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## Agenda and presenters



Executive summary	Brian Dames
Audited financial results	Paul O'Flaherty
Construction	Paul O'Flaherty
Operations	Brian Dames
Concluding remarks	Brian Dames





## Executive summary



## **Brian Dames Chief Executive**





### **Executive summary**



- Safety
  - Safety improved, but continues to be of primary focus
- Power system
  - No load shedding since April 2008, despite an extremely tightly balanced power system
  - Severe winter weather impacted the supply to customers in some provinces, but Eskom's preparedness helped to mitigate the risk
  - Tight power system meant we did not do as much maintenance as required, although more was done than in the previous year
- MYPD 3 determination
  - Need to re-engineer the business to work within the revenue allowed by NERSA
- Capacity expansion programme
  - Installed 261MW of additional generation capacity, 787km of high-voltage transmission lines and 3 580MVA of new transformer capacity during the year to March 2013
  - Significant challenges remain with Medupi
- **Business results** 
  - Results reflect the impact of the 16% tariff increase granted by NERSA for 2012/13 (originally 25.9%) and the declining demand for electricity, due to lower economic growth and industrial unrest
  - Profits are reinvested in full in Eskom's business, helping to fund the capacity expansion programme and to service debt
- Funding
  - Secured 82.9% of the funding required for the capacity expansion programme
  - Credit rating downgrades highlight the need for Eskom to be financially sustainable





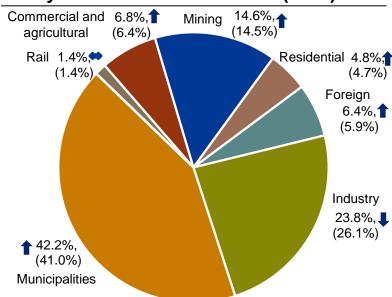
## Eskom has the advantages and challenges of all large-scale enterprises



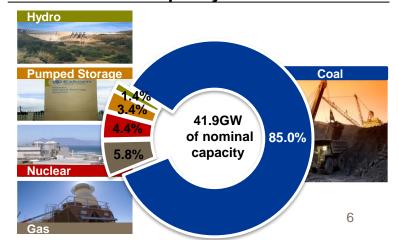
- Strategic 100% state-owned electricity utility, strongly supported by the government
- Top 15 global electricity utility
- Africa's largest electricity utility
- Supplies approximately 95% of South Africa's electricity
- For the year ended 31 March 2013:
  - Electricity sales of 216 561GWh (2012: 224 785GWh) and electricity revenues of R126.7 billion (2012: R113.0 billion)
- As at 31 March 2013 :
  - 46 266 group employees (2012: 43 473)
  - 5.0 million customers (2012: 4.9 million)
  - Net maximum generating capacity of 41.9GW (2012: 41.6GW)
  - 373 280km of cables and power lines
  - Moody's and S&P ratings: Baa3 and BBB respectively with a negative outlook
  - 17.1GW of new generation capacity by 30 September 2018, of which 6.0GW already commissioned



## Eskom electricity sales by customer for the year ended 31 March 2013 (2012)



#### Generation capacity-31 March 2013



## Eskom's strategic pillars support our purpose









## Performance against shareholder compact



Key performa areas	ınce	Key performance indicator	Unit	Target March 2013	Target achieved *	Actual March 2013	Actual March 2012	Actual March 2011
Keeping the		Management of national supply / demand constraint	Load shedding (Yes/No)	No	•	No	No	No
lights on		DSM energy efficiency	GWh	1 827		2 244	1 422	1 339
		Internal energy efficiency	GWh	20.0		28.9	45.0	26.2
lana na via a		UCLF	%	6.00		12.12 <sup>1</sup>	7.97	6.14
Improving operations		SAIDI	Hours	47.00		41.89	45.75	52.61
operations		System Minutes <1	Minutes	3.40		3.52	4.73	2.63
Delivering		Generation capacity installed and commissioned	MW	260	•	261	535	315
capital		Transmission lines installed	Km	900	•	787	631	443
expansion		Transmission capacity installed and commissioned	MVA	3 545	•	3 580	2 525	5 940
Reducing Eskom's		Relative particulate emissions	kg/MWh	0.30	•	0.35	0.31	0.33
environmental footprint		Water usage per kWh sent out	L/kWh	1.32	•	1.42	1.34	1.35

