**	**131**	112

The Eskom Development Foundation

Eskom's corporate social investment initiatives are carried out through the Eskom Development Foundation, a section 21 company.

The Development Foundation carried out its social investment programmes through community development, small business development, electrification of schools and clinics, education development and donations. Particular emphasis was put on the development of rural communities, women and disabled people. Job creation initiatives were undertaken through small business development support.

The following amounts were expensed during 2001:

	Budget 2001 Rm	Actual 2001 Rm	Actual 2000 Rm
Electrification of schools and clinics	**8,5**	**9,6**	13,9
Community development	**10,0**	**9,1**	22,7
Small business development	**10,0**	**6,0**	8,7
Eskom Mathematics and Science College Education Programme	**5,0**	**5,3**	4,0
Donations	**3,5**	**3,4**	5,9
South African AIDS Vaccine Initiative (SAAVI)	**15,0**	**15,0**	15,0
Total	**52,0**	**48,4**	70,2

The electrification of schools and clinics is discussed in more detail in the section on electrification on page 64.

Community development

The community development division focuses on skills development and education. During 2001 there was an increased focus on project monitoring to ensure the sustainability of projects, as well as on issues such as quality training by service providers to ensure effective delivery of project work. This was particularly relevant to the community projects in the rural areas. A total of 63 community development projects received grants in the nine provinces.

Small business development

The small business development programme focused on promoting incentives that would lead to the establishment of manufacturing, tourism and agricultural processing businesses with export potential. A proactive strategy has been adopted that seeks to maximise the equity of owners by contributing towards capital equipment to improve the creditworthiness and cash flow viability of the businesses assisted. As part of the women empowerment initiative started in 2000, 325 business women have been trained. In addition, 570 entrepreneurs have been trained.

Eskom Mathematics and Science College Education Programme

The Mathematics and Science College Education Programme was adopted as the education strategy for community development. The focus is on teacher development, capacity building for school governing bodies and school management. There has also been a focus on direct learner intervention to address the current crisis of grade 12 mathematics and science results. A total of 11 colleges of education participated in the programme directed at leadership development as well as the second chance programme for grade 12 learners.

Donations

The focus is on philanthropic donations and disaster relief, mainly to welfare and other organisations that deal with HIV/AIDS, caring for the aged, hospices and other social initiatives. During the year 174 philanthropic donations including one disaster relief donation for the Western Cape were approved.

SAAVI

The Development Foundation supported SAAVI in its search for an HIV/AIDS vaccine. SAAVI, co-ordinated by the Medical Research Council, was set up to develop and test an affordable and effective HIV/AIDS vaccine for southern Africa. An amount of R15 million (2000: R15 million) was made available to SAAVI as a special project during 2001, of which R7,5 million was drawn by SAAVI.

1.1.3 Productivity performance

Productivity information provides key insights into Eskom's business performance by analysing the change in net income between two accounting periods in terms of the impact of productivity, inflation (price recovery) and growth.

Productivity improvement occurs through the more economic, efficient and effective use of all operating and capital resources, which includes coal, employees and assets. Price recovery is the difference between electricity price increases and inflationary changes in the prices of Eskom's resources. Growth represents the change in net income when resource quantities and prices change at the same rate as electricity sales volumes and prices. Broadly speaking, productivity improvement creates additional wealth and thereby drives long-term business performance. Price recovery, on the other hand, indicates how wealth is distributed to the organisation's stakeholders who include customers, employees and investors.

The change in net profit between 2000 and 2001 was as follows:

	2001 Rm	2000 Rm
Net profit for the year before fair value adjustment	**3 608**	3 084
Adjustment and provisions not impacting on overall performance	**512**	(141)
Adjusted net profit for the year before fair value adjustment	**4 120**	2 943
Adjusted net profit for previous year before fair value adjustment	**3 584**	2 168
Change in profit	**536**	775
Attributable to:		
Net productivity improvement	**107**	428
Productivity (deterioration)/improvement before restructuring	**(21)**	20
Productivity improvement due to restructuring	**128**	408
Price overrecovery	**214**	144
Wealth reinvested in the business	**321**	572
Growth	**215**	203
Total	**536**	775

The adjusted net profit before fair value adjustment for 2000 has been increased by R641 million to take account of changes in the depreciation period for generation plant to ensure that 2000 and 2001 are on a comparable basis.

The sustainable improvement in productivity continues to be a key focus area for the business. This is reflected by the improvement of R107 million during the year with positive contributions from primary energy, operating manpower, capital and a reduction in voluntary employee separation costs. The main reason for the negative performance of R21 million before the impact of restructuring, is attributable to Eskom's commitment to maintain its quality of supply through increased maintenance, the electrification initiative and increased expenditure on the customer interface.

The result also shows that Eskom overrecovered on its prices during the year by R214 million or one percentage point. This meant that Eskom's effective average electricity price increase was marginally higher than the impact of inflation on the business. One of the reasons for this was the low inflation rate for the business mainly due to a reduction in interest and finance charges for the year compared to 2000.

The result also indicates that Eskom increased further the improvements achieved in previous years thereby demonstrating its commitment to improving performance on a sustainable basis. The improvement achieved was the result of better use of existing capacity and infrastructure through increased sales. Over the past ten years, Eskom's cumulative productivity saving, when expressed in 2001 rand, amounted to R6,9 billion.

Subsequent reporting to the Management Board and Electricity Council will involve feedback on the process, and on the progress in managing the top 20 major risks for the entire organisation.

An integrated risk management directive was approved in 2001 detailing the strategy and process to be followed by groups and main subsidiaries. A full communication, education and training strategy will be compiled and implemented during 2002.

Sensitivity to financial market forces

Eskom remained appropriately hedged against all known currency risks during the year thereby minimising any potential negative impact as a consequence of the declining rand. Eskom was also well positioned to capitalise on declining interest rates and the risk was hedged out during the year at favourable levels before the interest rate cycle turned.

1.2 Black economic empowerment (BEE)

As part of its procurement policies and managerial support programme, Eskom supports small, medium and micro enterprises (SMMEs) and large black businesses by the procurement and supply of goods and services from black businesses, thereby contributing to black economic empowerment. An amount of R3 636 million (2000: R1 867 million) was spent in this regard, against a target of R2 689 million, all amounts inclusive of VAT. This included an amount of R1 139 million purchased from Eyesizwe Coal (Pty) Limited, a black empowerment colliery.

A policy framework has been developed and approved by the Management Board for the economic empowerment of women, through support and development from a procurement perspective.

During 2001, Eskom Enterprises spent R313 million (2000: R91 million) against a target of R132 million, all amounts inclusive of VAT, on the procurement and supply of goods and services from black businesses in South Africa. This includes an amount of R89 million spent on the fibre optic network, which is a one-off contract.

1.3 Maintain good governance

Shareholder compact

The shareholder compact has been negotiated with the government and is now finalised. It currently awaits signature by the Minister of Public Enterprises on behalf of the government as shareholder. It will serve to promote and encourage good governance practices within Eskom, and also provide an effective framework to guide the relationship between Eskom and the government as shareholder. In terms of the compact, the shareholder communicates its objectives and expectations regarding the performance of Eskom and confirms a mandate from the shareholder to the Electricity Council, i.e. board of directors, after incorporation. The compact is not intended to interfere in any way with company law principles. The normal relationship between the shareholder and the board will be preserved as the control and management of Eskom vests in the board. In giving effect to these principles, the compact intends to clarify the role and responsibilities of the government as shareholder by setting out the circumstances when shareholder approval is required, when the shareholder needs to be consulted and the remaining areas where the board is duly empowered to direct the organisation.

Governance structures and processes

Effective governance structures and processes have been implemented in Eskom and its subsidiaries in line with the King Report on Corporate Governance, and in terms of the PFMA and the Eskom Act. The behaviour of employees and management is governed in terms of the Business Conduct Policy. Additional information on corporate governance and ethics appears on pages 10 to 15 of this report.

Public Finance Management Act (PFMA)

During the year the necessary approval, as required by the PFMA, was received from the Minister of Finance to allow the Treasury department to carry on with its trading operations. As allowed for under the Act, application was made to the Department of Public Enterprises (DPE) for exemption under section 54(2) regarding significant transactions. The application is currently under consideration.

mplementation, training and awareness

Good progress has been made with the systematic programme of training within the major line groups, as well as the subsidiaries, to create wareness and train all staff regarding the application of the PFMA. Concerns and risk areas have been evaluated and guidance given. Where

necessary, changes were made to reporting systems and policies and procedures, including guidance on the reporting of irregular, fruitless and wasteful expenditure. It is envisaged that the process will be of an ongoing nature. Non-compliance with the Act is dealt with in terms of Eskom's existing disciplinary process.

Losses through criminal conduct and irregular, fruitless and wasteful expenditure

Processes have been put in place to report on material losses caused by criminal conduct and irregular, fruitless and wasteful expenditure, as required by the Act. There were no material losses reported for the Eskom group during 2001.

Losses of prepaid electricity revenue have occurred primarily due to theft by vendors and theft of electricity by the public. Eskom is actively engaged in pursuing criminal charges against certain vendors and certain individuals. There is an ongoing programme to improve processes and controls over the prepaid electricity sales. In addition, the prepaid operation project was initiated during 2001 to prevent further losses. Good progress has been made in this regard.

Eskom Enterprises and other subsidiaries

Eskom Enterprises complies in all significant respects with the provisions of the Act. The Eskom Enterprises board of directors, as the accounting authority, complies with the various duties and responsibilities as prescribed by the Act. An awareness programme, run by Eskom, has been used to communicate the implications of the Act. Training has been provided to other subsidiaries during the year to educate and create an awareness amongst its employees.

1.4 Information systems

Eskom recognises the need to manage its information in an integrated manner. The various aspects relating to information management have been placed under the responsibility of the executive director of Resources and Strategy to facilitate integration. There is a need to balance transparency and openness towards stakeholders, with confidentiality and protection of intellectual assets.

Information systems strategy

Enabling agreement and service level agreements

The enabling agreement and related service level agreements between Eskom and Ariviakom (Pty) Limited have been concluded and used in guiding the business relationship during 2001. Technical performance of Eskom's information technology infrastructure was sustained, despite the fact that penalty clauses were not enforced on Ariviakom (Pty) Limited during 2001. KPIs will be enhanced to monitor and manage the relationship in this regard in the future.

Information systems strategy

The existing information systems strategy was reviewed and modified to address the impending transformation of the business. The new information strategy is built on the strategic pillars of architecture, governance, business continuity emphasising information security, e-business, skills and outsourcing, and business systems and processes.

Information management

Business systems and processes

Key initiatives under business systems and processes included:

Customer Receipts and Payments System (CRP)

Policies and procedures implemented in 2000 to address the shortcomings in financial reporting and the reconciliation process between the financial systems (SAP/R3) and CRP were effective in 2001. A decision has been taken to replace the in-house developed billing system with an off-the-shelf product from SPL WorldGroup BV. Implementation will start in 2002.

Human resources information system (HoRISon)

Approval has been obtained for the implementation of a totally integrated human resources system during 2002.

SAP upgrade

Group business cases to upgrade the current version of SAP/R3 used for financial and commercial management were approved. Implementation will commence in 2002 with final implementation in 2003.

Access to Information Act

Compliance with the Access to Information Act, Act 2 of 2000, has been viewed as an opportunity to better co-ordinate the flow of information into and out of the organisation. It is therefore not seen as merely a legal compliance issue, but rather an opportunity to deal with information management in a holistic and integrated manner. The Act requires the publication of an information manual by August 2002. Eskom is in the process of developing the required manual. In terms of the Act, Eskom appointed the executive director of Resources and Strategy as the deputy information officer to co-ordinate and oversee information management in Eskom.

1.5. Research, development and demonstration

Investment in technical research, development and demonstration projects amounted to R284 million (2000: R184 million), which is 1,1% (2000: 0,8%) of total revenue. It is estimated that in 2001, research provided a return of 5:1 in terms of avoided costs and direct cost reductions. In addition, non-quantifiable benefits in social, environmental and customer satisfaction were realised.

During 2001 research, development and demonstration activities resulted in a number of major outputs. Some of these include the completion of the wind energy feasibility study and the virtual power station study as part of the demand-side management initiative. Smaller projects with exciting potential include the introduction of a human performance portfolio that addressed the interface between man and machine to improve performance, and the unique development of a guided flow conveyor transfer system, which has resulted in cost savings on coal transport at power stations.

The ongoing insulator research, which has focused on in-service inspections to ensure integrity of insulators, has positioned Eskom globally as the knowledge has been exported to other utilities. Some of the research outputs and guidelines produced this year have been adopted by international standard organisations. The development of the Siamese Cable Drum technique resulted in major benefits with respect to the installation of fibre optic networks where reliability has been increased and installation time and maintenance reduced.

Joint collaborative research has continued to expand both locally and internationally, with the development of close ties with the United States Electric Power Research Institute (EPRI) and the German-based VGB Powertech e.V. and the expansion of local joint initiatives with both South African industry and academic institutions. Ongoing research with EPRI, in the area of dynamic thermal circuit rating, has produced valuable returns both from a technological and economic perspective. Together with local partner Council for Scientific and Industrial Research (CSIR), Eskom developed Corocam, a commercial daylight corona detection camera for use on power systems, which allows corona to be detected during daytime inspections, thereby increasing safety and efficiency.

Environmental research, undertaken at both an operational and strategic level, aims to address the environmental needs of all groups, and plays an important role in long-term strategic planning and decision-making. Key projects included mitigating the impact of sociable weavers nesting on distribution poles. This has successfully enabled the relocation of nests, thereby preventing the occurrence of fires and improving the quality of supply. The conclusion of the electromechanical optimisation of electrostatic precipitators study resulted in improvements and the compilation of relevant guidelines for future operational implementation. In order to apply the environmental decision support framework, a life cycle assessment of coal-fired generation was completed and three case studies were assessed.

The South African Centre for Essential Community Services, established by Eskom and EPRI, aims to identify, develop and implement technologies that improve the quality of life in South African communities. Key projects include water filtration using the slow sand water filtration process, demonstration of the reverse osmosis technology at the Ga-Mokwathi Village, the Solar Water Heatbarrow and the sterilisation of medical waste.

Demonstration

Eskom's strategic planning takes into account research and development relating to the identification of demonstration plants. A demonstration and pilots co-ordination committee was constituted which prioritises demonstration and pilot plants relevant to Eskom's business strategy. Environmental impact assessments (EIAs) are integrated into business planning processes and investment decisions using the Department of Environmental Affairs and Tourism EIA Guideline as the basis.

Wind

The plant design for Eskom's experimental wind farm was completed in 2001 with two sites being proposed in the Western Cape. Approval has been obtained for the first phase of the environmental assessment process (the scoping study). The second phase, the plan of study for the environmental impact report, is in progress.

Solar

Pre-feasibility studies for a proposed large-scale solar thermal plant have been completed. The environmental assessment process is being followed for the Dish Stirling Solar System project, which is proposed to be erected in Johannesburg.

Biomass

A System Johannsen Gasifier has been constructed and is currently under demonstration in Johannesburg.

Nuclear

The Pebble Bed Modular Reactor (PBMR) development project progressed well during 2001. The draft detailed feasibility report was completed and has been the subject of intensive internal and external review. Based upon these reviews, opportunities for optimising the design are being reviewed and specific technological challenges are in the process of being overcome. The EIA and licensing activities also progressed well, although delays in the EIA process have resulted in programme delays of approximately three months, with a risk of further delays having been identified by the authorities. Once current technical and economic assessments are complete, the decision regarding the construction of the demonstration plant will be finalised by Eskom and other stakeholders.

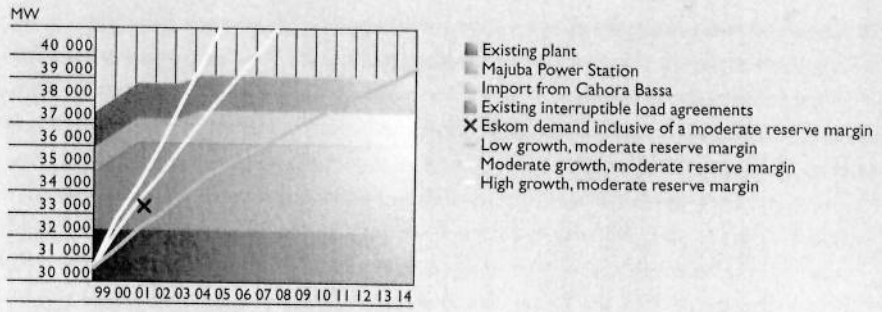
Capacity planning and management

Eskom's Integrated Strategic Electricity Planning (ISEP) process is intended to provide strategic projections of supply-side and demand-side options to be implemented to meet long-term load forecasts based on Eskom's obligation to supply electricity. It provides the framework for Eskom to investigate a wide range of new supply-side and demand-side technologies with a view to optimising investments and returns.

The ISEP8 plan provides many economically and environmentally acceptable options for flexible and timely decision-making. The focus is to provide as robust a plan as possible, taking into account the objectives of Eskom and the shareholder. Specific attention was given to those uncertainties that would influence decisions on the timing and mix of new capacity.

The uncertainty in long-term planning is illustrated in the graph below by the differences in the timing of implementation, as new demand-side or new supply-side options are given over the demand forecast range. The demand forecast is increased by a reserve margin to take account of risk in terms of plant outage, weather conditions and drought. This can be placed into context by noting that the recorded annual peak demand during 2001 was 30 599 MW.

Timeframe for new supply-side and demand-side options



With moderate growth in demand for electricity and a moderate reserve margin, new supply-side options are required for commercial service from 2006 and new demand-side options have to be commissioned during 2002. The higher energy demand experienced during 2001 has resulted in a decrease in the system operating reserve margin from 22% in 2000 to 18% in 2001, against an optimal level of 12%.

Eskom is continuing to use this planning window of opportunity to research and generate data on a variety of options, such as the return to service of Eskom mothballed plant, conventional pulverised fuel plant, new gas-fired plant, greenfield fluidised bed combustion boiler technology, new nuclear plant (PBMR), new pumped storage schemes and regional power options.

Studies for two proposed pumped storage schemes have been undertaken and environmental records of decision have been obtained for both sites. However, an appeal has been lodged against one of the sites and Eskom is currently awaiting a decision by the Minister of Environmental Affairs and Tourism. A pre-feasibility study is currently being conducted for a third possible scheme.

Environmental issues continue to be integrated into the ISEP process using the strategic environmental assessment approach that was initiated during 2000. Focus was on environmental life cycle assessments, site-specific studies, water-related issues and climate change considerations.

1.6 Restructure for growth

Incorporation of Eskom

The Eskom Conversion Act, Act 13 of 2001, will convert Eskom into a company in terms of the Companies Act. The incorporation will become effective on a date to be determined by the Minister by proclamation in the Government Gazette. It is anticipated that the conversion of Eskom into a company will be effective from March 2002. The implications of this conversion are as follows:

- The Electricity Council and the Management Board will be replaced by a board of directors.
- The government will be Eskom's sole shareholder (previously the owner).
- The Eskom Act will be repealed.

It is important to note that the conversion is being done in a way that converts Eskom without a physical transfer of assets, rights and obligations from one entity to another. The conversion does not affect the following:

- The current business operations
- The rights and conditions of service of employees
- Contracts entered into with Eskom
- The rights and obligations of suppliers and other third parties
- The ownership of Eskom's assets and the tax values thereof
- Loans and guarantees issued and received

Company structure and strategies

An investigation has been embarked upon to ascertain what the best model and structure for Eskom would be, taking into account government policy and the need to position Eskom appropriately in a changing global environment. The envisaged structure includes the creation of Eskom Holdings Limited as a holding company, and the creation of each of its main line groups as operating divisions and ultimately possibly as wholly-owned subsidiaries of Eskom when deemed appropriate.

Strategic and investment planning

A long-term strategic roadmap aimed at achieving Eskom's strategic intent of being Africa's pre-eminent energy and related services business of global stature, was developed in 2001. This included the definition of the future business model, the development of strategies aimed at closing the gap between current reality and future business aspirations taking into account appropriate environmental considerations. Detailed strategies developed include:

- Investment strategy for business diversification and support of the strategic intent
- Supply-side and demand-side investment strategy aimed at optimising future investments in power plant and electricity use including the creation of a renewable energy strategy as a key line of business within the next ten years
- Brand strategy to align the Eskom brand with the future business model

- Human resource strategy to ensure Eskom has the skills to meet future business needs
- Technology strategy to define the role of technology in the future business model

Electricity industry restructuring

Distribution

During 2001 the industry restructuring initiative continued to focus on the electricity distribution industry (EDI) under the direction of the Department of Minerals and Energy (DME).

Following the Electricity Distribution Industry Restructuring Committee's initial recommendation to Cabinet in late 2000, a revised blueprint was submitted in 2001 and, based on these recommendations, Cabinet made the following key decisions:

- The thrust of the EDI restructuring blueprint was endorsed.
- The number of six regional electricity distributors was approved both as the end-state model of the EDI and the policy direction of the government.
- Eskom is expected to play a central role in the restructuring process.
- The EDI restructuring plan was approved, including time frames, establishment of the EDI holding company and transitional mechanisms that will allow Eskom and the strong municipalities to assist the weaker municipal distributors.

The EDI task team is finalising ringfencing proposals in preparation for the separation of Distribution from Eskom, as required by the blueprint. The task team will continue striving to assist the government in implementing a world-class EDI that will enhance the quality of life and economic success in South Africa by working with all stakeholders in a cost-effective and timely manner.

Positioning Generation and Transmission for competition

The government has also indicated its intention to restructure the transmission and generation sectors of the electricity supply industry (ESI) in order to introduce competition into the generation sector, to facilitate black economic empowerment and to encourage foreign direct investment and strategic equity participation. Eskom is preparing itself for transformation by considering various models that will ensure open access to the transmission network and an effective power market, while maintaining quality of supply standards.

Generation

The Generation group is continuing to focus on world-class performance, consistent with commercial objectives, and exposing its management teams to learning opportunities in the areas of trading, flexible supply options and governance, that will equip managers to operate in the restructured ESI. Trading and bidding via clusters of power stations have now become part of the everyday business and are currently being refined.

Transmission

Eskom, in consultation with various stakeholders and utilities, looked at how best to position the Transmission group to handle the changing ESI. The model that will evolve is one that ensures open access to the network and the independence of Transmission, which would work in the South African environment to ensure excellent customer satisfaction, sound technical performance and the maximisation of resources.

Communication with stakeholders

Ongoing discussions with key stakeholders on the restructuring of the ESI continued during the year. This culminated in a workshop during October 2001 involving the government (represented by the DME, the Department of Public Enterprises and the Department of Provincial and Local Government) as well as the NER, Eskom and the South African Local Government Association.

There is common understanding on the objectives of the industry restructuring, the key components thereof and the best way to take the process forward. Some issues, however, still need to be resolved and discussions on these will be ongoing. In the meantime, Eskom will continue with preparing for the restructuring of the organisation within the policy framework of the government as the process unfolds.

In addition, communication with investors and rating agencies has taken place and further communication on events will continue.

2. Customer

2.1 Customer management

Eskom uses a number of statistical perception measurement surveys, conducted by an independent organisation, that measure customer satisfaction with the service delivered.

MaxiCare[1] and PreCare[2] surveys rated Eskom's overall service quality at 8,03 (2000: 8,19) for MaxiCare and 8,51 (2000: 8,90) for PreCare against the target of 8,00. It indicated a decline in perceived customer service between March and April 2001. The specific aspects rated lower by the agriculture, commercial and industrial customer categories related to quality of supply and outage management.

As reported previously, an enhanced MaxiCare[3] and PreCare[3] survey was implemented in 2000. Results are summarised by means of the total quality index (TQI) which gives a broader overall indication of the quality of service delivered and takes both the importance and perceived performance of the individual service aspects measured into account. This enhanced measure is more reflective of the absolute measure of customer satisfaction, whereas the MaxiCare and PreCare reflect the trend on a monthly basis on a single aspect of overall service quality. A TQI of 100% indicates that all expectations of customers have been met. The average TQI for enhanced MaxiCare for all customer categories was 78% (2000: 70%). The TQI for enhanced PreCare, which measures residential customers, was 73% (2000: 76%).

The TQI figure indicates that there has been a marked improvement in performance against service issues rated important by the customers in the agriculture, industry and commercial segments. This may appear contrary to the MaxiCare survey which relates to one single question "Overall service quality" on a scale of one to ten, whereas the Enhanced MaxiCare averages many more detailed questions rating performance against importance and is more consistent with customer forum feedback.

Another recently introduced measure, KeyCare[4] TQI, which measures the perceptions of key customers, reflected 104% (2000: 108%).

A new CallCare[5] survey measures the satisfaction of customers that phoned the call centre in the previous week. Call volumes to the seven call centres increased to 2 399 227 (2000: 2 021 450) with the call centre service level 12-month moving window improving to 67% (2000: 51%) of calls answered in 30 seconds. Customers rated the call centre service delivery as 7,8 and the follow-up service delivery at 6,2.

Specific actions were implemented during 2001 to improve customer service. These included a new bill format, bills available in the customer's choice of any of the eleven official languages and an internet site where all business with Eskom can be done online. Furthermore, an increased number of customer forums were held; an increased number of newsletters delivered with the Eskom bill; thousands more payment points available via EasyPay and the Post Office; and the use of cellphone SMS for outage as well as disconnect notifications. There was also a continued focus on staff training.

2.2 Electricity tariff increases

Average price increase

During 2001, the NER approved a general price increase of 6,2 % for 2002 (2001: 5,2%) which is anticipated to be marginally above the expected rate of inflation for 2002 and the actual CPI of 5,7% for 2001. Eskom regards the real price increase approved by the NER as a positive step towards more realistic and cost-effective electricity prices into the future, which will ultimately result in market-related returns sufficient to attract new investors into the industry. Whilst this decision was a difficult one for the NER, it reflected an awareness of the challenges that face not only Eskom, but all players in the ESI into the future.

1. *Monthly survey of customers that have been receiving electricity for longer than six months on a scale of one to ten.*
2. *Monthly survey of new customers or customers with revised contracts on a scale of one to ten.*
3. *Annual survey where retail customers rate both importance and perceived performance on detailed service issues where results are the TQI percentage against importance.*
4. *Annual survey where key customers rate both importance and perceived performance on detailed service issues where results are the TQI percentage against importance.*
5. *Quarterly survey where customers who have phoned the call centre are asked to rate the various aspects of the experience on a scale of one to ten.*

Regulation

The relationship between Eskom and the NER continues to develop into a constructive one. Significant progress was made with regard t certain principles applicable to price regulation.

The Regulatory Bill, which is being developed under the auspices of the DME, was circulated for public comment during the latter part of 2001 Eskom has used this opportunity to contribute to a very important piece of legislation that will shape the regulatory framework for the ESI Some progress has also been made between the NER and the Competition Commission in addressing their respective roles and jurisdictior with regard to competition matters in the ESI.

Despite a difficult year and significant challenges, steady progress has been made towards putting in place certain key building blocks for an effective regulatory framework.

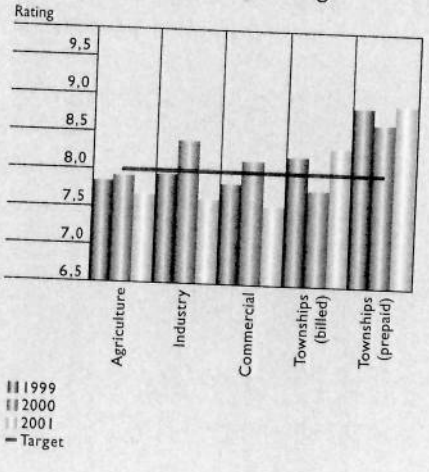
Tariff restructuring

Eskom's fifth retail pricing plan was issued in 2001 at a time of major uncertainty in the ESI. The strategic direction developed during 1999 is still valid in the longer term. The short-term pricing strategy required by the NER is to put all pricing restructuring driven by the cost reflectiveness objective on hold. However, because of the restructuring of the EDI, Eskom continued with pricing developments aimed at aligning existing tariffs and the introduction of new tariffs where needed.

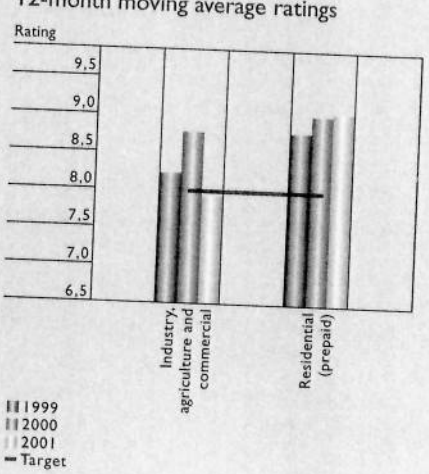
The most significant change in the Wholesale Electricity Pricing System (WEPS) time-of-use tariffs has been the lengthening of the summer season to nine months, with the winter season being shortened to three months from June to August. None of the customers approached to participate in a WEPS pilot project accepted the invitation. As an alternative to a pilot project, dummy bills have been calculated for selected customers in order to determine the impact that WEPS will have on their accounts, once promulgated.

Eskom continued to phase out the high-energy block of the Landrate tariff to enable all customers to be billed on a standard rate per unit consumption.

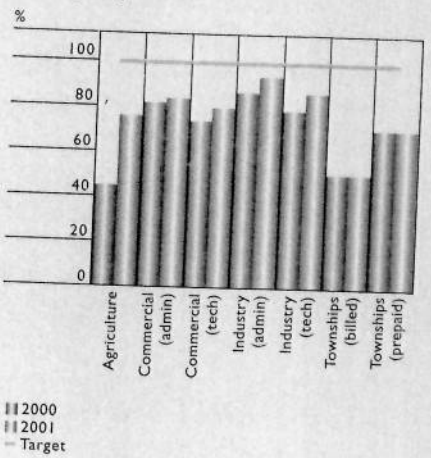
MaxiCare overall service quality
12-month moving average ratings



PreCare overall service quality
12-month moving average ratings



Enhanced MaxiCare –
total quality index



2.3 Technical performance

Operational sustainability index

The purpose of the operational sustainability index is to reflect overall technical performance and is used to balance low-cost production against long-term reliability. The index, through its monitoring and alarm system, assists management to achieve the sustainable long-term technical smooth running of Eskom. The sustainability index combines 20 (2000: 19) weighted indicators into a composite index. To enhance the effectiveness of the index an additional measure, unplanned capability loss factor, was introduced in 2001. These measures include the key indicators discussed below as well as specifically refined measures. The sustainability index is revised annually to ensure that appropriate indicators are measured, and that standards and alarms are realistic. International and regional trends are monitored and, where appropriate, included in the index. Senior management performance is evaluated against this index.

The score achieved for 2001 was 82,4% (2000: 80,9%) against a minimum threshold of 80,0%. The index rose steadily for the first half of the year until it reached an all-time high of 92,3% in June. Improvements were experienced in nuclear performance, transmission customer average interruption duration index, transmission and distribution quality of supply, and MaxiCare. In the second half of the year the score dropped again as a result of the deterioration in system minutes lost, transmission voltage waveform, distribution contracted customer voltage dips and MaxiCare, all of which still continue to receive management attention.

In the Generation group where availability, reliability, long-term plant health and nuclear safety are measured, a score on the sustainability index of 100% (2000: 94%) was achieved. In the Transmission group the score was 86% (2000: 94%) for measures that included system stability, plant health, interruption performance and quality of supply. Two major incidents this year (one of which was initiated by abnormally severe weather conditions) were mainly responsible for the score loss. Both incidents have been thoroughly investigated and actions taken to address any shortcomings that were found. The Distribution group measures quality of supply and customer perception and achieved a score of 60% (2000: 57%). The safety and environmental measures, which are the responsibility of all groups, scored 59% and 100% (2000: 50% and 100%) respectively.

Generation plant performance

Generation energy availability factor (EAF)

The EAF measures plant availability and takes into account energy losses not under control of plant management, as well as internal non-engineering constraints. During 2001, a performance of 92,0% (2000: 92,1%) was achieved against a target of 90,0%.

Plant unit capability factor (UCF)

The Generation group continued to maintain exceptional plant performance in 2001 by achieving a UCF of 92,5% (2000: 92,8%) against a target of 91%.

Unplanned automatic grid separations (UAGS)

UAGS, a EURELECTRIC base-load plant indicator, is a measure of the reliability of service provided to the electrical grid, and measures the number of supply interruptions per operating period (7 000 hours). During 2001, the reliability of the Eskom generating units was 1,5 (2000: 1,4) interruptions against a target of 1,7.

Distribution system performance

Distribution system performance is measured by network performance and power quality indicators. Network performance indicators measure the way interruptions are managed, while power quality indicators measure the technical quality of electricity supplied to customers.

Distribution implemented a new system, called the Network Equipment Performance System, to capture and quantify the impact of interruptions on customers. The system became operational in 2001 although certain problems still need to be resolved.

National network performance indicators in place include power quality indicators, voltage waveform indicators (regulation, unbalance, harmonics) and voltage disturbance indicators (dips).

The performance for 2001 for these power quality indicators was:

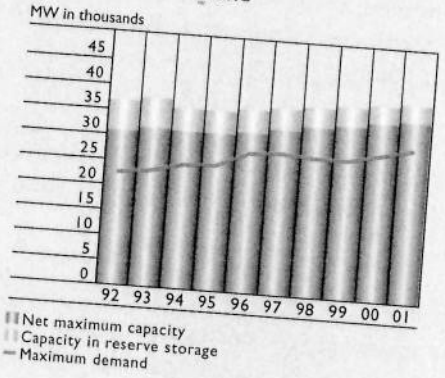
		Target 2001 %	Actual 2001 %	Actua 200 %
Waveform quality indicators	Regulation[1]	95,0	95,8	95,8
	Unbalance[2]	95,0	99,1	99,1
	Harmonics[3]	95,0	100,0	100,0
Disturbance indicators	Type X dips[4]	95,0	92,6	86,8
	Type S dips[4]	95,0	95,6	92,6
	Type T dips[4]	95,0	100,0	97,1
	Type Z dips[4]	95,0	98,5	94,1

The targets for these indicators are based on regulatory requirements introduced by the NER. The improvement in the indicators reflects th effort Distribution has put into gaining an understanding of these indicators and managing them accordingly. The action steps taken include reconfiguration of networks, improvement of equipment performance and improved management of external factors such as bird interactions pollution, veld fires and lightning. Distribution is increasing efforts, where practical and financially feasible, to improve this performance, as these measures have a direct impact on the satisfaction and profitability of customers.

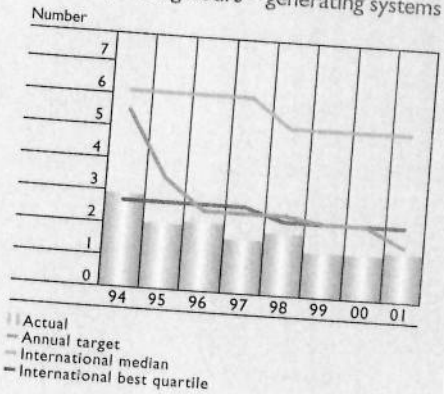
Transmission system performance

A measure of the performance of the transmission system is the number of system minutes lost over a 12-month period. This is an important measure, as it has a direct impact on the continuity of supply to customers. During 2001, the business registered 17,5 (2000: 4,1) system minutes lost against a target of 6,2 and it recorded 49 (2000: 48) interruptions for the year against a target of 45 interruptions. In 2001 there were two incidents with a severity greater than one system minute (2000: nil). The large increase in system minute interruptions can be attributed to these two incidents. The first incident was caused by severe snowstorms and ice build-ups in the KwaZulu-Natal region on 13 and 14 September 2001. No economical transmission line designs could have withstood such snowstorms. The second was the Western Cape interruption of 12 October 2001, which was caused by a fault at Koeberg Power Station. The interruption resulted in the isolation of the Western Cape grid as no alternative generation plant was available.

Generation plant capacity and maximum demand



Unplanned automatic grid separations per 7 000 operating hours – generating systems



1. *Reflects the ability to control deviations from the nominal supply voltage contracted with customers.*
2. *Reflects the ability to keep the three phases of the supply voltage electrically balanced, i.e. displaced by 120 degrees relative to each other and at the same magnitude.*
3. *Reflects the ability to avoid higher order frequencies in the 50 Hz supply voltage.*
4. *Reflects the ability to minimise faults and breaker operations at various voltage levels.*

These incidents contributed 6,8 and 5,7 system minutes respectively. Excellent teamwork was displayed in restoring supply in both incidents, with no accidents occurring in the hazardous snow conditions. The overall transmission system performance is reflected in the graph set out on the following page.

During 2001, the performance in respect of the quality of supply also improved.

2.4 Safety risk management

The continued emphasis on the implementation of risk control strategies and interventions instituted by the Operations Committee of the Management Board to address Eskom's health and safety performance maintained momentum during the year, and was instrumental in the further reduction of work-related fatalities to seven (2000: 10), down from the all-time high of 22 in 1996. The incidence of fatalities in the high-risk area of vehicle accidents reflects a similar progressive reduction to three (2000: five). In the high-risk area of electrical contacts there were two fatalities recorded, the same number as last year. However, the number of electrical contact injuries increased to 17 (2000: 15). The disabling injury incidence rate (DIIR)[1] for 2001 increased to 0,50 (2000: 0,41) against a target of 0,40. This deterioration is mainly attributed to the inclusion in the disabling injury statistics of a number of noise-induced hearing loss cases, the exposure of which occurred years ago but are only now being reported.

A total of 40 (2000: 29) public electrical fatalities were reported. Direct contact with low-hanging conductors, as well as indirect contact via mobile equipment and objects making contact with lines, remained the most significant reason for these incidents. In addition, a further 44 public fatalities occurred, resulting mainly from incidents like vandalism, unauthorised entry into substations and conductor theft. Eskom's extended power network due to electrification, together with illegal connections and energy theft, increased the risk of electrical contact incidents. Awareness campaigns and public electrical safety education for communities in identified high-risk areas have been intensified to reduce further the incidence of electrical contacts.

The Occupational Health and Safety Act and the Eskom health and safety policy are the two most important structures that complement the safety initiatives of the Operations Committee. Audits conducted during the year confirmed substantial adherence to statutory and Eskom requirements.

A significant event during the year was the signing of Eskom's new health and safety policy by the chief executive. This document is fundamental in establishing a safety culture. Health, safety and related activities remained a business priority for Eskom and in particular the Operations Committee throughout the year. The Management Board regularly monitored the performance of the following campaigns:

Reduction of electrical contacts

The campaign, aimed at a reduction in electrical contact incidents involving employees, remained a priority for 2001. It centred around a tailor-made promotional and training programme to enhance awareness of the dangers attached to working on power lines, the importance of pre-task risk assessments and the value of proper supervision. As a result of this campaign, the Distribution group set a record when staff worked for 12 consecutive months up to the end of October 2001 without experiencing a contact fatality.

Fleet safety

Vehicle-related fatalities and accompanying insurance claims showed a reduction, and is an indication of the improved safety culture established by the fleet safety campaign. The campaign included the implementation of the road safety directive, continued driver training, and installation and monitoring of onboard computers.

Public safety

The creation of electrical safety awareness amongst members of the public who use electricity, in particular first-time users, remains an ongoing task. The educational and promotional components of the campaign remain an essential investment in terms of Eskom's social responsibility and its liability in terms of the Electricity Act. In addition to regional campaigns, a national television and media campaign was also launched to enhance public awareness.

[1] *DIIR expresses the percentage of workers that suffered a disabling injury during a twelve consecutive month period.*

Job observations

Job observations of identified high-risk jobs are an important part of the work environment. Job observations have now been entrenched in day-to-day activities, and are incorporated in job compacts of supervisors in all the groups.

Occupational hygiene

Assessments have been conducted during the year to evaluate occupational hygiene exposures and take corrective action in cases of deviation. Noise-induced hearing loss and asbestosis cases are the two most prominent occupational diseases reported during the year. These cases reflect the result of historic exposures that occurred in workplaces years ago, that are now being reported. Stringent programmes are currently in place to ensure no further exposures occur, the most prominent being through engineering control and substitution. Other strategies include awareness training, regular monitoring of exposure levels, health screening of persons and technical verifications.

Emergency preparedness

Various courses were conducted throughout Eskom to train staff and promote emergency preparedness. The importance of this was emphasised by recent worldwide events. Audits throughout Eskom were conducted during the year to evaluate the effectiveness of programmes, identify exposures and institute corrective action. Emergency exercises that were held confirmed a high level of preparedness at business units.

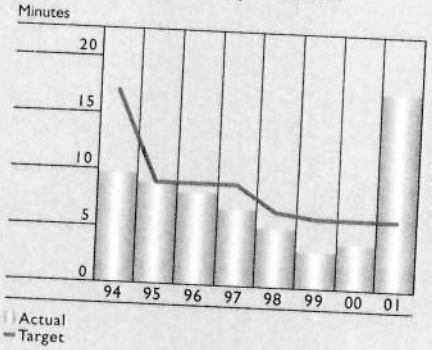
Training and awareness

A safety culture is created and reinforced by safety training and awareness. Ongoing health and safety development is a prerequisite for equipping staff to operate safely under all circumstances. Courses which include safety induction, emergency preparedness, occupational hygiene, health and safety representative and supervisor safety training have been conducted throughout the organisation. Areas of high risk that contribute to injuries and damage were identified and included in a new video series in support of ongoing safety training.

Fire risk management

Fire still poses a major risk to the safety of plant. It generally occurs as a consequence of other failures either in plant operation or in the human interface. Eight incidents were reported during 2001.

Total transmission system interruption time – system minutes lost per annum



As from 1996, system minutes reflect all transmission voltages. Before 1996, system minutes reflected only voltages of 132 kV and above.

A force majeur interruption occurred in KwaZulu-Natal in September resulting in the loss of 6,8 system minutes. In October 5,7 system minutes were lost caused by a fault trip at Koeberg Power Station resulting in the isolation of the Western Cape transmission grid as no alternative generation plant was available.

Where in-house fire teams were in place, fire fighting was carried out effectively to minimise the extent of damage to plant, with no reported injuries to personnel. This was also the case where incidents occurred at sites attended by local authority fire-fighting personnel in conjunction with Eskom staff. The relatively small number of incidents can be attributed to the continuing high level of engineering, coupled with proper training both in the operation of plant and equipment, and fire-fighting techniques.

Safety performance of subsidiaries

The safety performance indicators of Eskom Enterprises and its subsidiaries were not included in the calculation of the overall performance figures of Eskom. Seven of the nine major entities in the group reported no disabling injuries. Two business units accounted for 30 disabling injuries and two fatalities were reported, resulting in an Eskom Enterprises DIIR of 0,93.

Nuclear safety performance

As part of Eskom's ongoing commitment to nuclear safety, a peer review was performed during the year at the Koeberg Power Station. An international team, from the World Association of Nuclear Operators (WANO) Paris and Atlanta centres, provided constructive feedback relative to industry best practice.

Energy purchases and resource management

Eskom continued to review its fuel supply options and plant operating methodology with a view to reducing costs and improving efficiency and flexibility.

Coal

The growth in the total electricity demand for 2001 did not materialise to the extent budgeted, resulting in 94,1 million tons (2000: 92,3 million tons) burnt compared to the budget of 95,3 million tons. This represents a 1,7% increase in the energy generated by coal compared to the previous year.

Eskom has taken the opportunity in this period of lower growth to reduce actively its coal stockpile levels to reduce working capital and related holding costs, while at the same time ensuring the security of supply and creating flexibility in the burn regime. Coal stock at year-end was 14,8 million tons (2000: 19,8 million tons) representing 44 days (2000: 61 days) of burn.

During 2001 Eskom purchased 89,1 million tons of coal (2000: 91,9 million tons) against a budget of 90,6 million tons. Of this, 17,4 million tons (2000: 10,1 million tons) was purchased from BEE suppliers, including purchases from Eyesizwe Coal (Pty) Limited.

Eskom has long-term coal supply contracts with the mines to ensure the supply of coal to power stations. These contracts contain an environmental component, including a financial provision for mine closure. The mining houses carry out rehabilitation proactively to ensure the optimisation of costs and to protect the environment.

Eskom power stations have been designed to burn low-grade coal. While this supports South Africa's coal export capabilities, it results in challenges for air quality and efficiencies.

Environmental management audits were conducted at Kriel and Matla collieries. These audits showed progress in the development of environmental management systems, especially awareness of environmental issues and a drive towards compliance with legal requirements.

Majuba Colliery

As previously reported, the Majuba Colliery was permanently closed during 1993 due to unforeseen geological problems and the consequential high coal costs. It was also reported that an impairment provision in respect of future fuel supplies and a provision for future commitments in terms of the coal supply agreement were raised in the financial statements of Eskom at the end of 2000.

During the year, settlement was reached with Ingwe, which was in line with the expectations at the end of 2000. The loan receivable from Ingwe was settled, while at the same time Eskom's future commitments in terms of the original contract were extinguished.

Eskom

Water

Approximately 73% of Eskom's coal-fired capacity employs wet-cooled technology. During 2001, Eskom's power stations used 239 233 Mℓ (2000: 228 759 Mℓ) of raw water to produce 189 590 GWh (2000: 189 307 GWh) of electricity, resulting in a specific water consumption of 1,26 ℓ/kWh sent out (2000: 1,21 ℓ/kWh) against a target of ≤1,26 ℓ/kWh sent out. Eskom continues its collaborative effort with Eskom-tied mines to use mine water where possible. However, this usually requires additional water treatment systems. The higher consumption is attributed to increased production by the wet-cooled power stations relative to the dry-cooled stations. The outages on both Koeberg's units contributed to the increased production at wet-cooled power stations.

Eskom continually assesses the management of water resources and the impact of water-related legislation on its business. Eskom substantially complies with water legislation that affects its operations, and takes an active role in the development of the various strategies and institutions, such as catchment management agencies, that may affect its water use in the future. The efficient operation of the power stations is dependent on receiving the correct quantity and quality of water.