<sup>1.</sup> The 12.12% cumulative UCLF consists of energy losses of 7.54% (excluding losses due to the Duvha Unit 4 outage, emission control and short-term outages) plus energy losses of 1.17% for the Duvha Unit 4 outage and energy losses of 3.41% due to decisions by management for emission control and short-term outages



<sup>\*</sup> **Key:** 2012/13 performance exceeded the target for the year

## Performance against shareholder compact – (continued)



Key performance areas	Key performance indicator	Unit	Target March 2013	Target achieved *	Actual March 2013	Actual March 2012	Actual March 2011
Maximising socio-economic	Local content in new build contracts	%	52.0	•	80.2	77.2	79.7
contribution	% of B-BBEE spend	%	70.0		86.3	73.2	52.3
Implementing coal haulage and the road-to-rail migration plan	Coal road-to-rail migration	Mt	12.2	•	10.1	8.5	7.1
Pursuing private sector participation	ISMO ring-fenced and set-up subsidiary	Yes/No	Yes	-	-	-	-
	Cost of electricity <sup>1</sup>	R/MWh	481.6		496.3	374.2	296.4
Ensuring	Interest cover	Ratio	0.72		$0.27^{2}$	3.27	1.40
financial	Debt /equity	Ratio	2.10		1.96	1.69	1.66
sustainability	Free funds from operations as % of total debt - group	%	8.00	•	8.04	15.15	9.51
	Engineers	Number	1 949		2 144	2 273	1 335
Building strong	Technicians	Number	757		835	844	692
skills	Artisans	Number	2 543		2 847	2 598	2 213
	Youth programme	Number	5 000		5 701	5 159	n/a

<sup>\*</sup> **Key:** 2012/13 performance exceeded the target for the year

The original budget was revised to include the front-end loading of the integrated demand management (IDM) expenditure. The final budget numbers for the cost of electricity (excluding depreciation) was 508.9 R/MWh and for interest cover 0.34





Cost of electricity (excluding depreciation, but including immediate priorities)

<sup>2012/13</sup> performance did not meet the target for the year

The interest cover ratio includes the unwinding of interest, but excludes the impact of the remeasurement of the government loan of R17.3 billion income

### Triple bottom line: socio-economic ( )





Supplier development and localisation

- Eskom's direct impact on South Africa's GDP as a result of its operational and capital expenditure is approximately 3%
- B-BBEE<sup>1</sup> attributable spend amounted to **R103.4** billion or **86.3%** of total measurable spend for the year (2012: R72.1 billion or 73.2%)
  - BO<sup>2</sup> attributable spend amounted to R26.5 billion or 22.1% of total measurable spend for the year (2012: R14.4 billion or 14.8%)
  - BWO<sup>3</sup> attributable spend amounted to R5.7 billion or 4.7% of total measurable spend for the year (2012: R3.3 billion or 3.6%)
  - BYO<sup>4</sup> attributable spend amounted to R1.2 billion or 1.0% of total measurable spend for the year
- Job creation **35 759** (2012: 28 616) individuals working on new build project sites, since 2005 of which 16 100 (2012: 13 954) are employed from the local districts
- Since the inception of the build programme, 6 851 (2012: 5 915) individuals have completed their skills development training and **2 763** (2012: 2 342) are currently in training
- **80.2%** local content in the new build contracts placed for the financial year (2012: 77.2%)
- Since the inception of the respective new build projects, the total local content committed by the Eskom supplier network amounted to R85.9 billion or 62.8% of the total contract values awarded in the build projects