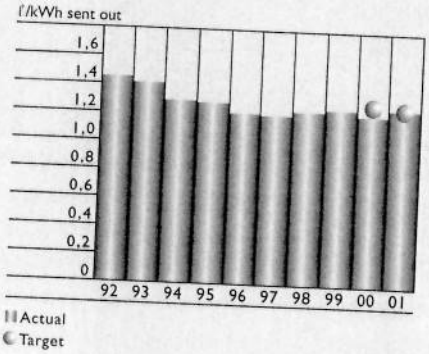
During January 2001, Eskom entered into a contract with the Department of Water Affairs and Forestry (DWAF) regarding raw water usage charges. This contract will be effective for a period of 15 years from 1 April 2000 resulting in predictable water prices over this period. In terms of the contract, the payment for water is tariff based, with the only fixed component being operational and maintenance expenditure, which is approved on an annual basis. The contract makes provision for Eskom to be compensated for incoming water of poor quality.

The National Water Act requires each water user to be licenced. During 2001, Eskom registered all its power stations as water users.

Eskom has undertaken to benchmark the power generation industry, in co-operation with the DWAF, in a project aimed at developing the principles of water conservation and water demand management. Eskom is evaluating all aspects of its current water measurement system and is identifying areas for potential improvement. Eskom is also upgrading water meters at power stations and revising the current water metering procedure. The first phase of this initiative has been completed with the replacement of relevant meters on the Komati Water System.

Eskom is assisting DWAF in the development of the Waste Discharge Charge System. Recommendations from the water assessment reports completed in 2001 are being incorporated into power station water management plans. Eskom will be subject to this charge system once it is operational.

Specific water consumption



Targets prior to 2000, were based on coal fired power stations only.

Key environment-related water research projects currently include biological monitoring of surface waters and the impact of air pollution on catchment areas.

Hydro and pumped storage schemes

Eskom continues to use hydro and pumped storage schemes as supply-side options to meet peak electricity demand. Pumped storage schemes have the advantage of smoothing the load demand curve and complement the base load supplied by coal-fired and nuclear stations.

Nuclear

Price competitiveness of Koeberg's primary energy remained in line with other supply options, despite negative exchange rate impacts, and is expected to remain competitive into the foreseeable future.

Following the promulgation of the Nuclear Energy Act, Act 46 of 1999, the governmental nuclear control approval process has been streamlined.

2.5 Electrification

Eskom undertook to electrify an additional 600 000 homes between 2000 and 2002. During the year under review, 209 535 (2000: 256 023) homes, including those of farm workers, were electrified. Since the inception of Eskom's electrification programme in 1991, a total of 2 601 219 homes have been electrified.

The DME has accepted the proposals of the National Electrification Co-ordinating Committee (NECC) regarding the National Electrification Programme and has appointed Eskom as the business planning and implementation agent until March 2002. The costs of installation and equipment are recovered from the DME.

The government started funding electrification as from April 2001 through the National Electrification Fund. As business planning and implementation agent, Eskom received R446 million from the DME during 2001 and electrified 153 691 homes, including those of farm workers, for and on behalf of the DME. These homes are included in the total electrification connections for 2001. Eskom will be responsible for household electrification in its areas of supply. Operating costs will continue to be the responsibility of the licenced distributors.

A stakeholder committee called the National Electrification Advisory Committee (NEAC) is in the process of being formed by the DME to replace the NECC. The NEAC will make recommendations and assist the Minister of Minerals and Energy with approval of annual electrification plans.

	Target 2001	Actual 2001	Actual 2000
Direct connections, excluding farm workers, number	**182 370**	**206 103**	250 801
Capital expenditure, Rm	**527**	**522**	664
Capital cost per connection, R	**2 890**	**2 523**	2 647
Average monthly sales per prepayment customer, kWh	**91**	**90**	92
Average monthly revenue per prepayment customer, R	**30**	**30**	29
Farm worker connections, number	**4 000**	**3 432**	5 222
Farm worker connections incentives paid, Rm	**4**	**3**	5

The reduction in capital cost per connection during 2001 is attributable to a reduction in the infrastructure cost per connection. Efforts continue to reduce further the unit capital cost and monthly operating costs.

The average monthly sales to prepayment customers measured in kilowatt-hours decreased during 2001, compared with 2000, and remain significantly lower than the amount required to cover operating cost and the depreciation of capital expenditure. The lower prepaid sales per customer is due to

the fact that more rural electrification is being done where disposable income is lower and hence consumption is lower. The replacement of faulty meters that commenced in 1999, continued in 2001.

Schools electrification

Funds applied to the electrification of grid schools:

	Budget 2001		Actual 2001		Actual 2000	
	Number	Rm	Number	Rm	Number	Rm
Eskom Development Foundation	245	8,5	219	9,6[1]	411	13,6
Department of Minerals and Energy	208	9,0	109	3,0	–	–

During 2001, the Eskom Development Foundation managed the electrification of eight clinics (2000: six), which were funded out of the total budget of R8,5 million. In addition, Eskom managed projects for certain transitional local councils, the NER, the Independent Electoral Commission and communities, whereby one clinic (2000: one) and 26 schools (2000: three) were electrified.

The budget of R9 million from the DME relates to its financial year for the period April 2001 to March 2002. Therefore, of the total budget of R9 million, R6 million will be spent to complete 99 projects during 2002. As from 2002, all schools and clinics electrification projects will be funded by the DME.

Funds applied to the electrification of non-grid schools:

	Project budget 2001		Inception to date 2001		Actual 2001	
	Number	Rm	Number	Rm	Number	Rm
Eskom Development Foundation	–	–	3	0,3	–	–
European Union	1 000[2]	98[2]	875	38,3	364	12,6

The non-grid (solar power) electrification of schools project funded by the European Union (EU) is due to be completed in 2002. The budget of R98 million includes amounts payable by the EU, via the DME, directly to equipment suppliers. The R38,3 million spent to date by Eskom, and recovered from the EU via the DME, only represents a portion of amounts spent by the EU on the project. Eskom has electrified 875 schools to date, and handed them over to the local communities.

Electrification has important environmental implications from both a natural and socio-economic perspective, as it contributes towards a reduction in domestic coal and wood burning. The relative efficiency of using electricity reduces the overall emission of pollutants and therefore decreases the level of ambient air pollution.

3. Sustainable environment

Environmental management system

Eskom is committed to continually strive towards sound environmental management and performance. An environmental management system (EMS) is an effective management tool in ensuring legal compliance, reducing risk, demonstrating due diligence and monitoring ongoing environmental performance.

1. *Funds made available by the Eskom Development Foundation included a provision of R3,6 million for 48 schools in the process of being electrified.*
2. *Project over the period 1999 to 2002.*

During 2000, a policy decision was made that the individual line groups in Eskom, and Eskom Enterprises, would become SABS ISO 14001 compliant by the end of 2002. The Corporate Environmental Affairs Department obtained SABS ISO 14001 certification in May 2001. During 2001, line groups continued implementing action plans set in 2000. Internal audits were conducted within the Generation, Transmission and Finance groups to assess the level of compliance with the SABS ISO 14001 standard and identify gaps. Results indicated that there is progress in the development and implementation of the group environmental management systems. Training, awareness and implementation strategies have been identified as critical focus areas for 2002. An external audit will be conducted throughout the organisation during 2003 to assess the extent of compliance.

Legal requirements

Eskom continues to keep abreast of the latest developments in legislation and continually assesses the impact of legislation on its business. Eskom's policy is, as a minimum, to comply with legislation and, where appropriate in the interest of the sustainability of the business, set standards where no legislation exists. Legislative requirements are incorporated into policies, procedures and standards. Eskom subscribes to external environmental legislation services and continues to interact with the relevant authorities regarding legislative compliance issues.

Eskom participated in, and provided input into, environment-related legislative issues, including environmental impact assessments, the development of a national radioactive waste management policy and strategy, the Department of Environmental Affairs and Tourism's (DEAT) National Core Set of Environmental Indicators Process and the background document on a national ambient air quality standard for sulphur dioxide.

Conventions

Climate change

South Africa ratified the United Nations Framework Convention on Climate Change (UNFCCC) during August 1997 as a developing country. Africa is a small global player with 3% of the world's carbon dioxide (CO_2) emissions, with South Africa contributing approximately half of these emissions.

Eskom participated in the UNFCCC and various other interventions. Specific focus areas during 2001 included the formalisation of a climate change policy for Eskom, the evaluation of potential clean development mechanism projects and extensive input into various national policy matters, such as the Conference of the Parties (COP) negotiations. Important outcomes achieved at the COP meetings included agreement on the operational rules and details for the implementation of the Kyoto Protocol, progress on ways to strengthen the flow of financial and technological support to developing countries and the appointment of a South African business representative to the executive board of the Clean Development Mechanism.

Persistent Organic Pollutants (POPs) Convention

South Africa is a signatory of the POPs Convention, which sets out control measures covering the production, import, export, disposal and use of three categories of pesticides, industrial chemicals that include polychlorinated biphenyls (PCBs) and unintended by-products (dioxins and furans). PCBs are predominantly used in industry, including Eskom, whilst dioxins and furans may also be unintentionally formed and released from thermal processes. The Convention prohibits the production of PCBs and sets stringent standards for the use of PCBs and management of dioxins and furans. Eskom's policy requires the elimination of the use of PCBs for all new equipment. Existing equipment containing PCBs will continue to be used until the end of its useful life.

Eskom adheres to relevant environmental conventions including the Montreal Protocol (Ozone Depleting Compounds).

Industry charters

The United Nations (UN) global compact asks companies to embrace, support and enact nine universal principles in the areas of human rights, labour standards and the environment. Eskom, a signatory to the compact, continues to support the UN global compact through its sustainable practices.

Eskom hosted representatives from the UN as part of the ten-year World Business Council for Sustainable Development anniversary and signed the South African Business Declaration at the Imbizo Conference. Together with other businesses, the signatories reaffirmed their commitment

to striving towards integrating environmental considerations into business planning and decision-making processes in the drive towards sustainable development.

Environmental impact assessments (EIAs)

EIAs are being applied as a decision support tool towards integrated environmental management by integrating socio-environmental and economic aspects into business planning processes and investment decisions.

Eskom's corporate directive requires that all Eskom projects, as defined in the EIA Regulations, will follow the EIA process as set out in national legislation and associated guidelines. Public participation is seen as an essential element of the EIA process. Each group in Eskom is responsible for the development of an environmental screening process and procedure that assesses the environmental significance of all projects, as part of the overall project planning processes. The Generation, Transmission and Distribution groups have compiled and implemented procedures in line with the corporate directive. During 2001, three projects (2000: 10) were initiated prior to the issue of a record of decision (ROD) by the relevant authority and one project (2000: 11) experienced delays in excess of six months in obtaining a ROD.

Environmental management programmes

As part of the EIA process for new projects, environmental management programmes (EMPs) are being compiled in all groups for specific sites. As part of the SABS ISO 14001 implementation, further progress was made within Generation towards revising and adapting all EMPs by the end of 2002. By 2001, Transmission completed EMPs for all substations (2000: 83%) and 85% for lines (2000: 22%) and Distribution completed EMPs for 99,5% of substations (2000: 69%).

Stakeholder relationship

Communication and marketing

Communication has been facilitated by the development of an environmental intranet portal, EnviroWeb, that makes information that is vital for the implementation of the EMS available to the organisation. A workshop addressing the status of EMS in Eskom and potential changes in environmental legislation was held for practitioners and managers in Eskom.

During World Environment Week, initiatives such as an industrial theatre and a competition were arranged to raise environmental awareness. Eskom executive management participated in and supported these initiatives.

The environmental help line received 83 telephonic and more than 120 electronic requests. These included questions relating to Eskom's per kilowatt-hour resource usage and emission data. The help line offers the public and staff a service to voice concerns, obtain advice and register any issues regarding Eskom's environmental performance. The public reported 72 (2000: 66) environment-related complaints which covered issues including vegetation management in servitudes, condition of substations in urban areas and objections to line construction in sensitive areas. All reported complaints have been investigated and appropriate mitigation measures implemented.

Partnerships and associations

Eskom continues to develop long-term partnerships and sustainable environmental programmes with non-governmental organisations and community groups.

Partnerships have been established with the Endangered Wildlife Trust, Food and Trees for Africa, Ekangela Trust, Peace Parks, World Wide Fund for Nature (SA) and the Wildlife and Environment Society of Southern Africa. These partnerships focus on co-operative initiatives towards sustainable development, capacity building and joint ventures.

Eskom interacts with other businesses and organisations, both nationally and internationally, and is represented on the Southern African Power Pool (SAPP), Electric Power Research Institute (EPRI), Power Institute of East and Southern Africa, World Business Council for Sustainable Development (WBCSD), E7 (an association of the world's leading electricity companies), G8 Renewables Task Force, International Emissions Trading Association, World Energy Council and EURELECTRIC.

During 2000, a policy decision was made that the individual line groups in Eskom, and Eskom Enterprises, would become SABS ISO 14(compliant by the end of 2002. The Corporate Environmental Affairs Department obtained SABS ISO 14001 certification in May 2001. Dur 2001, line groups continued implementing action plans set in 2000. Internal audits were conducted within the Generation, Transmission Finance groups to assess the level of compliance with the SABS ISO 14001 standard and identify gaps. Results indicated that there is progr in the development and implementation of the group environmental management systems. Training, awareness and implementation strateg have been identified as critical focus areas for 2002. An external audit will be conducted throughout the organisation during 2003 to assess extent of compliance.

Legal requirements

Eskom continues to keep abreast of the latest developments in legislation and continually assesses the impact of legislation on its business. Esko policy is, as a minimum, to comply with legislation and, where appropriate in the interest of the sustainability of the business, set standards whe no legislation exists. Legislative requirements are incorporated into policies, procedures and standards. Eskom subscribes to exter environmental legislation services and continues to interact with the relevant authorities regarding legislative compliance issues.

Eskom participated in, and provided input into, environment-related legislative issues, including environmental impact assessments, the developme of a national radioactive waste management policy and strategy, the Department of Environmental Affairs and Tourism's (DEAT) National Core S of Environmental Indicators Process and the background document on a national ambient air quality standard for sulphur dioxide.

Conventions

Climate change

South Africa ratified the United Nations Framework Convention on Climate Change (UNFCCC) during August 1997 as a developing countr Africa is a small global player with 3% of the world's carbon dioxide (CO_2) emissions, with South Africa contributing approximately half of the emissions.

Eskom participated in the UNFCCC and various other interventions. Specific focus areas during 2001 included the formalisation of a climat change policy for Eskom, the evaluation of potential clean development mechanism projects and extensive input into various national polic matters, such as the Conference of the Parties (COP) negotiations. Important outcomes achieved at the COP meetings included agreement o the operational rules and details for the implementation of the Kyoto Protocol, progress on ways to strengthen the flow of financial an technological support to developing countries and the appointment of a South African business representative to the executive board of th Clean Development Mechanism.

Persistent Organic Pollutants (POPs) Convention

South Africa is a signatory of the POPs Convention, which sets out control measures covering the production, import, export, disposal and us of three categories of pesticides, industrial chemicals that include polychlorinated biphenyls (PCBs) and unintended by-products (dioxins an furans). PCBs are predominantly used in industry, including Eskom, whilst dioxins and furans may also be unintentionally formed and released from thermal processes. The Convention prohibits the production of PCBs and sets stringent standards for the use of PCBs and management of dioxins and furans. Eskom's policy requires the elimination of the use of PCBs for all new equipment. Existing equipment containing PCBs will continue to be used until the end of its useful life.

Eskom adheres to relevant environmental conventions including the Montreal Protocol (Ozone Depleting Compounds).

Industry charters

The United Nations (UN) global compact asks companies to embrace, support and enact nine universal principles in the areas of human rights, labour standards and the environment. Eskom, a signatory to the compact, continues to support the UN global compact through its sustainable practices.

Eskom hosted representatives from the UN as part of the ten-year World Business Council for Sustainable Development anniversary and signed the South African Business Declaration at the Imbizo Conference. Together with other businesses, the signatories reaffirmed their commitment

to striving towards integrating environmental considerations into business planning and decision-making processes in the drive towards sustainable development.

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Key initiatives undertaken in 2001 include the following:

- Eskom participated in the UN environment programme initiative on the power generation industry sector E7 Report for the World Summit on Sustainable Development.
- Eskom was represented on the G8 Task Force and Advisory Group and hosted a southern African outreach event.
- Eskom's chairman is co-chair of the WBCSD projects on sustainable livelihoods and sustainability in the electricity utility industry.
- Eskom participated in the development of a SAPP guideline relating to EIAs for thermal power plants in the region and also performed a high-level environmental analysis of the SAPP pool plans. A project, aimed at investigating the probability of droughts occurring and the impact of climate changes on the frequency of droughts, has been initiated. It also addresses the technical requirements and costs associated with the strengthening of the SAPP transmission grid.

World Summit on Sustainable Development (WSSD)

South Africa will host the United Nations WSSD in August and September 2002. A key focus of the WSSD will be a review of progress made in the implementation of Agenda 21 since 1992 and agreement of action-orientated decisions to address areas where further efforts are needed. All countries have been called on to participate in the review by preparing national reports to reflect experiences and lessons learnt, as well as to identify priorities and recommendations for the way forward regarding further implementation of Agenda 21.

Eskom is actively involved in the preparations for the WSSD through participation in the Business Action for Sustainable Development (BASD), the Business Co-ordinating Forum for the World Summit on Sustainable Development (BCF) and the constitution of an internal Eskom steering committee. Eskom's chairman is the vice-chair of the BASD and alternate chair of the BCF.

Eskom is involved in activities that include policy input into national and international processes, input into the proposal regarding the call for concrete partnerships based on legacy projects and input into South Africa's approach to support Africa and the New Partnerships for African Development principles.

Environmental auditing

Regular environmental audits are undertaken on all line groups. During 2001, these audits focused on SABS ISO 14001 compliance for the Generation, Finance and Transmission groups as well as two tied collieries. Audits were conducted on fire and servitude management, oil management and the implementation of procedures for reporting on environmental cost allocations for the whole organisation. Environment-related incidents are audited as per the corporate incident investigation process. The incident investigations undertaken this year were all related to servitude management, with greater focus on bush clearing. Key results of these audits are included in this report.

Environmental education

Eskom is committed to educating, training and motivating its employees about the environment. Several capacity building events were held through the African Centre for Energy and the Environment, a joint initiative between Eskom and the EPRI, including air quality management and climate change workshops. Line groups are responsible for the identification and implementation of training programmes.

Environmental accounting

Environmental accounting refers to the practice of identifying and reporting on expenditure incurred for environmental purposes. The process of identifying and recording environmental expenditure has improved considerably since 2000. During 2001, R146 million (2000: R116 million) was spent on capital and R261 million (2000: R217 million) on operational environmental activities, primarily in the Generation group.

The Generation group incurred 72% (2000: 71%) of Eskom's total environmental costs. This was primarily due to air quality management including a major overhaul of the electrostatic precipitators on one unit at Hendrina Power Station, replacement of fabric filters at Duvha Power Station and the implementation of the Environmental Management Programme Report requirements on Eskom-associated mines.

Expenditure in Transmission was mainly for bird guard mitigation devices. Distribution expenditure related mainly to environmental assessments associated with reticulation lines. Eskom Enterprises is in the process of enhancing reporting processes.

During 2001, the environmental accounting process was further refined through the revision of the corporate procedure and the formalisatio of the Generation-specific procedure.

Environmental externalities

Externalities refer to costs and benefits experienced by third parties, as the result of the actions of an organisation, that are not accounted fo in the price of the product (based on the definition by the European Commission Studies, 1998). Eskom has undertaken research to establis a robust methodology for identifying and managing current and future externalities. Eskom has expanded the traditional approach to include positive externalities and has applied this to the environmental, social, economic and political areas.

Environmental performance

Assessment and measurement of environmental performance are managed through the operational sustainability index and by reporting or additional key environmental indicators and issues to the Management Board Environmental Steering Committee. During the year, both reporting processes were reviewed for applicability and effectiveness.

The environmental component of the operational sustainability index comprises four equally weighted KPIs, namely relative particulate emissions, specific water consumption, customer satisfaction (PreCare/MaxiCare) and reported legal contraventions. These indicators are also discussed in this report.

Environmental performance indicators

	Target 2001 Rm	**Actual 2001 Rm**	Actual 2000 Rm
Reported legal contraventions counted in the operational sustainability index	**0**	**2**	3
Specific water consumption, ℓ/kWh sent out[1]	**≤1,26**	**1,26**	1,21
Net water consumption, Mℓ	**n/a[2]**	**239 233**	228 759
Relative particulate emissions, kg/MWh sent out[3]	**0,33**	**0,31**	0,35
Total particulate emissions, kt	**124,50[4]**	**59,64**	66,08
Radiation exposure, mSv per annum	**0,25[5]**	**0,0007[6]**	0,0005[6]
Customer satisfaction – PreCare/MaxiCare indicators (environmental component)	**>8,00**	**8,43**	8,82

Of the 20 (2000: 21) legal contraventions reported, two (2000: three) were registered against the sustainability index. They were:

- A contractor working on the construction of a line in the Eastern Cape drove a truck into a water canal supplying water to a local community, leading to diesel and oil pollution. The incident was registered on the sustainability index due to the receipt of a letter of censure from the government and the fact that Eskom did not report the incident to an appropriate body. The resulting contravention of legislation led to operating standards in the region being revised and attention given to contractor training and management.
- Illegal dumping of waste on an unregistered waste site at Matimba Power Station which was established in 1988. Several applications had been submitted to the DWAF but had not been finalised. The management of the waste site during operation was carried out in accordance with legal requirements. The incident was registered on the sustainability index as it was not attended to within an appropriate time frame. The site was subsequently closed and an application submitted to the DWAF to obtain a closure certificate.

1. *Volume of water consumed per unit of power sent out by all generating stations.*
2. *No targets set for this indicator.*
3. *Amount of ash emitted per unit of generated power sent out.*
4. *Chief Air Pollution Control Officer permitted allowance.*
5. *National Nuclear Regulator limit.*
6. *Indicators have been restated based on the new methodology as approved by the National Nuclear Regulator.*

Additional key indicators and issues include environment-related public complaints, contraventions of legislation, land and biodiversity management, environmental expenditure, environmental impact assessments, efficiency and energy usage and gaseous emissions. Performance on these indicators is discussed in this report.

Air quality management

Particulate emissions

The emission of particulates (ash) is regulated by the Chief Air Pollution Control Officer (CAPCO) of the DEAT. Registration certificates for individual power stations are issued by CAPCO which state the actual quantity of particulate emissions that may be emitted from the power station stacks during a 31-day period. For 2001, the overall actual particulate emissions performance of 59,64 kt (2000: 66,08 kt) is well within the permitted allowance of 124,50 kt (2000: 131,76 kt).

Eskom is committed to reducing overall particulate emissions to an average of 0,28 kg/MWh sent out by the end of 2003, as part of the five-year strategy initiated in 1998. During 2001, significant reduction in relative emissions was achieved at Duvha Power Station after flue gas conditioning was installed at certain units in 2000. The performance of Hendrina Power Station also improved due to a major overhaul of one unit. Enhanced management attention at Matla Power Station resulted in further reductions.

Gaseous emissions

The emission quantities of sulphur dioxide (SO_2), nitrogen oxides (NO_x) and carbon dioxide (CO_2) emitted from Eskom power stations are calculated annually, based on the coal characteristics and the power station design parameters (the relevant figures are at the back of the annual report). The increase in emissions in 2001 is primarily due to an increase in the amount of coal burnt.

The following greenhouse gases are produced or used in the electricity generation and distribution process:

- CO_2 and nitrous oxide (N_2O) are produced as the result of the combustion of coal in order to produce electricity.
- Methane (CH_4) measurements at Eskom's power stations have shown CH_4 emissions from this source to be so small that it is undetectable and can be considered negligible. This fact is duly noted and recorded in South Africa's initial national communication to the UNFCCC.
- Sulphur hexafluoride (SF_6) gas is mainly used in gas-insulated switchgear installations in Eskom. Eskom's primary focus has been research and development of innovative technologies for leak detection and repair, in conjunction with the EPRI.

Ambient air quality

Eskom has been operating an ambient air quality monitoring network since the 1980s. This network includes strategic sites and sites in the immediate vicinity of certain power stations. The network provides strategic information on long-term trends in air quality from various sources on a national and regional scale.

All sites, with the exception of two, are equipped to monitor SO_2, NO_x, ozone (O_3), fine particulate matter (FPM) and the relevant meteorological parameters comprising wind speed, wind direction and ambient temperature. The two sites are equipped to monitor SO_2, FPM and meteorological parameters.

All monitoring equipment is calibrated against National Meteorological Laboratory standards in a South African National Accreditation Systems accredited laboratory.

Ambient air quality results indicate that the annual concentrations at all sites are within the guidelines set by the DEAT for SO_2 and NO_x. In respect of FPM, difficulties have been experienced with equipment after changing to conform to international practice.

Other related impacts

Eskom continues to monitor international trends with respect to electromagnetic frequency (EMF) activity. A comprehensive internal web knowledge base has been developed and revised. The EMF policy review process was initiated in 2001.

There are two types of noise pollution associated with electrical power plants, i.e. the noise associated with the operational frequency of 50 Hz for alternating current systems and the noise associated with corona discharge for high-voltage systems. In both instances, Eskom adheres to national standards that govern noise pollution levels.

Key air quality related research projects include electrostatic precipitator optimisation, the bagfilter research programme and gas cleaning technologies.

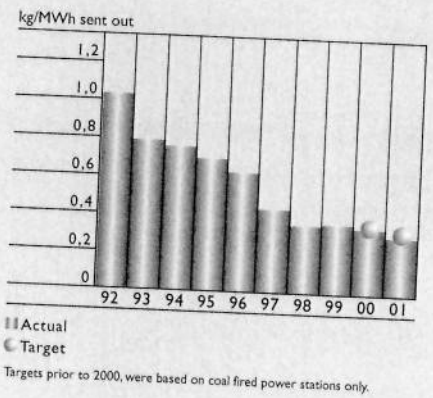
Land

The environmental land management directive requires the sustainable use and maintenance of all Eskom land in order to ensure conformance to applicable legislation and to optimise its asset value. During 2001, the document was updated to ensure that environmental due diligence assessments are undertaken prior to the sale or purchase of land.

Land registers are maintained by all groups, and were updated during 2001. Property manuals were compiled and implemented to assist in the general management of land. Environmental issues were integrated into these manuals. An audit of land was undertaken in Transmission to ensure that the land register was up to date, that effective information systems were in place and that the land boundaries were documented to facilitate proper management. Appropriate actions were taken to address concerns raised during the audit process.

A servitude workshop was held during July 2001 and was aimed at identifying issues to reduce legal contraventions and public complaints and to contribute to the improvement of quality of supply. This resulted in the revision of the existing vegetation management standard and improved communication in Eskom, as well as with its customers and contractors. The vegetation management standard is in the process of being updated, and a communication and training action plan has been compiled for implementation during 2002.

Relative particulate emissions



Targets prior to 2000, were based on coal fired power stations only.

Servitude management audits were undertaken for Transmission and Distribution and key issues identified were the lack of control over invader species and weeds as well as illegal dumping on servitudes. Fire management audits were conducted in line with the Veld and Forest Fire Act, Act 101 of 1998. The sites visited had processes in place to control and prevent the spread of veld fires. However, a plan for the management of firebreaks and the formalisation of fire management plans is still outstanding.

Key research projects include the degradation and bioremediation of pollutants in soils and innovative methods to clean up herbicide-contaminated sites.

Biodiversity management

Eskom's partnership with the Endangered Wildlife Trust (EWT), initiated in 1996, has strengthened over the past year. The partnership is focused on efforts to manage interactions between birds and electrical infrastructure.

There were 253 wildlife interactions reported at 114 localities in 2001. These included collisions, electrocutions and pollution-related incidents. Following investigations, mitigation measures were recommended at 55 of these localities, of which 19 have been completed. The application of mitigation measures was delayed as an improved bird flapper attachment mechanism was developed during the latter part of the year.

The Eskom and EWT partnership also conducted the National Crane Census during 2001. The aim of the project is to determine the numbers of cranes and population trends, and the information gained is used to determine the impact of electrical infrastructure on populations.

Eskom continues to be represented as a trustee on the Ekangala Grassland Trust, which aims at conserving a million hectares of high-altitude grassland in southern Africa. The Trust aims to co-ordinate existing activities in the area and proclaim the area as a biosphere in terms of the UN Man and the Environment Programme.

Areas registered as natural heritage sites include Koeberg, Groot Hagelskraal, Thyspunt and Plattekloof. Approximately one third of Eskom's 73 ha Plattekloof property is registered as a natural heritage site, and during 2001 this site received media attention. The Plattekloof servitude houses the only power lines supplying electricity to the city of Cape Town and Eskom has to maintain the servitude in terms of its maintenance plan. Eskom brush cuts areas adjacent to the heritage site to provide a firebreak to prevent the occurrence of uncontrolled fires. These fires result from excessive vegetation growth in the servitude and can impact the quality of supply, which can lead to total supply interruptions in Cape Town. The EWT was requested to assess the impact of the brush cutting on the habitat and assist in the compilation of an action plan to ensure effective management of the heritage site. Existing management plans are currently under review. The Plattekloof Advisory Committee and Eskom are working together to ensure effective species conservation and quality of supply within the servitude. The advisory committee comprises representatives from non-governmental organisations, government departments, local community members and Eskom.

Key research is being done on the identification and quantification of the impact of power lines on birds in the Karoo, testing the efficacy of bird impact mitigation devices and investigating the ecological dynamics of flora and fauna during rehabilitation of sites.

Quality of supply

Transmission has launched a project to investigate ways to reduce line faults resulting from veld and forest fires. As a result, a Veld and Fire Management Strategy has been developed. The main objective is to restore the veld within Eskom servitudes to a low-risk condition with the judicious use of burning, cutting and herbicide treatment.

Birds colliding with conductors or roosting on power lines may impact quality of supply. Conductors may break as a result of collisions, and electrocutions cause power interruptions. Projects have been initiated to make conductors more visible to reduce collisions, and towers that have the potential to electrocute birds are being modified. Bird-friendly designs have been adopted on a national basis as the standard for new lines, and existing transmission lines have been retrofitted with bird guards to prevent bird streamers (streams of bird excreta) from causing outages. This has resulted in a reduction of line faults by up to 80% in certain areas.

A line-clearing programme has been introduced in some areas, involving the removal of alien vegetation and cutting and trimming of indigenous vegetation to prevent interactions with infrastructure. This is done to ensure an effective quality of supply and the safety of the customer, the general public and Eskom staff.

Activities in informal settlements developed under, or in close proximity to, power lines may have an impact on quality of supply. Extensive awareness campaigns have been undertaken to inform communities of the hazards of housing in demarcated servitudes.

Key research projects include rehabilitation and vegetation management and optimisation of herbicide use and application in servitudes.

Waste management

During 2001, Eskom implemented a directive to support the waste policy, which requires the proactive management of waste and integrated environmental management. All groups have initiated reporting processes according to the directive.

The list of registered Eskom waste sites, and waste sites used by Eskom facilities, was reviewed and updated. Waste sites managed by Eskom's operating power stations have permits, with the exception of Matimba Power Station which has submitted an application to the DWAF for the closure of the site.

Approximately 4 tons of PCB-containing capacitor cans from decommissioned sites were transported to a European incineration facility for disposal during 2001. This process was carried out in line with the Basel Convention and disposal certificates were obtained.

The oil spill cleanup directive and standard were formalised and implemented throughout the organisation to ensure uniform reporting and management of oil spills. Awareness and training initiatives were undertaken countrywide at power stations and regions. A formal training course is being designed in conjunction with a tertiary institution for implementation during 2002. A total of 146 (2000: 150) oil spills were reported, all of which have been addressed, and appropriate mitigation measures implemented.

Eskom's corporate documentation on the management of asbestos is being updated to be aligned with the National Asbestos Regulations.

As a follow-up to the previous waste management audits, an audit was scheduled with Roshcon, a subsidiary of Eskom Enterprises, in 2001 with the focus on waste removal and final disposal. Roshcon is in the process of integrating environmental management into its quality system. Proper oil management plans are in place at most of the Eskom sites audited.

Key research projects include identification and evaluation of waste information systems, optimisation of solvent management and awareness and training.

Commitments

Key commitments for 2002 include the revision of Eskom's renewables strategy to align it with the draft DME renewables strategy, further development of KPIs for Eskom Enterprises, further development of Eskom's gaseous emissions strategy and benchmarking on key environmental performance indicators. Audits will be conducted on EIA projects and environmental management programmes for existing facilities.

4. Human resources alignment

Human resources sustainability index

An index consisting of measures related to human capital management was implemented during 2001 through monthly reporting against set standards. The index comprises 16 measures in the areas of employee satisfaction, competence, equity, health and wellness. This index will be reviewed annually to evolve and refine appropriate performance measures for human resources, alongside the technical sustainability index, for assuring the long-term sustainability of Eskom's regulated business.

Managing and retaining skills

A skills management system is being implemented for all management and professional levels throughout the organisation. During 2002, the skills database will be populated to enable Eskom to have a realistic, real-time view of talent available for both current and future requirements, and to identify capability gaps clearly.

Education and training

Eskom continued to demonstrate its commitment to development and transformation by investing in education and training. During 2001, Eskom invested a total of R449 million (2000: R405 million) in the development and training of workers, both internal and external to Eskom.

The Chief Executive Women's Programme, aimed at accelerating the development of women engineers, has been particularly successful with 39 women being employed within the organisation.

Eskom's bursary programme ensures that the organisation proactively develops a pipeline to provide for the critical skills identified at the entry level in the fields of engineering, finance and information technology.

During 2001, Eskom supported 2 123 (2000: 2 481) bursars and trainees, 85% (2000: 84%) of whom were black. During the year, 676 (2000: 620) black bursars and trainees completed their training. Of the bursary intake for 2001, 53% (2000: 46%) were women. This represents a 7% (2000: 17%) increase in the intake of female bursars and trainees between 2000 and 2001.

Skills development legislation

There is an ongoing alignment of Eskom learning systems with the skills development legislation, the Energy Sector Education and Training Authority (ESETA) requirements and the National Skills Development Strategy.

Eskom has been submitting annual workplace skills plans to ESETA. The first annual training report based on the workplace skills plan for the year ending March 2001, resulted in Eskom receiving the full grant for the implementation of its Workplace Skills Plan. Eskom has also submitted an application for the 5% grant for contributing to growth and supply of skills to the sector through skills development and training. Eskom has thus applied for all available grants (50% recovery of levies paid).

Employee health and wellness

Eskom has established a comprehensive wellness programme, intended to address the well-being of individuals and groups. The programme consists of employee assistance, sports and recreation, managing the impact of HIV/AIDS, biokinetics, spiritual wellness, occupational health and medicine, travel medicine and health promotion. Health and wellness teams have been created to implement the total integration of services, information sharing and allocation of resources.

The Worklife programme continues to provide professional and counselling support to employees to assist them in dealing with personal and work-related issues that impact on their performance and productivity.

Change resilience programmes were designed to create an environment to assist in the understanding of the dynamics of change, and to provide employees with the necessary skills to manage change and the related effects. The programmes will be implemented and evaluated during 2002.

Rewards and recognition

During 2001, a project was initiated to redesign the reward strategy for the regulated business that is conducive to encouraging employee behaviour that enhances business performance. The new design will apply to all bands in Eskom and includes three key focus areas: incentives (productivity gainshare and performance bonuses), grading and remuneration (revising the current grading of staff) and performance management. The implementation of the new design will depend on the approval of the Management Board and consultation with organised labour.

Furthermore, the continued rollout of a long-term incentive scheme, Eskom Performance Index, to all levels of executive management has been approved.

Eskom and the trade unions could not reach an agreement during the 2001 annual salary increase cycle of negotiations. The majority of trade unions declared a dispute and a mediation session between Eskom and the relevant trade unions took place. No resolution was reached and Eskom decided to implement its final offer for the July 2001 payroll. Eskom and the trade unions later reached a settlement agreement under the auspices of the Commission for Conciliation, Mediation and Arbitration with additional increases to be implemented with effect from 1 January 2002.

Human resources policies

All human resources policies and practices have been reformatted, reviewed and updated and are available via the intranet. In line with transformation, ongoing reviews of human resources policies and practices and alignment will be continued in 2002.

Consultative processes and structures

The successful implementation of the administration process of the full-time shop stewards agreement and the finalisation of all the 2000 and 2001 national disputes contributed to an improved employee relations scenario when compared to 2000.

Employee participation

The structures for the participation of employees through their trade unions are in place and resulted in successful participation in 2001. However, the trade union walk-out at the Central Bargaining Forum late in the year strained relations.

Industrial action

Total workdays lost as a result of industrial action in 2001 was 17 204 compared to 2 745 in 2000. This increase related to the salary strike and the Cosatu protest action against privatisation that took place in July and August respectively. The salary strike resulted in 15 058 workdays being lost. This was the first protected strike in Eskom in terms of the recognition services agreement. The operation of this agreement was successful as there was no interruption of service to the customer during the industrial action. The Cosatu protest resulted in 1 874 workdays lost.

Managing the impact of HIV/AIDS

The response strategies developed from the 1999 surveillance study were implemented as an integral part of the business plans. The key focus areas remained education, communication, care and support, self-awareness and the management of associated risks. A new surveillance study will take place in 2003.

Eskom has continued to contribute to the national and international fight against HIV/AIDS, and has joined forces with other corporate organisations in this fight, through the SA Business Coalition on HIV/AIDS and the Global Business Council. Eskom also participates in the leadership of the South African Development Community utilities' HIV/AIDS committee. Eskom committed R30 million to the SAAVI vaccine development research, of which R7,5 million was paid during 2001 (2000: R15 million) through the Eskom Development Foundation, with the balance payable in 2002.

Eskom considers the implementation of the HIV/AIDS response strategy to be a focus area for the business and, as a result, it was included as a key measure in the human resources sustainability index.

Implementing employment equity

Eskom set itself an employment equity target for 2001 in terms of which more than 50,7% of its management, professional and supervisory staff would be black[1]. At the end of 2001, a total of 53,1% (2000: 50,7%) of its staff in these categories were black, thereby exceeding its target by 2,4 percentage points.

Eskom also exceeded its gender equity target of 20% of women in management, professional and supervisory level by achieving 21,7% (2000: 18,4%) for 2001. In addition, 17,9% (2000: 16,4%) of staff on all levels were women. Eskom has formulated equity targets in support of the Employment Equity Act in terms of which more than 30% of staff will be women by 2005 and 0,5% will be people with a disability by 2004. To ensure that the target set for 2005 is achieved, women accounted for 27,6% (2000: 28,0%) of all promotions awarded, and 52,6% (2000: 41,0%) of people recruited during 2001. Gender and disability equity is treated as a focus area under Eskom's employment equity policy.

The policy on the identification and categorisation of disabled employees has been finalised and is in the process of being implemented.

The Eskom Enterprises group attained its employment equity target by achieving 43% (2000: 37%) of staff on management, professional and supervisory level being black, against the target of 42%. At the end of 2001, a total of 13% (2000: 15%) of staff on management, professional and supervisory level were women, against the target of 13%. In addition, 17% (2000: 18%) of staff on all levels were women.

Transformational leadership

Through programmes such as the business appreciation workshop and the middle managers' programme, Eskom ensures that leaders have efficient skills to lead the organisation effectively during the era of transformation,

1. *Black, Asian and Coloured South Africans*

Leadership is also empowered to make the necessary decisions, in terms of the Eskom delegation of authority, to achieve the business objectives in line with the PFMA, the Labour Relations Act and the Companies Act.

Information as required under schedule 4 of the Companies Act

Share capital and dividends

Eskom does not have share capital and, as a result, no dividends have been paid or proposed. Equity consists of reserves.

Capital expenditure

Capital expenditure on property, plant, equipment and intangible assets was R3 993 million (2000: R3 367 million) and included expenditure of R66 million (2000: R297 million) on Majuba Power Station and R522 million (2000: R664 million) on electrification.

Subsidiaries, associates, joint ventures and investments

Details of Eskom's subsidiaries, significant associates and joint ventures are set out in Schedule 1 and Schedule 2 on page 120 and page 121 respectively.

Directorate and secretariat

The names of the directors and the address of Eskom's Secretariat appear on pages 6 to 9.

Post-balance sheet events

There were no significant post-balance sheet events.

Audit Committee information

The names of Audit Committee members are reflected on pages 6 to 7. Five meetings were held during 2001.

Balance sheets

Eskom

at 31 December

	Notes	Group 2001 Rm	Group 2000 Rm	Eskom 2001 Rm	Eskom 2000 Rm
Assets					
Non-current assets		**59 643**	61 406	**59 536**	61 303
Property, plant and equipment	3	**50 196**	50 293	**49 279**	49 553
Negative goodwill	4	**(250)**	(288)	**(250)**	(288)
Intangible assets	5	**170**	328	**168**	328
Future fuel supplies	6	**2 525**	2 656	**2 525**	2 656
Financial market assets	7	**3 918**	5 138	**3 918**	4 953
Loans receivable	9	**2 408**	2 397		
Investment in associate and joint venture companies	10	**392**	240	**150**	229
Investment in subsidiaries	11			**3 518**	3 388
Other investments	12	**61**	228	**49**	105
Deferred tax assets	13	**44**	253	**–**	218
Trade and other receivables	14	**179**	161	**179**	161
Current assets		**17 266**	12 773	**15 173**	12 050
Inventories	15	**2 293**	2 409	**2 210**	2 344
Trade and other receivables	14	**4 145**	4 319	**4 172**	4 672
Financial market assets	7	**10 828**	6 045	**8 791**	5 034
Total assets		**76 909**	74 179	**74 709**	73 353
Equity and liabilities					
Reserves		**34 148**	30 989	**33 361**	30 582
Non-current liabilities		**26 672**	28 409	**26 176**	28 266
Financial market liabilities	7	**17 933**	22 030	**17 896**	22 030
Retirement benefit obligation	16	**3 931**	3 264	**3 733**	3 120
Provisions					
Decommissioning and nuclear waste management	17	**2 154**	1 897	**2 154**	1 897
Closure, pollution control and rehabilitation	17	**598**	534	**598**	534
Other	17	**411**	385	**157**	386
Deferred income	18	**702**	299	**702**	299
Deferred tax liabilities	13	**943**	–	**936**	–
Current liabilities		**16 089**	14 781	**15 172**	14 505
Trade and other payables	19	**3 542**	3 891	**2 917**	3 901
Taxation		**19**	30	**–**	–
Financial market liabilities	7	**11 521**	9 563	**11 501**	9 752
Provisions	17	**1 007**	1 297	**754**	852
Total equity and liabilities		**76 909**	74 179	**74 709**	73 353

Income statements

for the year ended 31 December

	Notes	Group 2001 Rm	Group 2000 Rm	Eskom 2001 Rm	Eskom 2000 Rm
Revenue	22	**26 112**	24 459	**24 983**	23 569
Operating expenditure	23	**(19 409)**	(17 979)	**(18 791)**	(17 441)
Net operating income		**6 703**	6 480	**6 192**	6 128
Interest income	24	**1 370**	1 057	**1 570**	1 310
Interest expenditure	25	**(4 144)**	(4 332)	**(4 154)**	(4 354)
Profit after interest before fair value adjustment		**3 929**	3 205	**3 608**	3 084
Net fair value (loss)/gain on financial instruments	25	**(157)**	129	**(182)**	129
Profit before tax		**3 772**	3 334	**3 426**	3 213
Income tax expense	26	**(1 211)**	(1 466)	**(1 154)**	(1 454)
Net profit for the year after tax		**2 561**	1 868	**2 272**	1 759

Cash flow statements

for the year ended 31 December

	Notes	Group 2001 Rm	Group 2000 Rm	Eskom 2001 Rm	Eskom 2000 Rm
Cash flows from operations		**8 641**	7 661	**7 797**	7 038
Cash generated by trading operations	27	**11 209**	9 985	**10 244**	9 101
Interest received	28	**2 654**	1 781	**2 816**	2 045
Interest paid	29	**(5 152)**	(4 075)	**(5 263)**	(4 108)
Income tax paid	30	**(70)**	(30)	**–**	–
Cash utilised in investing activities	31	**(3 711)**	(3 538)	**(3 384)**	(3 462)
Cash effects of financing activities	32	**(3 491)**	(2 413)	**(4 095)**	(2 423)
Net increase in cash and cash equivalents for the year	33	**1 439**	1 710	**318**	1 153

Statements of changes in equity

Eskom

for the year ended 31 December

	Foreign revaluation Rm	Local revaluation Rm	Insurance reserve Rm	Accumulated profit Rm	Total Rm
Group					
Balance 1 January 2000	503	–	182	26 811	27 496
Effect of deferred taxation – Opening balance creation	–	–	–	1 693	1 693
Cash flow hedges – Reclassified and deducted from future fuel supplies	(68)	–	–	–	(68)
Net profit for the year after tax	–	–	–	1 868	1 868
Transfer of reserves	127	–	(109)	(18)	–
Balance at 31 December 2000	562	–	73	30 354	30 989
Available-for-sale asset movements – Fair value gains	**113**	**512**	**–**	**–**	**625**
Cash flow hedges – Fair value losses	**(131)**	**–**	**–**	**–**	**(131)**
– Reclassified and added to future fuel supplies	**104**	**–**	**–**	**–**	**104**
Net profit for the year after tax	**–**	**–**	**–**	**2 561**	**2 561**
Transfer of reserves	**537**	**(694)**	**30**	**127**	**–**
Balance at 31 December 2001	**1 185**	**(182)**	**103**	**33 042**	**34 148**

The foreign revaluation reserve includes gains and losses on the fair value revaluation of foreign exchange contracts and similar instruments designated as cash flow hedges for future anticipated foreign currency denominated transactions. The variable revaluation exists until the maturity of these instruments, which coincides with the maturity of the underlying obligation, thereby resulting in the actual contracted cost of cover being taken to the income statement.