## Triple bottom line: socio-economic (continued)





Electrification	<ul> <li>A total of 144 558 (2012:155 213) homes were electrified during the year to 31 March 2013</li> <li>Since inception of the electrification programme in 1991, a total of more than 4.3 million (2012: 4.2 million) homes have been electrified</li> </ul>
Employment equity	<ul> <li>The Eskom company disability percentage is 2.59% (2012: 2.49%) of the total workforce</li> <li>Racial equity<sup>1</sup> in senior management is 58.3% (2012: 53.9%) and in professionals and middle management 69.6% (2012: 65.7%)</li> <li>Gender equity<sup>2</sup> in senior management is 28.2% (2012: 24.3%) and in professionals and middle management 34.6% (2012: 32.4%)</li> </ul>
Training and development	<ul> <li>Over 130 000 people employed in the Eskom cloud and over 500 000 people supported by Eskom</li> <li>Over 60 000 jobs in non-mining related industries suppliers</li> <li>Eskom's learner pipeline includes 2 144 engineering, 835 technical, 2 847 artisan and 1 071 other learners</li> <li>A further 5 701 learners in the youth programme</li> </ul>
Corporate governance	Eskom was adjudged an "excellent integrated reporter" at the Ernst and Young inaugural Excellence in Integrated Reporting awards and was the overall winner of the Nkonki SOC Integrated Report Awards 2012
Eskom Development Foundation	<ul> <li>Invested R194.3 million (2012: R87.9 million) in corporate social initiatives during the year which impacted 343 (2012: 264) organisations with some 652 347 (2012: 531 762) project beneficiaries during the period</li> </ul>





## Triple bottom line: safety



**Employee** and contractor fatalities

Fatalities:	Year to 31 March 2013	Year to 31 March 2012	Year to 31 March 2011
Employees	3	13	7
Contractors	16	11 <sup>2</sup>	18

**Employee** LTIR

#### **Employee lost-time incident rate:**

Index (target: 0.20)	0.39	0.41	0.47
mack (target: 0.20)	0.00	0.71	0.77

Causes of fatalities

Causes of fatalities <sup>(1)</sup> :	Electrical Contact	Vehicle	Falls	Violent assault	Other	
Employees and contractors	5	4	4	2	4 <sup>2</sup>	

- Covers the period 1 Apr 2012 31 March 2013
- A fatality recorded in 2011/12 has been re-classified as non-work related
- Included in the four fatalities are two security guards who died from asphyxiation from a heating fire





## Triple bottom line: environmental 🔇



**Environmental** performance

Atmospheric emissions:	Year to 31 March 2013	Year to 31 March 2012	Year to 31 March 2011
Relative particulate emissions, kg/MWh	0.35	0.31	0.33
Specific water consumption, L/kWh sent out	1.42	1.34	1.35
CO <sub>2</sub> emissions (relative), tons/MWh	0.98	0.99	0.99
CO <sub>2</sub> emissions, Mt	227.9	231.9	230.3
Nitrogen oxide emissions, kt	964.8	977	977
Sulphur dioxide emissions, kt	1 843	1 849	1 810
Nitrous oxide emissions, t	2 980	2 967	2 906
Environmental legal contraventions, number	47	50	63

Management systems

The Generation division, Group Capital construction management, the telecommunications department, Rotek SOC Ltd, Roshcon SOC Ltd, Eskom Aviation and the Sustainability Systems departments obtained ISO 14001 certification during the year





## Triple bottom line: financial highlights<sup>1</sup>



Income statement for the period	Audited year to 31 March 2013	Audited year to 31 March 2012	Audited year to 31 March 2011
Revenue (Rm)	128 869	114 847	91 447
(Contraction)/growth in GWh sales (%) <sup>2</sup>	(3.7)	0.2	2.7
Profit for the period after tax (Rm)	5 183	13 248	8 356
Return on average total assets (%)	1.3	3.7	2.9
Revenue per kWh (cents per kWh)3	58.5	50.3	40.3
Operating costs per kWh (cents per kWh) <sup>4</sup>	54.2	41.3	32.8
Capital expenditure (Rbn) <sup>5</sup>	60.1	58.8	47.9
As at end of the period:			
Average days coal stock (days)	46	39	41
Gross debt securities issued/borrowings (Rm)	202 956	182 567	160 310
Debt: equity (ratio)	1.8	1.6	1.6

- MYPD 3 determination of an 8% annual average tariff increase
- Funding plan well advanced and more than 82.9% of sources of funds secured
- Credit ratings: Moody's and S&P downgraded ratings to Baa3 and BBB respectively





<sup>1.</sup> Group numbers unless otherwise specified Compared to the same period last year

Company numbers and includes environmental levy

<sup>4.</sup> Company numbers and includes depreciation and amortisation costs

Excluding interest capitalised during construction

## Sound performance in a tough year



- Kept the lights on amid increasingly difficult circumstances
- Operational progress made
- Generation, transmission capacity added
- Tariff decision has required a new approach to business
- Response plan initiated: re-engineering everything we do
- Maintenance catch-up plan implemented
- Fourth year of profit against budget
- 82.9% of R300 billion funding plan secured
- Coal stock days increased
- Safety improved





## Audited financial results



## Paul O'Flaherty Finance Director





## Income statement for the year ended 31 March 2013



- Group revenue of R128.9 billion (31 March 2012: R114.8 billion), an increase of 12.2%
- Revenue growth has been offset by escalating operating expenditures mainly due to an increase in primary energy costs
- Effective tax rate of 26.4%
   (31 March 2012: 28.0%)
- Finance costs impacted by the R17.3 billion gain resulting from the re-measurement of the government loan
- Net profit decreased from R13.2 billion as at 31 March 2012 to R5.2 billion as at 31 March 2013

Includes the effect of the re-measurement of the government loan: R17.3 billion income in 2012/13 (R9.6 billion cost for the half-year to 30 September 2012 and R5.5 billion income in 2011/12)

	Audited	Reviewed	Audited	Audited
	year to	half-year	year to	year to
Rm		to 30 Sept		
KIII	2013	2012	2012	2011
Revenue	128 869	73 368	114 847	91 447
Other income	1 155	516	712	587
Primary energy	(60 748)	(24 973)	(46 314)	(35 795)
Opex (incl. depreciation and amortisation)	(57 701)	(26 881)	(44 872)	(36 772)
Net fair value loss on financial instruments	(1 655)	(1 292)	(2 388)	(1 816)
Operating profit before embedded derivatives	9 920	20 738	21 985	17 651
Embedded derivative gain / (loss)	(5 942)	698	334	(1 261)
Operating profit	3 978	21 436	22 319	16 390
Net finance income (cost)	3 027 <sup>1</sup>	$(3785)^1$	$(3.956)^1$	(4 741)
Share of profit of equity - accounted investees	35	22	41	24
Profit before tax	7 040	17 673	18 404	11 673
Income tax	(1 857)	(5 044)	(5 156)	(3 261)
Loss from discontinued operations	-	-	-	(56)
Net profit for the year /period	5 183	12 629	13 248	8 356
				17



## Key performance ratios



	Unit	Audited year to 31 March 2013	Audited year to 31 March 2012	Audited year to 31 March 2011
Revenue per kWh (electricity sales)	cents per kWh	58.5	50.3	40.3
Costs per kWh (electricity business)	cents per kWh	54.2	41.3	32.8
EBITDA	Rm	13 945	31 130	23 609
Free funds from operations (FFO)	Rm	18 110	30 483	16 953
Gross debt/ EBITDA	ratio	16.2	6.5	7.5
FFO/ gross debt	%	8.0	15.2	9.5
Return on average total assets <sup>1</sup>	%	1.3	3.7	2.9
Return on average equity <sup>1</sup>	%	4.9	13.9	10.7
Working capital ratio	ratio	0.7	0.8	0.9
Bad debt as percentage of revenue	%	0.8	0.5	0.8

Based on historical costs

<sup>4.</sup> Excluding disputes





**Excluding Soweto debt** 

<sup>2.</sup> Includes municipalities

## Company EBIT before embedded derivatives





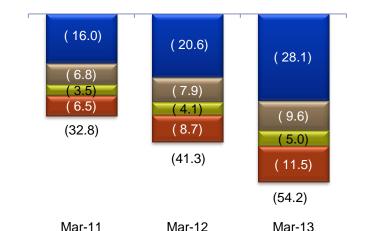
#### EBIT before embedded derivatives<sup>2</sup>