The local revaluation reserve includes gains and losses on the fair value revaluation of available-for-sale assets.

for the year ended 31 December

	Foreign revaluation Rm	Local revaluation Rm	Insurance reserve Rm	Accumulated profit Rm	Total Rm
Eskom					
Balance at 1 January 2000	492	–	150	26 556	27 198
Effect of deferred taxation – Opening balance creation	–	–	–	1 693	1 693
Cash flow hedges – Reclassified and deducted from future fuel supplies	(68)	–	–	–	(68)
Net profit for the year after tax	–	–	–	1 759	1 759
Transfer of reserves	129	–	(150)	21	–
Balance at 31 December 2000	553	–	–	30 029	30 582
Available-for-sale asset movements – Fair value gains	–	534	–	–	534
Cash flow hedges – Fair value losses	(131)	–	–	–	(131)
– Reclassified and added to future fuel supplies	104	–	–	–	104
Net profit for the year after tax	–	–	–	2 272	2 272
Transfer of reserves	537	(719)	–	182	–
Balance at 31 December 2001	1 063	(185)	–	32 483	33 361

1. Accounting policies

Basis of preparation

In terms of the Eskom Act of 1987, and as determined by the Electricity Council, the group annual financial statements are prepared in accordance with the applicable requirements of the Companies Act of 1973 and comply with South African Statements of Generally Accepted Accounting Practice and with International Accounting Standards (IAS).

The group annual financial statements are prepared on the historical cost basis except that certain financial instruments, such as foreign loans, derivative financial instruments, available-for-sale investments and trading assets and liabilities, are stated at fair value at balance sheet date.

The following principal accounting policies, except for the changes stated in note 2, are consistent, in all material respects, with those applied during the previous year.

Where necessary, comparative figures have been reclassified and restated for disclosure purposes.

Basis of consolidation

The group annual financial statements present the consolidated financial position and changes therein, operating results and cash flow information of Eskom and its subsidiaries. Subsidiaries are those entities in which the group has an interest of more than one half of the voting rights and the power to exercise control. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control effectively commences until the date that control effectively ceases.

The results of subsidiaries are included for the duration in which the group exercises control over the subsidiary. All significant intercompany transactions and resulting profits and losses between the group companies have been eliminated. Where necessary, accounting policies for subsidiaries have been changed to ensure consistency with the policies adopted by the group. Separate disclosure is made of minority interests if material.

Investments

Investments in subsidiaries

Investments in subsidiaries are carried at cost less accumulated impairment losses.

Investments in associates and joint ventures

An associate is an entity over which the group is in a position to exercise significant influence over the financial and operating policies, but which it does not control. A joint venture is an entity jointly controlled by the group and one or more other venturers in terms of a contractual arrangement.

Investments in associates and joint ventures are accounted for in the group and Eskom financial statements using the equity method for the duration that the group has the ability to exercise significant influence or joint control established by contractual agreement. Equity accounted income represents the group's proportionate share of profits of these entities and the share of taxation thereon. All material unrealised intergroup profits and losses are eliminated.

Carrying amounts of investments in associates and joint ventures are reduced to their recoverable amount where this is lower than their carrying amount.

Other investments

Unlisted investments are stated at cost less accumulated impairment losses.

Property, plant and equipment

Owned assets

Property, plant and equipment is stated at cost of acquisition or construction, less accumulated depreciation thereon.

Land is not depreciated. Mothballed power stations are plant that is out of commission, and are not being depreciated.

Major overhaul costs are capitalised as part of generating plant and depreciated on a straight-line basis over their estimated useful lives.

Other property, plant and equipment in commission are depreciated on a straight-line basis over their respective estimated useful lives, which are as follows:

	Years
Buildings and facilities	10 to 40
Plant – Generation	6 to 35
– Transmission	25
– Distribution	15 to 25
– Test, telecommunication and other plant	3 to 10
Equipment and vehicles	1 to 10

Works under construction are stated at cost, which includes all costs necessarily incurred to bring plant to the condition and location essential for its intended use. Costs include overheads and borrowing costs where applicable.

The cost of renewal and maintenance of assets is expensed as incurred. Where the life of an asset is extended, such costs are capitalised and depreciated over the adjusted useful life of the asset.

Construction materials are stated at weighted average cost.

Leased assets

Assets subject to finance lease agreements are capitalised at their cash cost equivalents, and the corresponding liabilities are recognised. The assets are depreciated on the straight-line basis over the shorter of their estimated useful lives, or the lease term. Lease finance charges are included in interest expenditure as they become due.

Lease and leaseback transactions in terms of which the group assumes substantially all the risks and rewards of ownership, are classified as finance leases. The lease and leaseback assets are kept at their carrying amount and depreciated over their remaining useful lives.

Rentals payable under operating leases are charged to income on a straight-line basis over the term of the relevant lease.

Goodwill and negative goodwill

Any excess of the value of the net assets acquired over the cost of the takeover is described as negative goodwill. Any excess of the cost of the takeover, compared with the value of the net assets acquired, is described as goodwill.

Goodwill is amortised to the income statement and negative goodwill is recognised as income in the income statement over the life of the assets, on a straight-line basis, both over a period not exceeding 20 years.

1. Accounting policies (continued)

Intangible assets

Computer software

Computer software is depreciated on a straight-line basis over its estimated useful life of three years.

Research and development

Research expenditure is expensed as incurred. Costs incurred on development projects (relating to the design and testing of new or improved products) are recognised as intangible assets to the extent that such expenditure is expected to generate future economic benefits. Other development expenditures are recognised as incurred. Development costs previously recognised as an expense are not recognised as an asset in a subsequent period. Development costs that have been capitalised are amortised by the group on a straight-line basis over the period of the expected benefit from the commencement of the commercial production of the product or when the new product is used. The amortisation period adopted does not exceed five years.

Capitalisation of borrowing costs

Borrowing costs attributable to the construction of qualifying assets are capitalised as part of the cost of these assets over the period of construction to the extent that the assets are financed by financial instruments. The capitalisation rate applied is the weighted average of the net borrowing costs applicable to the net borrowings of the group.

Impairment of assets

The carrying amounts of assets stated in the balance sheet, other than inventories and deferred tax assets, are reviewed at each balance sheet date to determine whether there is any indication of impairment. If any such indication exists, the recoverable amount of the asset is estimated as the higher of the net selling price and its value in use. An impairment loss is recognised in the income statement whenever the carrying amount exceeds the recoverable amount.

In assessing value in use, the expected future cash flows are discounted to their present value that reflects current market assessments of the time value of money and the risks specific to the asset. For an asset that does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

A previously recognised impairment loss is only reversed if there has been a change in the estimates used to determine the recoverable amount; however, not to an amount higher than the carrying amount that would have been determined (net of depreciation and amortisation) had no impairment loss been recognised in previous years.

An impairment loss in respect of goodwill is not reversed unless the loss was caused by a specific external event of an exceptional nature that is not expected to recur, and the increase in the recoverable amount relates clearly to the reversal of the effect of that special event.

Future fuel supplies

Nuclear

Fuel assemblies in the process of fabrication are valued at cost and include borrowing costs, which are capitalised during the fabrication period. Advance payments in terms of agreements are capitalised.

Coal

Non-refundable advances to suppliers, together with related borrowing costs thereon, are deferred and amortised against the cost of coal supplied on the basis of quantities of coal burnt.

Repayable advances to suppliers are capitalised, and the interest earned thereon is credited to interest income and repaid in terms of the agreements.

Financial instruments

Local financial market instruments

Derivative financial market instruments

Derivative financial assets and derivative financial liabilities are deemed to be held for trading unless they are designated as effective hedging instruments and comply with hedging criteria. Certain derivative transactions, while providing effective economic hedges under the risk management policies, do not qualify for hedge accounting under the specific rules of IAS 39, Financial Instruments – recognition and measurement.

Derivative financial instruments held for trading purposes are measured at fair value, with the resultant gains and losses included in interest income and interest expenditure respectively.

Financial market assets

Held-to-maturity assets, originated loans and receivables are measured at amortised cost.

Available-for-sale assets are measured at fair value with the resultant gains or losses recognised in equity until the financial asset is sold, or otherwise disposed of, or found to be impaired, at which time the cumulative gains or losses previously recognised in equity are included in interest income and interest expenditure respectively. Fair value gains or losses recognised in equity exclude interest, which are reported in the income statement on an accrual basis.

Financial assets held for trading purposes are measured at fair value, and the resultant gains and losses are included in interest income and interest expenditure respectively.

The settlement of financial market transactions that are established by regulation or market convention are accounted for, using trade date accounting.

Financial market liabilities

All financial market liabilities other than liabilities, held for trading purposes, and derivative liabilities are measured at amortised cost.

Financial market liabilities held for trading purposes and derivative liabilities are measured at fair value, and the resultant gains and losses are included in interest income and interest expenditure respectively.

Fair value estimation

Fair value is determined from a discounted cash flow calculation using independently sourced market rates for similar instruments.

Capital market instruments are calculated on a clean price basis as interest accrued to date disclosed separately.

Options are fair valued using the Black-Scholes model.

Amortised cost basis

Amortised cost is determined using the effective interest rate method.

Foreign currency financial market instruments

Transactions in foreign currencies are initially recognised at the exchange rates prevailing on the transaction date.

1. Accounting policies (continued)

Foreign loans are non-trading and are recorded at the exchange rates ruling at the date of the transaction. At balance sheet date, foreign loans are restated at the closing rates and the gains or losses are recognised in the income statement for the period. The initial measurement of foreign loans is adjusted for discounts or premiums. The discounts or premiums are amortised over the period of the relevant loan using the yield to maturity method.

Other monetary assets, liabilities and commitments in foreign currencies are translated at the exchange rates ruling at the balance sheet date.

Forward exchange contracts and similar instruments, designated as cash flow hedges for future anticipated foreign currency denominated transactions, are measured at fair value with the resultant gains or losses being recognised in equity. Forward exchange contracts and similar instruments, designated as fair value hedges for recognised foreign denominated transactions, are measured at fair value with the resultant gains or losses being charged to the income statement in the period.

If the hedged forecasted transaction results in the recognition of an asset or liability, the cumulative amount recognised in equity is adjusted against the initial measurement of the asset or liability. For other cash flow hedges, the cumulative amount recognised in equity is included in the income statement in the period when the forecasted transaction affects profits or losses.

Other financial market instruments

Trade and other receivables

Trade and other receivables are stated at cost less provision for doubtful debts. Debts considered to be irrecoverable are written off.

Trade and other payables

Local trade and other payables are stated at nominal value, which approximates fair value.

Loans receivable

Loans receivable consist of finance provided to employees of the group mainly for the purchase of immovable property, and are stated after a provision for doubtful loans. Specific provisions are made against identified doubtful loans. A provision is also raised based on periodic evaluations of loans and taking into account past experience, economic conditions, and changes in the nature and levels of risk exposure.

Inventories

Coal, maintenance and consumables

Inventories are valued at the lower of cost and net realisable value. Cost is determined on the weighted average basis.

Nuclear fuel

Nuclear fuel is valued at the lower of cost and net realisable value. Cost is determined on the first-in first-out basis and includes borrowing costs. Nuclear fuel consists of raw materials, fabricated fuel assemblies and fuel in reactors.

Insurance reserve

A full contingency reserve is created in Escap Limited and Gallium Insurance Company Limited in terms of the Short-term Insurance Act, 1998.

Provisions

Provisions are recognised when the group has a present legal or constructive obligation as a result of past events, for which it is probable that an outflow of economic benefits will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

An onerous contract is a contract under which the unavoidable cost of meeting the obligation exceeds the economic benefit expected to be received under it. When a contract becomes onerous, the present obligation under a contract is recognised and measured as a provision.

If the effect is material, provisions are determined by discounting the expected future cash flows that reflect current market assessments of the time value of money and, where appropriate, the risks specific to the liability.

Decommissioning and nuclear waste management

Nuclear and other generation plant

A provision is raised for the estimated decommissioning cost of nuclear or other generation plant and capitalised to the cost of nuclear or other generation plant when it is commissioned. The estimated cost of decommissioning at the end of the productive life of plant is based on engineering estimates and reports from independent experts. Decommissioning cost capitalised to the cost of nuclear or other generation plant is written off on a straight-line basis over the estimated useful lives of the plant.

Where the effect of discounting to present value is material, provisions are adjusted to reflect the time value of money and, where appropriate, the risk specific to the liability.

Any subsequent change to the provision regarding a change in the estimate of the decommissioning cost is charged to the income statement.

The provisions are restated on an annual basis to reflect the changes in time value of money. The impact of the change in time value on the provision is reflected in the income statement.

Spent fuel

A provision is made, over the life of the plant, for the management of spent nuclear fuel assemblies and radioactive waste. The annual charge to the income statement is based on the latest available cost information and is included in operating expenditure.

Where the effect of discounting to present value is material, provisions are adjusted to reflect the time value of money and, where appropriate, the risk specific to the liability.

The provisions are restated on an annual basis to reflect the changes in time value of money. The impact of the change in time value on the provision is reflected in the income statement.

Closure, pollution control and rehabilitation

Expenditure on property, plant and equipment for pollution control is capitalised and depreciated over the useful lives of the assets. The cost of current ongoing programmes to prevent and control pollution and to rehabilitate the environment is charged to the income statement as incurred, unless a present constructive or legal obligation exists to recognise such expenditure in which case a provision is created based on the best estimates available.

Provision is made for the estimated cost of closure, pollution control and rehabilitation during, and at the end of, the life of mines where a constructive obligation exists to pay coal suppliers. Closure, pollution control and rehabilitation costs capitalised to future fuel are written off over the estimated useful life of the power station.

Where the effect of discounting to present value is material, provisions are adjusted to reflect the time value of money and, where appropriate, the risk specific to the liability.

1. Accounting policies (continued)

Any subsequent change to the provision regarding a change in the estimate of the environment and rehabilitation cost is charged to the income statement.

Deferred income

Cross-border lease

Income realised on cross-border lease transactions is deferred. This income is recognised over the period that Eskom is exposed to a risk of a cancellation event on the contract and is allocated to the income statement on the same basis as the risk exposure profile.

Grants

Government grants received relating to the creation of electrification assets are included in non-current liabilities as deferred income, and are credited to the income statement on a straight-line basis over the expected useful lives of the related assets.

Retirement benefits

Retirement benefits are provided for all employees through the Eskom Pension and Provident Fund. Contributions to the Fund are based on a percentage of pensionable emoluments and are expensed in the period in which they are incurred.

The net benefit liability or asset at the balance sheet date is not accounted for in the financial statements. The rules of the Eskom Pension and Provident Fund state that any deficit on the valuation of the Fund will be funded by increases in future contributions or reductions in benefits. If there is a substantial surplus on the valuation of the Fund, future contributions may be decreased or benefits may be improved as determined by the Trustees of the Fund.

The estimated cost of gratuities is accounted for over the potential working life of the employees based on the assessment by independent actuaries, which takes into account the probability of employees staying until retirement.

Provision is made for post-retirement medical contributions by accounting through the income statement for the estimated cost over the expected period to retirement of the employees. The cost to the employer, in the form of employer contributions, is determined by using the projected unit credit method, with actuarial valuations being carried out at each balance sheet date. Actuarial gains and losses that exceed 10% of the present value of the post-retirement medical aid obligation are amortised to the income statement over the lesser of 10 years or the expected remaining working lives of the participating employees. The amount recognised in the balance sheet represents the present value of the post-retirement medical aid benefit as adjusted for unrecognised actuarial gains and losses.

Discontinuing operations

A discontinuing operation is a significant distinguishable component of the group's business that is abandoned or terminated pursuant to a single formal plan, and which represents a separate major line of business or geographical area of operations.

The profit or loss on the sale or abandonment of a discontinuing operation is determined from the formalised discontinuance date.

Exceptional items

Exceptional items are material items that derive from events or transactions that fall within the ordinary activities of the group and that individually or, if of a similar type, in aggregate, need to be disclosed by virtue of their size or incidence.

Cash and cash equivalents

Cash and cash equivalents are defined as money market assets and liabilities that mature within one year, and cash and bank balances.

Revenue

Revenue, which excludes value-added tax, represents the gross value of goods or services invoiced and accrued at the end of the year.

Electricity revenue

Electricity revenue is recognised when electricity is consumed by the customer.

Other revenue

Revenue from the sale of goods is recognised when the significant risks and rewards of ownership are transferred to the buyer.

Interest income

Interest income comprises interest receivable on loans, advances, trade receivables and income from financial market investments. Interest income is recognised on a time proportionate basis that takes into account the effective yield on assets.

Taxation

Income tax on the net profit for the year comprises current and deferred tax. Income tax is recognised in the income statement except to the extent that it relates to items recognised directly to equity, in which case it is recognised in equity.

The charge for current tax is based on the results for the year as adjusted for items that are non-assessable or disallowed using tax rates that have been enacted or substantially enacted at the balance sheet date and any adjustment to tax payable in respect of a previous year.

Deferred tax is provided on the comprehensive basis using the balance sheet liability method on all temporary differences between the carrying amounts of assets or liabilities for financial reporting purposes and the amounts used for taxation purposes, except differences relating to goodwill and negative goodwill not deductible for taxation purposes and the initial recognition of assets or liabilities that affect neither accounting nor computed taxable profits or losses.

Deferred tax is calculated at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled and is charged to the income statement.

A deferred tax asset is recognised only to the extent that it is probable that future taxable profits will be available against which the associated unused tax losses and credits can be utilised. Deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

Changes in accounting policies

Eskom has applied IAS 39, Financial instruments: Recognition and measurement, to its local financial market instruments.

Financial market assets

Financial assets classified as available-for-sale were measured at amortised cost using the effective interest rate method. In terms of IAS 39, available-for-sale financial market assets are measured at fair value with the resultant gains and losses being recognised in equity. Fair value gains or losses recognised in equity, exclude interest which is reported in the income statement on an accrual basis.

Derivative financial assets and liabilities

Derivative financial assets and liabilities were accounted for on an amortised cost basis. In terms of IAS 39, derivative financial assets and derivative financial liabilities are deemed to be held for trading unless they are designated as effective hedging instruments and comply with the hedge accounting criteria.

Derivative financial assets and derivative financial liabilities currently do not meet the hedge accounting conditions and are thus deemed to be held for trading. The derivative financial instruments are measured at fair value with the resultant gains or losses being charged to the income statement for the period.

In accordance with IAS 39, the comparative financial statements for the year ended 31 December 2000 are not restated and as a result the fair value adjustments are charged to the income statement in the current year.

3. Property, plant and equipment

	Group			Eskom		
	Cost Rm	Accumulated depreciation Rm	Carrying value Rm	Cost Rm	Accumulated depreciation Rm	Carrying value Rm
2001						
Land	**304**	**–**	**304**	**273**	**–**	**273**
Buildings and facilities	**2 892**	**1 536**	**1 356**	**2 790**	**1 510**	**1 280**
Plant – Generation	**44 336**	**18 503**	**25 833**	**44 336**	**18 503**	**25 833**
– Transmission	**9 432**	**3 941**	**5 491**	**9 432**	**3 941**	**5 491**
– Distribution	**22 016**	**7 647**	**14 369**	**22 016**	**7 647**	**14 369**
Regular distribution	**13 602**	**4 705**	**8 897**	**13 602**	**4 705**	**8 897**
Electrification	**8 414**	**2 942**	**5 472**	**8 414**	**2 942**	**5 472**
– Test, telecommunication and other plant	**1 812**	**1 227**	**585**	**503**	**445**	**58**
Equipment and vehicles	**2 652**	**1 897**	**755**	**2 399**	**1 752**	**647**
Total in commission	**83 444**	**34 751**	**48 693**	**81 749**	**33 798**	**47 951**
Plant at mothballed power stations	**598**	**377**	**221**	**598**	**377**	**221**
Works under construction	**1 225**	**–**	**1 225**	**1 050**	**–**	**1 050**
Construction materials	**57**	**–**	**57**	**57**	**–**	**57**
	85 324	**35 128**	**50 196**	**83 454**	**34 175**	**49 279**
2000						
Land	246	–	246	242	–	242
Buildings and facilities	3 074	1 468	1 606	2 783	1 429	1 354
Plant – Generation	41 737	16 844	24 893	41 737	16 844	24 893
– Transmission	9 009	3 602	5 407	9 009	3 602	5 407
– Distribution	20 593	6 724	13 869	20 593	6 724	13 869
Regular distribution	12 406	4 209	8 197	12 406	4 209	8 197
Electrification	8 187	2 515	5 672	8 187	2 515	5 672
– Test, telecommunication and other plant	1 033	555	478	508	403	105
Equipment and vehicles	2 642	1 817	825	2 527	1 813	714
Leased equipment	39	19	20	39	19	20
Total in commission	78 373	31 029	47 344	77 438	30 834	46 604
Plant at mothballed power stations	663	448	215	663	448	215
Works under construction	2 671	–	2 671	2 671	–	2 671
Construction materials	63	–	63	63	–	63
	81 770	31 477	50 293	80 835	31 282	49 553

for the year ended 31 December

	Carrying value beginning of year Rm	Additions and transfers Rm	Disposals Rm	Impairment losses Rm	Depreciation Rm	Carrying value end of year Rm
3. Property, plant and equipment (continued)						
Reconciliation of movements						
Group						
2001						
Land	246	67	9	–	–	304
Buildings and facilities	1 606	(90)	31	2	127	1 356
Plant	44 647	4 937	234	–	3 072	46 278
Equipment and vehicles	825	295	16	–	349	755
Leased equipment	20	–	20	–	–	–
Plant at mothballed power stations	215	6	–	–	–	221
Works under construction	2 671	(1 446)	–	–	–	1 225
Construction materials	63	175	181	–	–	57
	50 293	3 944	491	2	3 548	50 196
Eskom						
2001						
Land	242	35	4	–	–	273
Buildings and facilities	1 354	64	31	2	105	1 280
Plant	44 274	4 736	235	–	3 024	45 751
Equipment and vehicles	714	258	16	–	309	647
Leased equipment	20	–	20	–	–	–
Plant at mothballed power stations	215	6	–	–	–	221
Works under construction	2 671	(1 621)	–	–	–	1 050
Construction materials	63	175	181	–	–	57
	49 553	3 653	487	2	3 438	49 279

	Group		Eskom	
	2001 Rm	2000 Rm	**2001 Rm**	200 R
Borrowing costs are capitalised at a weighted average rate of 10,08% (2000: 12,78%).				
Details of land and buildings are available for examination at the registered offices of the respective businesses.				
Included in generation plant are assets leased to an international lessor and leased back under cross-border lease agreements with a book value of	**5 161**	5 385	**5 161**	5 385
The cross-border lease transactions over three units comprise primary lease terms of 18,8 and 22 years as well as renewal lease terms of 15,8 and 13 years respectively. The renewal leases will be at specified rentals on terms similar to the primary leases. Options at the end of the primary lease terms are either to purchase the rights of the lessor over the assets at a predetermined fixed price or to return the assets to the lessor at no cost but on condition that the lessor may require that the renewal lease be exercised. At the end of the renewal leases the assets will return to Eskom.				
The present value of lease and leaseback obligations was settled in full at commencement of the transactions.				

4. Negative goodwill

Balance at beginning of the year	**288**	358	**288**	358
Amortised during the year	**(38)**	(34)	**(38)**	(34)
Reversal during the year	**–**	(36)	**–**	(36)
Balance at end of the year	**250**	288	**250**	288

for the year ended 31 December

5. Intangible assets

	Group			Eskom		
	Cost Rm	Accumulated depreciation Rm	Carrying value Rm	Cost Rm	Accumulated depreciation Rm	Carrying value Rm
2001						
Total	**738**	**568**	**170**	**736**	**568**	**168**
2000						
Total	728	400	328	728	400	328

Reconciliation of movements

	Carrying value beginning of year Rm	Additions Rm	Disposals Rm	Impairment losses Rm	Depreciation Rm	Carrying value end of year Rm
Group						
2001						
Total	**328**	**49**	**13**	**–**	**194**	**170**
Eskom						
2001						
Total	**328**	**46**	**12**	**–**	**194**	**168**

6. Future fuel supplies

	Group		Eskom	
	2001 Rm	2000 Rm	**2001 Rm**	2000 Rm
Coal	**2 384**	2 587	**2 384**	2 587
Nuclear	**141**	69	**141**	69
	2 525	2 656	**2 525**	2 656

An amount of R104 million (2000: R68 million) relating to nuclear fuel was credited (2000: debited) to the foreign revaluation reserve in terms of the accounting policy on foreign currency and financial instruments in respect of cash flow hedges.

Eskom

		Group				Eskom			
		2001 Carrying amount Rm	**2001 Fair value Rm**	2000 Carrying amount Rm	2000 Fair value Rm	**2001 Carrying amount Rm**	**2001 Fair value Rm**	2000 Carrying amount Rm	2000 Fair value Rm
7.	**Financial instruments**								
	Financial market assets								
	Financial assets, other than investments in subsidiaries, associates and joint ventures, trade and other receivables, comprise the following classes of financial assets:								
	Non-current assets	**3 918**	**3 918**	5 138	5 138	**3 918**	**3 918**	4 953	4 953
	Held-to-maturity assets 7.1.1	–	–	–	–	–	–	–	–
	Originated loans and receivables 7.1.2	**1 046**	**1 046**	693	693	**1 046**	**1 046**	693	693
	Available-for-sale assets 7.1.3	**2 768**	**2 768**	4 319	4 319	**2 768**	**2 768**	4 134	4 134
	Assets carried at fair value 7.1.4	**132**	**132**	129	129	**132**	**132**	129	129
	Hedging instruments 7.1.5	**(28)**	**(28)**	(3)	(3)	**(28)**	**(28)**	(3)	(3)
	Current assets	**10 828**	**10 828**	6 045	6 045	**8 791**	**8 791**	5 034	5 034
	Held-to-maturity assets 7.1.1	–	–	–	–	–	–	–	–
	Originated loans and receivables 7.1.2	**4 498**	**4 498**	3 112	3 112	**2 577**	**2 577**	2 101	2 101
	Available-for-sale assets 7.1.3	**1 473**	**1 473**	–	–	**1 473**	**1 473**	–	–
	Assets carried at fair value 7.1.4	**3 002**	**3 002**	2 402	2 402	**3 002**	**3 002**	2 402	2 402
	Hedging instruments 7.1.5	**1 855**	**1 855**	531	531	**1 739**	**1 739**	531	531
		14 746	**14 746**	11 183	11 183	**12 709**	**12 709**	9 987	9 987
	Financial market liabilities								
	Financial liabilities other than trade and other payables comprise:								
	Non-current liabilities	**17 933**	**17 933**	22 030	22 030	**17 896**	**17 896**	22 030	22 030
	Liabilities carried at fair value 7.2.1	**888**	**888**	270	270	**888**	**888**	270	270
	Other liabilities 7.2.2	**16 535**	**16 535**	18 111	18 111	**16 498**	**16 498**	18 111	18 111
	Hedged items 7.2.3	**510**	**510**	3 649	3 649	**510**	**510**	3 649	3 649
	Current liabilities	**11 521**	**11 521**	9 563	9 563	**11 501**	**11 501**	9 752	9 752
	Liabilities carried at fair value 7.2.1	**3 122**	**3 122**	3 801	3 801	**3 122**	**3 122**	3 801	3 801
	Other liabilities 7.2.2	**3 532**	**3 532**	3 450	3 450	**3 512**	**3 512**	3 639	3 639
	Hedged items 7.2.3	**4 867**	**4 867**	2 312	2 312	**4 867**	**4 867**	2 312	2 312
		29 454	**29 454**	31 593	31 593	**29 397**	**29 397**	31 782	31 782

		Group			
		2001	**2001**	2000	2000
		Carrying value Rm	**Fair value Rm**	Carrying value Rm	Fair value Rm
7.	**Financial instruments (continued)**				
7.1	**Financial market assets**				
7.1.1	Held to maturity	–	–	–	–
	Capital market instruments	–	–	–	–
	Money market instruments	–	–	–	–
7.1.2	Originated loans and receivables	**5 544**	**5 544**	3 805	3 805
	Capital market instruments	**129**	**129**	120	120
	Money market instruments	**400**	**400**	250	250
	Cash and other deposits	**4 098**	**4 098**	2 854	2 854
	Foreign deposits	**917**	**917**	581	581
7.1.3	Available-for-sale assets	**4 241**	**4 241**	4 319	4 319
	Capital market instruments	–	–	4 319	4 319
	Non-qualifying hedged amounts	**4 241**	**4 241**	–	–
7.1.4	Assets carried at fair value	**3 134**	**3 134**	2 531	2 531
	Capital market instruments	**17**	**17**	144	144
	Money market instruments	**2 998**	**2 998**	2 374	2 374
	Derivatives	**112**	**112**	13	13
	Non-qualifying hedges	**7**	**7**	–	–
7.1.5	Hedging instruments	**1 827**	**1 827**	528	528
	Derivatives designated as cash flow hedges	**30**	**30**	62	62
	Contracts with positive fair values	**169**	**169**	100	100
	– Foreign exchange contracts	**169**	**169**	99	99
	– Foreign interest rate swaps	**–**	**–**	1	1
	Contracts with negative fair values	**139**	**139**	38	38
	– Foreign exchange contracts	**139**	**139**	37	37
	– Foreign interest rate swaps	**–**	**–**	1	1
	Derivatives designated as fair value hedges	**1 797**	**1 797**	466	466
	Contracts with positive fair values	**2 213**	**2 213**	689	689
	– Foreign exchange contracts	**2 143**	**2 143**	678	678
	– Foreign interest rate swaps	**70**	**70**	11	11
	Contracts with negative fair values	**416**	**416**	223	223
	– Foreign exchange contracts	**416**	**416**	214	214
	– Foreign interest rate swaps	**–**	**–**	9	9
		14 746	**14 746**	11 183	11 183

2001	2001 Non-current		2001	2001	Eskom 2001	2001	2000	2000	2000	2000
Current 1 year Rm	1 – 5 years Rm	After 5 years Rm	Sub-total Rm	Total Rm	Fair value Rm	Weighted average rate %	Current Rm	Non-current Rm	Total Rm	Fair value Rm
–	–	–	–	–	–		–	–	–	–
–	–	–	–	–	–		–	–	–	–
–	–	–	–	–	–		–	–	–	–
2 577	–	1 046	1 046	3 623	3 623		2 101	693	2 794	2 794
–	–	129	129	129	129		8	112	120	120
400	–	–	–	400	400	14,93	250	–	250	250
2 177	–	917	917	2 177	2 177	9,86	1 843	–	1 843	1 843
–	–	–	–	917	917		–	581	581	581
1 473	409	2 359	2 768	4 241	4 241		–	4 134	4 134	4 134
–	–	–	–	–	–		–	4 134	4 134	4 134
1 473	409	2 359	2 768	4 241	4 241		–	–	–	–
3 002	60	72	132	3 134	3 134	14,37	2 402	129	2 531	2 531
–	–	17	17	17	17		15	129	144	144
2 998	–	–	–	2 998	2 998	11,39	2 374	–	2 374	2 374
4	60	48	108	112	112	9,70	13	–	13	13
–	–	7	7	7	7		–	–	–	–
1 739	(25)	(3)	(28)	1 711	1 711		531	(3)	528	528
33	(3)	–	(3)	30	30		64	(2)	62	62
137	32	–	32	169	169		76	24	100	100
137	32	–	32	169	169		75	24	99	99
–	–	–	–	–	–		1	–	1	1
104	35	–	35	139	139		12	26	38	38
104	35	–	35	139	139		12	25	37	37
–	–	–	–	–	–		–	1	1	1
1 706	(22)	(3)	(25)	1 681	1 681		467	(1)	466	466
1 843	254	–	254	2 097	2 097		537	152	689	689
1 773	254	–	254	2 027	2 027		537	141	678	678
70	–	–	–	70	70		–	11	11	11
137	276	3	279	416	416		70	153	223	223
137	276	3	279	416	416		70	144	214	214
–	–	–	–	–	–		–	9	9	9
8 791	444	3 474	3 918	12 709	12 709		5 034	4 953	9 987	9 987

	Group			
	2001	2001	2000	2000
	Carrying value Rm	Fair value Rm	Carrying value Rm	Fair value Rm
7. Financial instruments (continued)				
7.2 Financial market liabilities				
7.2.1 Liabilities carried at fair value	**4 010**	**4 010**	4 071	4 071
Capital market instruments	**28**	**28**	3 330	3 330
Money market instruments	**2 363**	**2 363**	341	341
Derivatives	**1 225**	**1 225**	60	60
Embedded derivatives	**394**	**394**	340	340
Non-qualifying hedges	**–**	**–**	–	–
The embedded derivative is an equity-linked cash instrument. The equity-linked cash instrument comprises a zero coupon note and an embedded ALSI future. As a result of being unable to separately measure the embedded ALSI future, the entire instrument has been fair valued.				
7.2.2 Other liabilities	**20 067**	**20 067**	21 561	21 561
Capital market instruments	**14 110**	**14 110**	16 675	16 675
Money market instruments	**2 921**	**2 921**	1 659	1 659
Other	**179**	**179**	3 227	3 227
Non-qualifying hedges	**2 857**	**2 857**	–	–
7.2.3 Hedged items				
Foreign liabilities	**5 377**	**5 377**	5 961	5 961
Euro	**2 711**	**2 711**	2 058	2 058
US dollar	**293**	**293**	960	960
Japanese yen	**2 289**	**2 289**	2 878	2 878
Pound sterling	**67**	**67**	65	65
Swiss franc	**17**	**17**	–	–
	29 454	**29 454**	31 593	31 593

2001 Current 1 year Rm	2001 Non-current 1 – 5 years Rm	2001 Non-current After 5 years Rm	2001 Sub-total Rm	2001 Total Rm	Eskom 2001 Fair value Rm	2001 Weighted average rate %	2000 Current Rm	2000 Non-current Rm	2000 Total Rm	200 Fai valu Rm
3 122	446	442	888	4 010	4 010		3 801	270	4 071	4 071
–	4	24	28	28	28	11,47	3 330	–	3 330	3 330
2 363	–	–	–	2 363	2 363		411	(70)	341	341
365	442	418	860	1 225	1 225	9,55	60	–	60	60
394	–	–	–	394	394		–	340	340	340
–	–	–	–	–	–		–	–	–	–
3 512	2 850	13 648	16 498	20 010	20 010		3 639	18 111	21 750	21 750
71	2 831	11 208	14 039	14 110	14 110	14,96	1 653	15 022	16 675	16 675
2 876	19	26	45	2 921	2 921		1 846	38	1 884	1 884
1	–	121	121	122	122	9,91	140	3 051	3 191	3 191
564	–	2 293	2 293	2 857	2 857		–	–	–	–
4 867	499	11	510	5 377	5 377		2 312	3 649	5 961	5 961
2 340	360	11	371	2 711	2 711	7,25	284	1 774	2 058	2 058
221	72	–	72	293	293	8,15	777	183	960	960
2 289	–	–	–	2 289	2 289	3,86	1 240	1 638	2 878	2 878
–	67	–	67	67	67	8,52	11	54	65	65
17	–	–	–	17	17	4,00	–	–	–	–
11 501	3 795	14 101	17 896	29 397	29 397		9 752	22 030	31 782	31 782

for the year ended 31 December

	2001	2000
Financial instruments (continued)		
The items discussed below apply to both Eskom and the group.		
Key interest rate risk indicators for non-trading instruments		
Domestic to foreign interest rate mix, ratio	**71:29**	70:30
Foreign currency risk is fully hedged.		
The average annual rate of interest and finance charges on net financial market instruments, %	**11,41**	11,31
The weighted average maturity period of financial market instruments, years	**8,05**	7,56
Current financial market liabilities including credits and current loans of a revolving nature, Rm	**5 346**	5 394
Fair value information		
Integrated fair value information for portfolios where the intention is to hold the instruments to maturity is only prepared on a pool basis for risk assessment and risk management purposes. It is impractical to determine the fair value of all instruments in their respective categories for financial accounting purposes.		
Nominal value of all locally issued Eskom bonds, Rm		
Authorised	**56 360**	56 400
Issued	**15 245**	18 455
Financial market liabilities and interest thereon are secured by a first claim against revenue and assets.		
Portion of foreign debt guaranteed by the government of the Republic of South Africa, Rm	**2 709**	2 848
Derivatives and forward exchange contracts		
Derivatives and forward exchange contracts are primarily used for risk management purposes. In particular, they are used to hedge Eskom's exposure to domestic and foreign interest rate risk, foreign exchange risk and commodity price risk. In addition, derivatives are transacted to a limited extent for trading purposes. These trading positions are controlled within very tight limits and within the parameters of Eskom's risk management policies. Their use is monitored on a real time basis by an independent compliance function.		
The range of derivative instruments used includes domestic and foreign interest rate swap agreements, forward rate agreements, forward exchange contracts, commodity option contracts, bond option contracts and commodity futures contracts.		

7.11 The carrying amounts and fair values of financial assets and liabilities at 31 December are:

	Eskom 2001		Eskom 2000	
	Carrying amount Rm	**Fair value Rm**	Carrying amount Rm	Fair value Rm
Financial assets				
Financial market assets	**12 709**	**12 709**	9 987	9 987
Investment in associate and joint venture companies	**150**	**213**	229	229
Other investments	**49**	**49**	105	105
Trade and other receivables	**4 351**	**4 351**	4 833	4 833
	17 259	**17 322**	15 154	15 154
Financial liabilities				
Financial market liabilities	**29 397**	**29 397**	31 782	31 782
Letter of credit facilities	**108**	**108**	109	109
Trade and other payables	**2 917**	**2 917**	3 901	3 901
	32 422	**32 422**	35 792	35 792
Unrealised gains	**–**	**63**	–	–

The carrying amount of cash, trade receivables and trade payables approximates fair values because of the short maturity period of these instruments. Trade and other receivables after provision for doubtful debts, and trade payables are mainly expected to mature within 12 months.

The fair value of investment in associate and joint venture companies, and other investments is based on directors' valuations.

The method and assumptions for the fair value of the rest of the instruments are stated in the accounting policies and, as a result, the carrying values approximate the fair values.

8. Market risk management

The items discussed below refer to both the group and Eskom.

The objective of Eskom's market risk management is to ensure that Eskom and its customers are not exposed to undue financial risk. The management of market risk takes place within Eskom's centralised treasury function and adheres substantially to the G30[1] recommendations and in particular to the requirement that the functions of risk assessment and risk management be completely segregated.

Risk assessment

The risk assessment function takes responsibility for the identification, measurement and monitoring of market risk. By ensuring that the necessary processes and tools are in place, the risk assessment function seeks to identify potential risks at an early stage so that the information can be supplied timeously to the risk management committee. Advanced risk evaluation procedures are used and, amongst other indicators, internationally recognised methodologies of Value at Risk are used extensively. The revaluation rates and prices used for risk and accounting evaluations are obtained from independent external sources.

To ensure impartiality, the risk assesssment and compliance functions within the centralised Treasury have direct access and reporting responsibility to the executive director of Finance.

Risk management

Based on the information supplied by the risk assessment function, the Treasury risk management committee meets regularly to review and, if appropriate, approve the implementation of optimal strategies for the effective management of Eskom's commodity, liquidity, credit, currency and interest rate risks.

Market risks and broad management strategies

Commodity risk

Commodity risk originates from Eskom's use of commodities as inputs to the business as well as commodity-linked tariff agreements exposing it to commodity risk on the income side of the business. Where necessary, Eskom uses derivative instruments, including options, futures and forward agreements, to manage the exposure to these commodities.

Liquidity risk

Liquidity risk arises primarily from unexpected variations in revenue flows as well as Eskom's commitment to act as a market-maker in its own debt instruments. Eskom's strategy is to maintain a satisfactory call account balance as well as an adequate liquidity reserve portfolio consisting of liquid government and government-guaranteed assets.

Credit risk

The risk of counterparty failure is managed by setting exposure limits for each counterparty. This process is evaluated and managed by placing reliance on independent rating agencies. A credit committee, which is chaired by the executive director of Finance, reviews and approves these limits on a quarterly basis. International Swap Dealers Association (ISDA) netting agreements are in place with all Eskom's major counterparties.

1. *Group of 30 leading international bankers.*

	Group		Eskom	
	2001	2000	**2001**	2000
	%	%	%	%
The credit exposures by risk rating as at 31 December were:				
RSA government	**25**	40	**25**	40
A1+	**64**	52	**64**	52
Other	**11**	8	**11**	8
	100	100	**100**	100

Trade debtors comprise a large, widespread customer base. Credit evaluations are performed for all new customers together with required cash deposits and guarantees. Ongoing credit evaluation is performed on the financial condition of debtors and, where necessary, appropriate steps are taken to minimise risk. Information on trade receivables is contained under revenue management in the directors' report on page 43.

Currency risk

Currency risk arises primarily from foreign borrowings, imported components and electricity sales in foreign currencies. Management follows a conservative approach to currency risk, and therefore forward exchange contracts, and, to a limited extent, currency options, are used to hedge substantially all known foreign exchange exposures.

Interest rate risk

Interest rate risk arises from the repricing of Eskom's forward cover and floating rate debt as well as incremental funding and roll-over of maturing debt. Interest rate swaps are used as cash flow hedges of future interest rate payments, which have the economic effect of converting borrowings from floating to fixed rates. Interest rate swaps and forward rate agreements are used to limit the exposure to interest rate fluctuations.

Funding requirement

Eskom's requirements for external funding have been decreasing steadily over recent years, and it is anticipated that this trend will continue in the foreseeable future. However, Eskom's future funding requirement may change, depending on the future financial framework (with respect to dividend payments) still to be finalised with the government and the impact of the restructuring of the electricity supply industry. Eskom was a net investor of cash of R309 million (2000: R87 million) in the domestic and foreign markets during 2001.

for the year ended 31 December

	Group		Eskom	
	2001 Rm	2000 Rm	**2001 Rm**	2000 Rm
Loans receivable				
Secured by mortgages	**2 330**	2 327		
Other	**110**	98		
	2 440	2 425		
Provision for doubtful loans	**32**	28		
	2 408	2 397		
Investment in associate and joint venture companies				
Associate companies	**363**	209	**246**	209
Joint venture companies	**228**	101	**103**	90
	591	310	**349**	299
Provision for impairment losses	**199**	70	**199**	70
Total (refer schedule 1)	**392**	240	**150**	229
The income from associate and joint venture companies for the year amounted to R16 million (2000: R11 million) but as it was insignificant, it has been included in revenue for disclosure purposes.				
Investment in subsidiaries				
Shares at cost			**184**	34
Indebtedness			**3 334**	3 390
			3 518	3 424
Provision for impairment losses			**–**	36
Total (refer schedule 2)			**3 518**	3 388
Aggregate attributable after-tax profits of subsidiaries	**289**	109		
Other investments				
Amounts owed by electricity utilities	**29**	82	**29**	82
Other	**66**	180	**54**	57
	95	262	**83**	139
Provision for impairment losses	**34**	34	**34**	34
	61	228	**49**	105

	Group		Eskom	
	2001 Rm	2000 Rm	**2001 Rm**	2000 Rm
13. Deferred tax				
Balance at beginning of the year	**253**	1 693	**218**	1 693
Sale of business unit to subsidiary	**–**	–	**–**	(21)
Transfer from income statement (refer note 26)	**(1 152)**	(1 440)	**(1 154)**	(1 454)
Balance at the end of the year	**(899)**	253	**(936)**	218
Comprising:				
Deferred tax assets				
Property, plant and equipment	**–**	(1 882)	**–**	(1 910)
Inventories	**–**	54	**–**	54
Provisions	**44**	1 859	**–**	1 852
Taxation losses	**–**	261	**–**	261
Other	**–**	(39)	**–**	(39)
	44	253	**–**	218
Deferred tax liabilities				
Property, plant and equipment	**3 823**	–	**3 811**	–
Inventories	**96**	–	**96**	–
Provisions	**(2 162)**	–	**(2 160)**	–
Taxation losses	**(397)**	–	**(397)**	–
Other	**(417)**	–	**(414)**	–
	943	–	**936**	–
Computed taxation losses available for set-off against future taxable income	**144**	219	**–**	–
14. Trade and other receivables				
Trade	**4 751**	4 587	**4 529**	4 867
Interest receivable	**625**	700	**715**	777
Other	**899**	1 393	**1 030**	1 389
	6 275	6 680	**6 274**	7 033
Provision for doubtful debts	**1 951**	2 200	**1 923**	2 200
	4 324	4 480	**4 351**	4 833
Non-current portion	**179**	161	**179**	161
	4 145	4 319	**4 172**	4 672
15. Inventories				
Coal	**956**	1 062	**956**	1 062
Nuclear fuel	**590**	635	**590**	635
Maintenance spares and consumables	**747**	712	**664**	647
	2 293	2 409	**2 210**	2 344

for the year ended 31 December

	Group		Eskom	
	2001	2000	**2001**	2000
Retirement benefits				
The Eskom Pension and Provident Fund is registered in terms of the Pension Funds Act, 1956 as amended. All the employees are members of the Fund. Contributions comprise 20,8% of pensionable emoluments of which members pay 7,3%. The assets of the Fund are held separately from those of the group in respect of funds under the control of the trustees.				
The last valuation was performed at 31 December 2001. The Fund is actuarially valued annually. The actuarial present value of promised retirement benefits at 1 December 2001 was R19 584 million 2000: R15 767 million), while the fair value of the und's assets at this date was R20 665 million 2000: R15 679 million), indicating an estimated urplus of R1 081 million (2000: R88 million shortfall).				
he principal actuarial assumptions used for ctuarial valuation purposes were, %				
Long-term interest rate before tax	**13,0**	13,0	**13,0**	13,0
Salary inflation rate	**10,3**	10,3	**10,3**	10,3
Future pension increases	**8,5**	8,5	**8,5**	8,5
process is under way to convert the current kom Pension and Provident Fund into a defined ntribution fund.				
service gratuity, where applicable, is payable on tirement or death. The estimated present value of e anticipated expenditure for gratuities was calculated independent actuaries at 31 December 2001. The obability of employees staying until retirement is en into account when calculating the provision.				
nount provided, Rm	**1 008**	947	**917**	886
e principal actuarial assumptions used for uarial valuation purposes were, %				
ong-term interest rate before tax	**13,0**	13,5	**13,0**	13,5
xpected rate of salary increases	**8,0**	8,5	**8,0**	8,5

	Group		Eskom	
	2001	2000	**2001**	2000
16.3 The group has anticipated expenditure in terms of continued contributions to medical aid subscriptions in respect of employees that retire. The estimated present value of the anticipated expenditure, for both in-service and continuation members, was recalculated by independent actuaries at 31 December 2001. An independent actuarial valuation is performed annually.				
Amount provided, Rm				
Present value of obligation	**3 055**	2 491	**2 943**	2 408
Unrecognised actuarial gain	**–**	6	**–**	6
	3 055	2 497	**2 943**	2 414
The principal actuarial assumptions used for actuarial valuation purposes were, %				
Long-term interest rate before tax	**13,0**	13,5	**13,0**	13,5
Long-term medical aid inflation	**11,0**	11,5	**11,0**	11,5
16.4 Provision for post-retirement medical aid and gratuities, Rm				
Balance at beginning of the year	**3 444**	3 037	**3 300**	2 963
Provision for the year	**330**	140	**290**	137
Interest adjustment	**469**	392	**445**	385
Transfers within groups and associated company	**(48)**	–	**(48)**	(60)
Expenditure incurred	**(132)**	(125)	**(127)**	(125)
Balance at end of the year (refer notes 16.2 and 16.3)	**4 063**	3 444	**3 860**	3 300
Current portion	**132**	180	**127**	180
	3 931	3 264	**3 733**	3 120

for the year ended 31 December

	Group		Eskom					
	Total Group Rm	Other sub-sidiaries Rm	Total Eskom Rm	Nuclear decom-missioning and waste manage-ment Rm	Other decom-missioning Rm	Closure pollution control and reha-bilitation Rm	Letter of credit facilities Rm	Other Rm
Provisions								
Balance at 1 January 2000	3 281	193	3 088	1 162	600	505	135	686
Provision for the year	902	251	651	36	–	30	–	585
Interest adjustment	267	–	267	155	80	32	–	–
Revaluation	(36)	–	(36)	–	–	–	(36)	–
Foreign exchange profit	26	–	26	–	–	–	26	–
Utilised during the year	(507)	–	(507)	(63)	(7)	(18)	(16)	(403)
Balance at 31 December 2000	3 933	444	3 489	1 290	673	549	109	868
Provision for the year	**591**	**138**	**453**	**37**	**–**	**14**	**–**	**402**
Interest adjustment	**325**	**–**	**325**	**169**	**91**	**65**	**–**	**–**
Revaluation	**(30)**	**–**	**(30)**	**–**	**–**	**–**	**(30)**	**–**
Foreign exchange profit	**44**	**–**	**44**	**–**	**–**	**–**	**44**	**–**
Utilised during the year	**(825)**	**(80)**	**(745)**	**(45)**	**(2)**	**(14)**	**(15)**	**(669)**
Balance at 31 December 2001	**4 038**	**502**	**3 536**	**1 451**	**762**	**614**	**108**	**601**

Disclosed as:

	Group		Eskom	
	2001 Rm	2000 Rm	**2001 Rm**	2000 Rm
Non-current portion	**3 163**	2 816	**2 909**	2 817
Decommissioning	**2 154**	1 897	**2 154**	1 897
Closure, pollution control and rehabilitation	**598**	534	**598**	534
Other	**411**	385	**157**	386
Current portion	**875**	1 117	**627**	672
	4 038	3 933	**3 536**	3 489
Current provisions per balance sheet				
above	**875**	1 117	**627**	672
Provision for post-retirement medical aid and gratuities (refer note 16.4)	**132**	180	**127**	180
	1 007	1 297	**754**	852

Nuclear decommissioning and waste management

The payment dates of total expected future decommissioning cost are uncertain, but are currently expected to be between 2021 and 2050.

The provisions for the estimated decommissioning and waste management cost of nuclear plant have been discounted at 5%.

The payment dates of total expected future spent fuel cost are uncertain, but are currently expected to be between 2031 and 2050. The provision for the estimated spent fuel cost has been discounted at 5%.

Other decommissioning

The payment dates of total expected future decommissioning cost are uncertain, but are currently expected to be between 2007 and 2035.

The provision for the estimated decommissioning cost of other plant has been discounted at 5%.

Closure, pollution control and rehabilitation of coal mines

Provision is made for the estimated cost of closure, pollution control and rehabilitation and mine employee benefits at the end of the life of the mines where a constructive obligation exists to pay coal suppliers.

The payment dates of total expected closure, pollution control and rehabilitation costs are uncertain, but are currently expected to be between 2008 and 2050. The provision has been discounted at 6%.

Letter of credit facilities

The letter of credit facilities arise from fees payable to banks that are providing letter of credit facilities to cover any possible cancellation costs in terms of the cross-border lease transactions over the period of the leases. The letter of credit fees are influenced by the rates charged by banking institutions over time. The calculation of the value of the letters of credit is influenced by pledged securities that are marked to market. These US dollar denominated future cash flows have been discounted to arrive at a present value of the total provision required over the lease term.

for the year ended 31 December

	Group		Eskom	
	2001 Rm	2000 Rm	**2001 Rm**	2000 Rm
Deferred income				
Balance at the beginning of the year	**299**	340	**299**	340
Additions during the year	**449**	–	**449**	–
Income recognition during the year	**(46)**	(41)	**(46)**	(41)
Balance at end of the year	**702**	299	**702**	299

The income arises from benefits realised through cross-border lease transactions over certain generating plant. The present value of the lease and leaseback commitments was settled in full on commencement of the transactions and a profit resulted. The income is recognised in the income statement in accordance with the disclosed accounting policy.

The addition during the year arose as a result of the portion of the government's transitional electrification programmes that Eskom is managing on behalf of the Department of Minerals and Energy (DME). The funding for the electrification of new dwellings is provided by DME. Eskom retains ownership and responsibility for the electrification assets created upon conclusion of the agreement.

Trade and other payables				
Trade and other payables	**2 775**	2 967	**2 150**	2 900
Interest accrued	**767**	924	**767**	1 001
	3 542	3 891	**2 917**	3 901
Commitments				
Capital expenditure				
Estimated capital expenditure	**4 498**	2 245	**3 746**	2 231
Contracted	**1 737**	948	**985**	934
Approved, not yet contracted	**2 761**	1 297	**2 761**	1 297
This expenditure will be financed from debt and internally generated funds and is expected to be incurred as follows:	**4 498**	2 245	**3 746**	2 231
Within one year	**2 842**	1 618	**2 090**	1 615
Thereafter	**1 656**	627	**1 656**	616

	Group		Eskom	
	2001 Rm	2000 Rm	**2001 Rm**	2000 Rm
20.2 Future minimum operating lease payments	**54**	38	**50**	38
Within one year	**21**	17	**19**	17
Between 2 to 5 years	**33**	21	**31**	21

20.3 Derivative financial instruments

The range of derivative instruments used includes domestic and foreign interest rate swap agreements, forward rate agreements, forward exchange contracts, commodity option contracts, bond option contracts and commodity futures contracts.

20.4 Supply of water

Eskom has entered into long-term agreements with the Department of Water Affairs and Forestry to reimburse the department for the cost incurred in supplying water to Eskom. This cost is regarded as part of the cost of primary energy and is included in operating expenditure.

20.5 Coal

Eskom has entered into long-term agreements with suppliers for coal purchases. The annual cost of coal is regarded as part of the cost of primary energy and is included in operating expenditure.

21. Contingent liabilities

21.1 Guarantees and suretyship, issued on behalf of group companies and third parties, amount to	**194**	–	**91**	92
21.2 Eskom has guaranteed the debt raised by Motraco – Mozambique Transmission Company SARL. At 31 December, the outstanding commitment was	**1 328**	683	**1 328**	683
21.3 A guarantee has been issued for the pollution control costs and part of the estimated closure and rehabilitation costs for a colliery. The unprovided portion at 31 December was	**18**	24	**18**	24

21. Contingent liabilities (continued)

21.4 Eskom has indemnified the Eskom Pension and Provident Fund against any loss resulting from the negligence, dishonesty or fraud of the Fund's officers or trustees.

21.5 Eskom has underwritten the solvency margin of its subsidiary company, Escap Limited, in accordance with the requirements of the Insurance Act. At 31 December Escap Limited had a 79% solvency ratio against the 25% required.

21.6 Eskom has provided collateral security in the form of letters of credit from banks in respect of the cross-border lease transactions. The collateral security has been provided to hedge the beneficiary against its exposure to the loss of its remaining investment in the cross-border leases and the cost of replacing the transactions in the market if the lease and leaseback transactions are cancelled.

Eskom is ultimately responsible for meeting any potential losses that may arise to the banks should a cancellation event occur. A cancellation event will occur if there is an event of default, an event of loss of the asset or economic obsolescence of the asset.

The calculation of the beneficiary's exposure is influenced by pledged securities in the form of US treasury notes that are marked to market semi-annually. The exposure amount is adjusted accordingly.

Eskom has guaranteed the payment and facility-related obligations of a special purpose company, established as part of the cross-border lease structures, in favour of all parties to whom the company has such obligations in terms of the lease and leaseback operative documents.

At 31 December 2001 the amount guaranteed is US$ 407 million (2000: US$ 392 million).

	Group		Eskom	
	2001 Rm	2000 Rm	**2001 Rm**	2000 Rm
2. Revenue				
Electricity revenue	**24 983**	23 569	**24 983**	23 569
Other revenue	**1 129**	890	**–**	–
	26 112	24 459	**24 983**	23 569

Commodity-linked pricing agreements

Eskom has entered into a number of long-term pricing agreements to supply electricity to electricity intensive industries. These agreements are intended to increase Eskom's sales base and are targeted at customers mainly in the aluminium and the ferrochrome industries. These agreements which constitute approximately 7,6% (2000: 12,7%) of Eskom's sales, are structured to recover the equivalent of a standard tariff over the life of the agreement.

The agreements may be linked to an international commodity price (eg. aluminium or ferrochrome) or may be structured on a revenue neutral basis with a variety of revenue recovery mechanisms and/or claw-backs. The revenue risks associated with commodity-linked agreements are typically hedged via a financial institution or by means of floors and caps in the electricity price contract. The duration of the agreements varies from five to twenty years and, typically, coincide with the business cycles of the industries concerned.

The average revenue achieved from these agreements during 2001 amounted to 92,8% (2000: 92,6%) of the revenue that would have been generated from a standard tariff agreement. The apparent revenue shortfall is more than adequately offset by the benefit that Eskom receives from the various customers in the form of interruptibility of supply and additional sales.

23. Operating expenditure

	Group		Eskom	
	2001 Rm	2000 Rm	**2001 Rm**	2000 Rm
Primary energy	**5 382**	5 021	**5 382**	5 021
Materials	**1 164**	1 005	**569**	509
Contracts	**1 823**	1 745	**1 823**	1 745
Transport	**377**	344	**362**	344
Staff costs	**5 400**	5 385	**5 163**	5 093
Salaries and other staff costs	**4 520**	4 699	**4 350**	4 437
Pension contributions	**383**	371	**358**	348
Post-retirement medical benefits and gratuities	**330**	140	**290**	137
Training and development (only manpower-related costs)	**167**	175	**165**	171
Depreciation and amortisation	**3 742**	3 141	**3 632**	2 988
Depreciation of property, plant and equipment	**3 548**	3 060	**3 438**	2 907
Amortisation of intangible assets	**194**	81	**194**	81
Amortisation of negative goodwill	**(38)**	(34)	**(38)**	(34)
Managerial, technical and other fees	**187**	284	**156**	134
Net loss/(profit) on disposal of property, plant, equipment and intangible assets	**154**	(20)	**154**	(20)
Doubtful and bad debts	**195**	235	**169**	234
Research and development	**284**	184	**284**	184
Deferred income recognised	**(46)**	(41)	**(46)**	(41)
Net impairment loss	**131**	429	**95**	394
Auditors' remuneration	**15**	12	**13**	11
Normal recurring	**11**	9	**12**	8
Non-recurring	**4**	3	**1**	3
Directors' emoluments – Eskom directors	**22**	27	**22**	27
Other operating expenditure	**617**	262	**1 051**	852
Total operating expenditure	**19 409**	17 979	**18 791**	17 441

for the year ended 31 December

	Group		Eskom	
	2001 Rm	2000 Rm	**2001 Rm**	2000 Rm
Operating expenditure (continued)				
The net impairment loss consists of the following:	**131**	429	**95**	394
Property, plant and equipment	**2**	98	**2**	63
Future fuel supplies	**–**	229	**–**	229
Investments in associate and joint venture companies	**129**	68	**129**	68
Investment in subsidiaries			**(36)**	–
Other investments	**–**	34	**–**	34
Directors' emoluments			**22**	27
Executive directors			**16**	17
Services as directors			**14**	15
Other benefits			**2**	2
Non-executive directors				
Services as directors			**3**	2
Past directors				
Compensation in respect of retirement from office			**3**	8
Included in executive directors' other benefits are Eskom's contributions to the Eskom Pension and Provident Fund, the Executive Group Life Insurance Scheme and medical aid contributions.				
All the executive directors have normal employment contracts with Eskom. The continuation of their service is dependent on satisfactory performance on an ongoing basis and notice periods do not exceed one year. There are no service contracts for non-executive directors.				
Interest income				
Interest and discount amortised on financial market assets	**1 343**	1 035	**1 239**	950
Treasury trading net income	**27**	22	**27**	22
Interest receivable from subsidiary and associate companies	**–**	–	**304**	338
	1 370	1 057	**1 570**	1 310
Fair value gains on financial instruments	**649**	133	**624**	133
	2 019	1 190	**2 194**	1 443

	Group		Eskom	
	2001 Rm	2000 Rm	**2001 Rm**	2000 Rm
25. Interest expenditure				
Interest and discount amortised	**3 520**	3 851	**3 554**	3 880
Locally issued bonds	**2 581**	2 635	**2 581**	2 635
Other local debt	**207**	119	**241**	148
Foreign debt	**732**	1 097	**732**	1 097
Other net financial profits and losses				
Exchange differences	**(113)**	(13)	**(113)**	(13)
Amounts capitalised	**(57)**	(165)	**(57)**	(165)
Unwinding of discount on provisions (refer notes 16 and 17)	**794**	659	**770**	652
	4 144	4 332	**4 154**	4 354
Fair value losses on financial instruments	**806**	4	**806**	4
	4 950	4 336	**4 960**	4 358
Net fair value adjustment on financial instruments				
Gains (refer note 24)	**649**	133	**624**	133
Losses	**(806)**	(4)	**(806)**	(4)
	(157)	129	**(182)**	129
26. Income tax expense				
Current tax	**59**	26	**–**	–
Current year	**53**	26	**–**	–
Underprovided in prior years	**6**	–	**–**	–
Deferred tax	**1 152**	1 440	**1 154**	1 454
Origination and reversal of temporary differences	**983**	1 440	**983**	1 454
Current year	**169**	–	**171**	–
Underprovided in prior years				
Total income tax expense in income statement	**1 211**	1 466	**1 154**	1 454
Computed tax losses	**1 466**	1 089	**1 322**	870
Unused tax losses available for set-off against future income	**144**	219	**–**	–

for the year ended 31 December

	Group		Eskom	
	2001	2000	**2001**	2000
	%	%	%	%
Income tax expense (continued)				
Reconciliation of effective tax rate				
Taxation as a percentage of profit before tax	**32,07**	43,97	**33,68**	45,25
Taxation effect of				
Exempt income	**1,83**	3,94	**2,00**	3,33
Expenditure not allowed	**(8,23)**	(17,91)	**(9,07)**	(18,58)
Insurance contingency reserve	**(0,13)**	–	**–**	–
Controlled foreign operations income	**(0,40)**	–	**(1,59)**	–
Utilised tax losses	**0,40**	–	**–**	–
Prior year adjustment	**4,46**	–	**4,98**	–
Standard tax rate	**30,00**	30,00	**30,00**	30,00
Deferred tax credit recognised directly in equity				
Relating to changes in accounting policies	**–**	1 693	**–**	1 693
Relating to fair value adjustments on financial instruments	**–**	–	**–**	–
Cash generated by trading operations				
	Rm	Rm	**Rm**	Rm
Net operating income	**6 703**	6 480	**6 192**	6 128
Non-cash items	**4 483**	4 016	**4 230**	3 510
Depreciation on property, plant and equipment	**3 548**	3 060	**3 438**	2 907
Amortisation of intangible assets	**194**	81	**194**	81
Amortisation of future fuel	**161**	152	**161**	152
Negative goodwill amortised	**(38)**	(70)	**(38)**	(70)
Net loss/(profit) on disposal of property, plant, equipment and intangible assets	**154**	(20)	**154**	(20)
Impairment of assets	**131**	429	**95**	394
Net movement in provisions	**(70)**	425	**(163)**	86
Net movement on deferred income	**403**	(41)	**403**	(41)
Other	**–**	–	**(14)**	21
	11 186	10 496	**10 422**	9 638
hanges in working capital	**23**	(511)	**(178)**	(537)
Inventories	**116**	(130)	**134**	(111)
Trade and other receivables	**99**	83	**438**	(73)
Trade and other payables	**(192)**	(464)	**(750)**	(353)
	11 209	9 985	**10 244**	9 101

	Group		Eskom	
	2001 Rm	2000 Rm	**2001 Rm**	2000 Rm
28. Interest received				
Interest income (refer note 24)	**2 019**	1 190	**2 194**	1 443
Non-cash items	**635**	591	**622**	602
Interest receivable	**75**	(49)	**62**	(38)
Discount amortised	**200**	189	**200**	189
Other	**360**	451	**360**	451
	2 654	1 781	**2 816**	2 045
29. Interest paid				
Interest expenditure (refer note 25)	**(4 950)**	(4 336)	**(4 960)**	(4 358)
Non-cash items	**(202)**	261	**(303)**	250
Interest accrued	**(157)**	6	**(234)**	(5)
Discount amortised	**454**	437	**454**	437
Other	**(499)**	(182)	**(523)**	(182)
	(5 152)	(4 075)	**(5 263)**	(4 108)
30. Income tax paid				
Amounts unpaid at the beginning of the year	**(30)**	(34)	**–**	–
Current taxation charged to income statement	**(59)**	(26)	**–**	–
Amounts unpaid at the end of the year	**19**	30	**–**	–
	(70)	(30)	**–**	–
31. Cash utilised in investing activities				
Expenditure on property, plant and equipment	**(3 944)**	(3 263)	**(3 652)**	(3 183)
Expenditure on intangible assets	**(49)**	(104)	**(46)**	(104)
	(3 993)	(3 367)	**(3 698)**	(3 287)
Proceeds from disposals	**350**	277	**345**	277
Net expenditure on property, plant, equipment and intangible assets	**(3 643)**	(3 090)	**(3 353)**	(3 010)
Future fuel supplies – coal	**(237)**	(114)	**(237)**	(114)
– settlement of advances	**279**	–	**279**	–
– nuclear	**33**	330	**33**	330
Investment in associate, joint venture and subsidiary companies and other investments	**(114)**	(327)	**(88)**	(507)
Long-term accounts receivable	**(18)**	(161)	**(18)**	(161)
Loans receivable	**(11)**	(176)	**–**	–
	(3 711)	(3 538)	**(3 384)**	(3 462)

for the year ended 31 December

	Group		Eskom	
	2001 Rm	2000 Rm	**2001 Rm**	2000 Rm
12. Cash effects of financing activities				
Debt raised	**548**	159	**522**	119
Debt repaid	**(5 541)**	(1 929)	**(5 541)**	(1 912)
Increase in non-current financial assets	**1 502**	(643)	**924**	(630)
	(3 491)	(2 413)	**(4 095)**	(2 423)
13. Cash and cash equivalents				
Cash and bank, and money market assets	**6 238**	4 406	**4 317**	3 606
Cash equivalents	**668**	1 001	**668**	1 001
Commercial paper bills	**(5 229)**	(5 169)	**(5 229)**	(5 169)
Total cash and cash equivalents at end of the year	**1 677**	238	**(244)**	(562)
Total cash and cash equivalents at beginning of the year	**238**	(1 472)	**(562)**	(1 715)
Net increase in cash and cash equivalents for the year	**1 439**	1 710	**318**	1 153

14. Related-party information

Associate and joint venture companies

Details of investment in associates and joint venture companies are disclosed in note 10 and schedule 1, while income is disclosed in note 24. Interest income of R2 million (2000: R21 million) is included in note 24.

The group sold goods to the value of R267 million (2000: R75 million) to associate and joint venture companies.

The group purchased goods to the value of R360 million (2000: R16 million) from associate and joint venture companies.

The outstanding balances included in trade and other receivables (note 14) amounted to R56 million (2000: R76 million).

The above transactions were made on commercial terms and conditions at market rates.

The investment in associate and joint venture companies are set out in schedule 1.

35. Segment reporting

	Regulated		Non-regulated		Group eliminations		Consolidated	
	2001 Rm	2000 Rm	**2001 Rm**	2000 Rm	**2001 Rm**	2000 Rm	**2001 Rm**	2000 Rm
Business segmentation								
External revenue	**24 983**	23 569	**3 234**	2 911	**(2 105)**	(2 021)	**26 112**	24 459
Net operating income	**6 192**	6 128	**498**	352	**13**	–	**6 703**	6 480
Interest income	**1 570**	1 310	**167**	114	**(367)**	(367)	**1 370**	1 057
Interest expenditure	**(4 154)**	(4 354)	**(332)**	(345)	**342**	367	**(4 144)**	(4 332)
Fair value adjustment	**(182)**	129	**25**	–	**–**	–	**(157)**	129
Profit before tax	**3 426**	3 213	**358**	121	**(12)**	–	**3 772**	3 334
Income tax expense	**(1 154)**	(1 454)	**(57)**	(12)	**–**	–	**(1 211)**	(1 466)
Net profit for the year after tax	**2 272**	1 759	**301**	109	**(12)**	–	**2 561**	1 868
Other information								
Capital expenditure	**3 698**	3 287	**295**	80	**–**	–	**3 993**	3 367
Depreciation and amortisation	**3 632**	2 988	**115**	153	**(5)**	–	**3 742**	3 141
Net impairment losses	**95**	394	**–**	35	**36**	–	**131**	429
Non-cash flow items	**4 549**	4 362	**364**	506	**3**	–	**4 916**	4 868
Assets and liabilities								
Assets	**74 559**	73 124	**6 482**	5 807	**(4 524)**	(4 992)	**76 517**	73 939
Investment in associate and joint venture companies	**150**	229	**247**	11	**(5)**	–	**392**	240
Total assets	**74 709**	73 353	**6 729**	5 818	**(4 529)**	(4 992)	**76 909**	74 179
Total equity and liabilities	**74 709**	73 353	**6 729**	5 818	**(4 529)**	(4 992)	**76 909**	74 179
Geographical segmentation								
Revenue								
South Africa	**24 339**	23 095	**3 056**	2 883	**(2 105)**	(2 021)	**25 290**	23 957
Outside South Africa	**644**	474	**178**	28	**–**	–	**822**	502
Total revenue	**24 983**	23 569	**3 234**	2 911	**(2 105)**	(2 021)	**26 112**	24 459

The assets and liabilities are not presented on a geographical level.

Schedule 1 — Investment in associate and joint venture companies

Eskom

at 31 December

Name	Nature of operation	Issued/ stated capital R	Effective holding 2001 %	Effective holding 2000 %	Group carrying value 2001 Rm	Group carrying value 2000 Rm	Eskom carrying value 2001 Rm	Eskom carrying value 2000 Rm
The following unlisted investments are included in investment in associated and joint venture companies (refer note 10):								
Associate companies								
Unlisted shares								
Directly held								
PN Energy Services (Pty) Limited (formerly Phambili Nombane)	Electricity reticulation	3 000 000	**50**	33	**4**	4	**4**	4
TED (Pty) Limited[1] (Transitional Electricity Distributor)	Electricity reticulation	1 000	**50**	50	**240**	203	**240**	203
Uitesco (Pty) Limited (Uitenhage Electricity Supply Company (Pty) Limited)	Electricity reticulation	60 000	**33**	33	**2**	2	**2**	2
Indirectly held								
Ariviakom (Pty) Limited	Information technology	301 814 000	**45**	–	**109**	–	**–**	–
Elgas SARL	Gas energy	100	**25**	49	**7**	–	**–**	–
Gesco (Libya)	Technology refurbishment	1 000 000	**49**	–	**1**	–	**–**	–
Total investment in associate companies					**363**	209	**246**	209
Joint venture companies								
Incorporated								
Directly held								
Motraco – Mozambique Transmission Company SARL	Management of electricity transmission system and supply of electricity	39 500 000[2]	**33**	33	**78**	76	**78**	76
Eskom-Shell Solar Home Systems (Pty) Limited	Electrification	100	**50**	50	**25**	14	**25**	14
Indirectly held								
Trans Africa Projects (Pty) Limited[1]	Construction	4 000	**–**	50	**–**	–	**–**	–
Trans Africa Projects Limited[1] (Mauritius)	Construction	100 000[2]	**–**	50	**17**	4	**–**	–
HEM~KOM Liveline Engineering (Pty) Limited	Live-line maintenance	900 000	**50**	50	**1**	1	**–**	–
EON~Solutions Africa (Pty) Limited	Telecommunication consulting	100	**50**	50	**1**	–	**–**	–
Ash Resources (Pty) Limited	Manufacture	200	**25**	25	**6**	6	**–**	–
Mountain Communications (Pty) Limited	Telecommunication	1 000[3]	**50**	50	**100**	–	**–**	–
South Dunes Coal Terminal (Pty) Limited	Coal exports	100 000	**50**	–	**–**	–	**–**	–
Total investment in joint venture companies					**228**	101	**103**	90
Total investment in associate and joint venture companies					**591**	310	**349**	299
Provision for impairment losses					**199**	70	**199**	70
Investment in associate and joint venture companies					**392**	240	**150**	229

Where the above entities' financial year-ends are not coterminous with that of Eskom, financial information has been obtained from published information or management accounts as appropriate.

1. *Year-end other than 31 December.*
2. *Authorised capital in US dollar.*
3. *Authorised capital in maluti.*

Schedule 2 — Investment in subsidiaries

Eskom

at 31 December

Name	Nature of operation	Country of incorporation	Issued/ stated capital R	Effective holding 2001 %	Effective holding 2000 %	Interest of Eskom Investment 2001 Rm	Interest of Eskom Investment 2000 Rm	Interest of Eskom Indebtedness 2001 Rm	Interest of Eskom Indebtedness 2000 Rm
Subsidiary companies									
Directly held									
Eskom Finance Company (Pty) Limited	Finance (employee housing loans)	South Africa	4 000	**100**	100	**–**	–	**2 316**	2 400
Escap Limited	Insurance	South Africa	179 500 000	**100**	100	**180**	30	**–**	–
Gallium Insurance Company Limited	Insurance	Isle of Man	4 000 000	**100**	100	**4**	4	**–**	–
Eskom Enterprises (Pty) Limited	Non-regulated electricity supply industry activities and electricity supply and related services outside the Republic	South Africa	100	**100**	100	**–**	–	**1 018**	990
Indirectly held									
Golang Coal (Pty) Limited	Coal exports	South Africa	1 000	**67**	67				
Eskom Energie Manantali SA	Energy supply	Mali	1 000	**100**	–				
Pebble Bed Modulor Reactor (Pty) Limited	Reactor driven generation project	South Africa	100	**100**	100				
Technology Services International (Pty) Limited	Technical consulting	South Africa	100	**100**	100				
Rotek Industries (Pty) Limited	Maintenance and services	South Africa	4 000	**100**	100				
Rosherville Properties (Pty) Limited	Properties	South Africa	1	**100**	100				
Rosherville Vehicle Services (Pty) Limited	Transport	South Africa	1	**100**	100				
Airborne Laser Solutions (Pty) Limited	Aerial surveying technologies	South Africa	1	**100**	100				
Amazing Amanzi (Pty) Limited	Low-energy utility devices	South Africa	1	**70**	70				
						184	34	**3 334**	3 390
Total investment in subsidiaries								**3 518**	3 424
Investment								**184**	34
Indebtedness								**3 334**	3 390
Provision for impairment losses								**–**	36
Investment in subsidiaries								**3 518**	3 388

Eskom

1. Statistical overview

	2001	2000	1999
Sales			
Total sold, GWh[1]	**181 511**[2]	178 193[2]	173 412[2]
Growth in GWh sales, %	**1,8**[3]	2,8[3]	1,1[3]
Electricity output			
Total electricity for Eskom system (Eskom stations and purchased), GWh[4]	**198 790**	194 601	188 475
Total produced by Eskom stations, GWh (net)	**189 590**	189 307	181 818
Coal-fired stations, GWh (net)	**175 223**	172 362	165 665
Hydroelectric stations, GWh (net)	**2 061**	1 343	726
Pumped storage stations, GWh (net)	**1 587**	2 591	2 590
Gas turbine stations, GWh (net)	**–**	1	–
Nuclear power station, GWh (net)	**10 719**	13 010	12 837
Total purchased for Eskom system, GWh	**9 200**	5 294	6 657
Total consumed by Eskom, GWh[5]	**2 177**	3 478	3 507
Total available for distribution, GWh[1]	**196 613**	191 123	184 968
Plant performance indicators			
Total power station nominal capacity, MW	**42 011**	41 298	40 585
Total power station net maximum capacity, MW[6]	**39 810**	39 186	38 517
Peak demand on integrated Eskom system, MW	**30 599**	29 188	27 813
Average energy availability – UCF (after excess capacity), %[7]	**92,0 (92,5)**	92,1 (92,8)	91,0 (92,5)
Generation load factor (after excess capacity management), %[8]	**54,4 (59,8)**	55,1 (60,6)	54,9 (61,2)
Integrated Eskom system load factor, %	**72,9**	74,7	75,9

Difference between electricity available for distribution and electricity sold (includes internal sales) is due to transmission and other losses.

Includes sales in respect of Department of Water Affairs and Forestry (DWAF) not stated in previous years.

Own usage is not included in the calculation.

Includes Eskom electricity produced and delivered to neighbouring countries.

In respect of pumped storage facilities and synchronous condenser mode of operation. See Table 2, Note 9, Since 1993, energy consumption for water pumped for DWAF has been excluded from this total.

Includes reserve stored and Transkei generators.

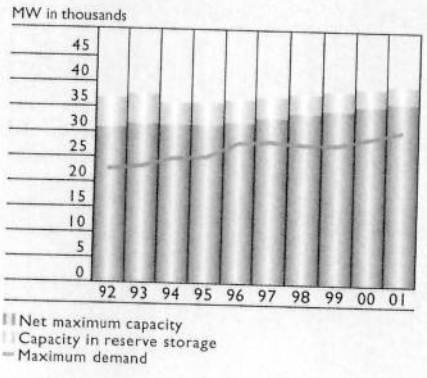
Capacity hours available times 100 divided by total capacity hours in year.

kWh produced times 100 divided by (average net maximum capacity times hours in year).

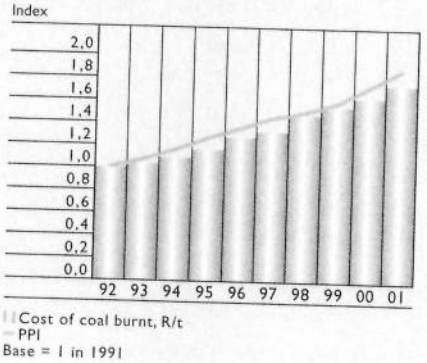
for the year ended 31 December

1998	1997	1996	1995	1994	1993	1992
171 457[2]	172 550[2]	165 370[2]	153 547[2]	149 443	143 800	138 126
(0,6)[3]	4,3[3]	7,7[3]	2,7	3,9	4,1	(0,4)
185 583	187 850	178 884	165 006	160 351	154 361	148 556
183 093	187 811	178 855	164 834	160 293	154 260	148 207
165 473	170 464	163 541	151 730	148 003	145 514	136 830
1 596	2 092	1 319	529	1 074	146	752
2 420	2 608	2 220	1 274	1 517	1 345	1 333
3	–	–	–	2	–	4
13 601	12 647	11 775	11 301	9 697	7 255	9 288
2 490	39	29	172	58	101	349
3 299	3 511	3 130	1 866	2 113	1 898	2 295
182 284	184 339	175 754	163 140	158 238	152 463	146 261
39 872	39 154	38 497	37 840	37 840	39 746	39 060
37 848	37 175	36 563	35 951	35 926	37 636	36 846
27 803	28 329	27 967	25 133	24 798	23 169	22 640
91,6 (92,7)	90,4 (91,5)	89,6 (90,6)	81,6 (84,3)	77,1 (79,9)	80,5 (81,7)	76,7
55,3 (61,6)	57,7 (65,0)	55,7 (63,9)	52,3 (59,0)	50,9 (58,3)	46,8 (56,4)	46,9 (54,6)
74,8	74,3	71,5	74,1	72,8	75,1	73,5

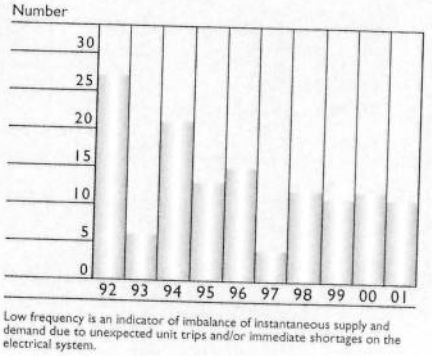
Generation plant capacity and maximum demand



Cost of coal burnt versus production price index (PPI)



Low-frequency incidents
Below 49,70 Hz



Low frequency is an indicator of imbalance of instantaneous supply and demand due to unexpected unit trips and/or immediate shortages on the electrical system.

for the year ended 31 December

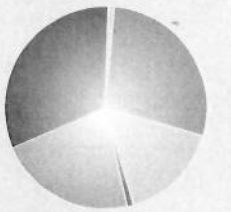
Name of station	Location	Number and capacity of generator sets MW	Total nominal capacity MW[1]	Total net maximum capacity MW[1]	Generators in reserve storage Total rating Number	Generators in reserve storage Total rating MW	Other generation Total rating MW[2]
2. Power stations in commission at 31 December 2001							
Coal-fired stations							
Arnot[3]	Middelburg, Mpumalanga	6 x 350	2 100	1 980	–	–	–
Camden[4]	Ermelo	8 x 200	1 600	–	8	1 520	–
Duvha[3]	Witbank	6 x 600	3 600	3 450	–	–	–
Grootvlei[4]	Balfour	6 x 200	1 200	–	6	1 130	–
Hendrina[3]	Hendrina	10 x 200	2 000	1 895	–	–	–
Kendal[3, 5]	Witbank	6 x 686	4 116	3 840	–	–	–
Komati[4]	Middelburg, Mpumalanga	5 x 100; 4 x 125	1 000	–	9	891	–
Kriel[3]	Bethal	6 x 500	3 000	2 850	–	–	–
Lethabo[3]	Sasolburg	6 x 618	3 708	3 558	–	–	–
Majuba[6]	Volksrust	3 x 657; 3 x 713	4 110	3 843	–	–	–
Matimba[3, 5]	Ellisras	6 x 665	3 990	3 690	–	–	–
Matla[3]	Bethal	6 x 600	3 600	3 450	–	–	–
Tutuka[3]	Standerton	6 x 609	3 654	3 510	–	–	–
Subtotal coal-fired stations (13)			37 678	32 066	23	3 541	–
Gas turbine stations[7]							
Acacia	Cape Town	3 x 57	171	171	–	–	–
Port Rex	East London	3 x 57	171	171	–	–	–
Subtotal gas turbine stations (2)			342	342	–	–	–
Hydroelectric stations							
Colley Wobbles	Mbashe River	3 x 14	42	–	–	–	42
First Falls	Umtata River	2 x 3	6	–	–	–	6
Gariep[8]	Norvalspont	4 x 90	360	360	–	–	–
Ncora	Ncora River	2 x 0,4; 1 x 1,3	2	–	–	–	–
Second Falls	Umtata River	2 x 5,5	11	–	–	–	2
Vanderkloof[8]	Petrusville	2 x 120	240	240	–	–	11
Subtotal hydroelectric stations (6)			661	600	–	–	61
Pumped storage schemes[9]							
Drakensberg	Bergville	4 x 250	1 000	1 000	–	–	–
Palmiet	Grabouw	2 x 200	400	400	–	–	–
Subtotal pumped storage schemes (2)			1 400	1 400	–	–	–
Nuclear power station							
Koeberg[3]	Cape Town	2 x 965	1 930	1 800	–	–	–
Total Eskom stations in commission (24)			42 011	36 208	23	3 541	61

Difference between nominal and net maximum capacity reflects auxiliary power consumption and reduced capacity caused by age of plant and/or low coal quality.
Operational but not included for capacity management purposes.
Base-load station.
In long-term reserve storage (mothballed).
Dry-cooled unit specifications are based on design back-pressure and ambient air temperature.
Unit 6 commissioned in April 2001.
Stations used for peaking or emergency supplies.
Use restricted to peaking, emergencies and availability of water in Gariep and Vanderkloof dams.
Pumped storage facilities are net users of electricity during peak periods. Water is pumped during off-peak periods to generate electricity during peak periods.

for the year ended 31 December

	2001	2000	1999	1998	1997	1992[1]
3. Environmental implications of using one kilowatt-hour of electricity[2]						
Water usage, l	**1,26**	1,21	1,25	1,23.	1,20	1,45
Coal usage, kg	**0,50**	0,49	0,49	0,48	0,48	0,48
Ash produced, g	**139,78**	129,95	133,65	134,90	126,19	–
Ash emitted, g	**0,31**	0,35	0,37	0,36	0,44	1,03
SO_2 emissions, g	**7,91**	7,95	8,28	8,65	7,36	7,25
NO_x emissions, g	**3,61**	3,56	3,70	3,65	3,66	3,65
CO_2 emissions, kg	**0,89**	0,85	0,88	0,89	0,90	0,90

South African energy mix



Non-energy use	1%
Coal	28%
Renewables	16%
Natural gas	1%
Electricity	22%
Liquid fuels (oil products)	32%

Source: SA Energy Profile (1998)
South African National Energy Association

Eskom energy mix 2001

Coal	88%
Nuclear	5%
Pumped storage	1%
Hydro	1%
Imports	5%

1. *This is a base year to be used for reference purposes only.*
2. *Figures are based on total energy produced by Eskom power stations.*

Eskom

for the year ended 31 Decembe

4. Transmission and distribution equipment in service at 31 December 2001

		2001	2000	Change
Main transmission system, km	765 kV	**870**	870	–
	533 kV DC (monopolar)	**1 031**	1 031	–
	400 kV	**15 499**	15 039	460
	275 kV	**7 379**	7 298	81
	220 kV	**1 336**	1 239	97
	132 kV	**797**	984	(187)
Total transmission lines, km[1]		**26 912**	26 461	451
Distribution lines, km	165 – 132 kV	**20 681**	20 147	534
	88 – 33 kV	**21 144**	20 936	208
Total distribution lines, km		**41 825**	41 083	742
Reticulation lines, km	22 kV and lower	**247 897**	238 015	9 882
Total all lines, km		**316 634**	305 559	9 075
Cables, km	165 – 132 kV	**77**	52	25
	88 – 33 kV	**243**	243	–
	22 kV and lower	**6 738**	6 520	218
Total all cables, km		**7 058**	6 815	243
Transformers	Transmission, MVA[2]	**111 290**	110 345	945
	Distribution and reticulation, MVA	**79 855**	78 299	1 556
Total transformer capacity, MVA		**191 145**	188 644	2 501
Transformers	Transmission, number	**359**	356	3
	Distribution and reticulation, number	**261 897**	262 734	(837)
Total transformers, number		**262 256**	263 090	(834)

1. *Transmission line lengths as per GIS (Geographic Information System) distances.*
2. *Base of definition: transformers rated >30 MVA and primary voltage >132 kV.*

for the year ended 31 December

5. Sales of electricity to categories of customers

Category	Number of customers[1] 2001	2000	Change %	GWh sold 2001	2000	Change %
Distributors	**989**	989	0,0	**72 189**	72 307	(0,2)
Residential	**3 159 990**	2 947 955	7,2	**7 301**	6 308	15,7
Commercial	**35 534**	32 213	10,3	**6 407**	792	709,0[2]
Industrial	**3 416**	3 391	0,7	**48 664**	55 878	(14,8)[2]
Mining	**1 337**	1 335	0,1	**31 923**	31 402	1,7
Agricultural	**72 519**	67 474	7,5	**4 224**	3 813	10,8
Traction	**600**	600	0,0	**3 481**	3 329	4,6
Distribution international	**46**	46	0,0	**286**	223	28,3
Eskom international	**8**	8	0,0	**6 710**	3 872	73,3
Internal	**424**	424	0,0	**326**	268	21,6
	3 274 863	3 054 435	7,2	**181 511**	178 192	1,8[3]

1. *The 2000 information has been restated based on revised customer categories and numbers. Customer numbers have been revised to take into account the removal of disconnected customers and homes that no longer exist as a result of floods and other reasons.*
2. *The GWh sold for 2000 was not restated.*
3. *The GWh sold growth from 2000 to 2001 increased by 1,8% if own usage is excluded.*

6. Net revenue per category of customer

Category	Net revenue Rm 2001	2000	Change %	Average net price c/kWh sold 2001	2000	Change %
Redistributors	**9 325**	8 807	5,9	**12,91**	12,20	5,9
Residential[1]	**2 256**	1 794	25,8	**30,90**	27,70	11,6
Commercial	**1 151**	185	522,2	**17,95**	22,64	(20,7)
Industrial	**5 624**	6 679	(18,8)	**11,56**	11,94	(3,2)
Mining	**4 261**	4 053	5,1	**13,35**	12,91	3,4
Agricultural	**1 134**	1 102	2,9	**26,85**	28,88	(7,0)
Traction	**547**	511	7,0	**15,69**	15,35	2,2
Distribution international	**40**	32	25,0	**13,99**	14,35	2,5
Eskom international	**600**	369	62,6	**8,94**	9,53	(6,2)
Internal	**45**	37	21,6	**13,80**	13,81	0,0
	24 983	23 569	6,0	**13,76**	13,23	4,0[2]

1. *Prepayments included under Residential.*
2. *General price increase with effect from 1 January 2001 equal to 5,2%.*

Awards

Eskom

Financial Times Global Energy award

Eskom received the Financial Times Global Energy award for Power Company of the Year 2001.

Leadership in Practice award

Eskom's chairman became the 12th recipient of the Leadership in Practice (LIP) award. This award has been made annually by the Unisa School of Business Leadership since 1989.

Sunday Times – Markinor Brands of the Year survey

Eskom was voted as the second most admired brand in South Africa in the Sunday Times-Markinor Brands of the Year awards.

The KPMG Survey of Sustainability Reporting in South Africa

Eskom was awarded the KPMG Gold award for the best sustainability disclosure in an annual report in the Public Entities Category (2000 Annual Report), and the Gold award for the best Corporate Environmental Report in the South African Category (2000 Environmental Report).

Technology Top 100

Eskom's Research Division was declared the overall category winner in the Technology Top 100 as the "Best Research and Development Group in South Africa" by Business Day and MTN.

Top 300 Black Economic Empowerment Companies

Eskom was awarded a Top 300 Black Economic Empowerment Companies certificate by Impumelelo Top Publishing.

Productivity award

Eskom Transmission (Northern Region) was a finalist in the 2001 Productivity awards of the National Productivity Institute (NPI). They received a certificate of recognition for an outstanding achievement in productivity improvement.

Olifants River Catchment award

Kriel and Hendrina power stations jointly received an award from the Olifants River Catchment Forum for contributing towards the improvement of water quality, and the management thereof, in the Olifants River.

NOSA Health and Safety awards

Six Eskom power stations received NOSCAR awards from the National Occupational Safety Association (NOSA) in recognition of their overall health and safety performance and the quality of their health and safety management programmes. These power stations are: Lethabo, Matla, Koeberg, Duvha, Drakensberg and Palmiet.

NOSA Platinum awards

Gariep and Vanderkloof power stations were the first two industries in the country to be honoured with Platinum awards from NOSA for their integrated health and safety programmes.

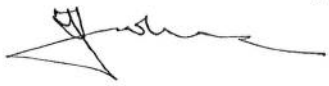
Health and safety policy

Eskom will provide and maintain a healthy and safe work environment for its employees.

It is Eskom's policy to provide the resources necessary:

- To maintain health and safety systems
- To protect individuals against risk to health and safety arising out of Eskom's business
- To protect Eskom's property against damage or loss
- To minimise risk to the environment arising out of Eskom's activities

No operating condition or urgency of service can ever justify endangering the life of anyone.

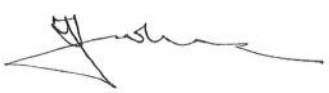


Thulani S Gcabashe
Chief Executive

Environmental policy

Eskom will:

- promote open communication on environmental issues amongst employees and stakeholders;
- establish an environmental management system with a view to ensuring continual improvement in appropriate business activities, including prevention of pollution where economically viable and sustainable;
- contribute toward sustainable development through the efficient production, distribution and use of energy; and
- educate, train and motivate its employees about the environment.



Thulani S Gcabashe
Chief Executive