Cents/ kWh



#### **Operating costs**





- ■Other operating expenses <sup>3</sup>
- Depreciation and amortisation expense <sup>4</sup>
- ■Employee benefit expense
- ■Primary energy costs

- Includes non-electricity revenues
- 2. Includes other income and net fair value gains/losses on financial instruments
- 3. This mainly consists of repairs and maintenance and IDM costs
- 4. Includes net impairment losses

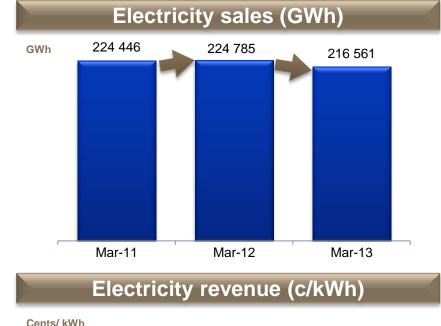


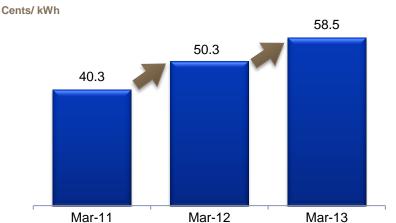


#### Sales and revenue



- 216 561GWh sales for the year to 31 March 2013 represents:
  - a 3.7% decrease compared to last year;
  - below the budgeted sales of 222 083GWh (budgeted contraction of 1.2%)
- Sales contracted (in GWh) due to:
  - Lower demand for electricity due to the weaker than expected economic conditions
  - Demand-response initiatives including power buybacks
  - Industrial action in the mining sector
  - Major customer breakdowns
- Revenue per kWh increased by 16.4% compared to the same period last year primarily as a result of the 16.0% tariff increase granted by NERSA







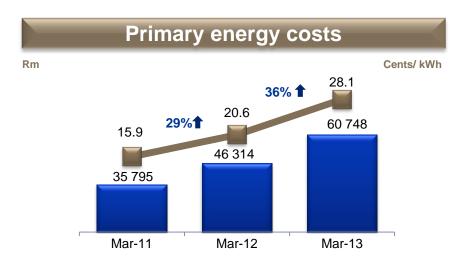


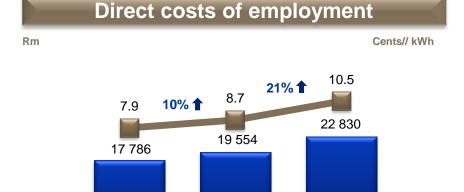
## Operating expenses<sup>1</sup>



Mar-13

46 266





#### **Depreciation & amortisation expenses<sup>2</sup>**



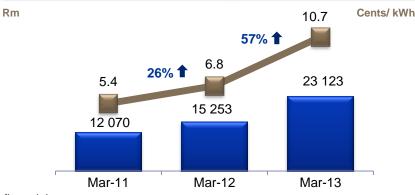


Mar-12

43 473

Mar-11

Headcount: 41 788



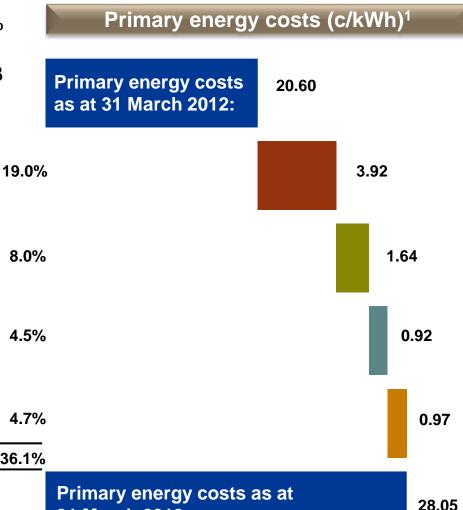
- 1. Cents/kWh figures are calculated based on total electricity sales numbers and group financials
- 2. Including net impairment loss
- 3. Including managerial, technical and other fees, research and development, operating lease expenses, auditor's remuneration, repairs and maintenance



## Analysis of primary energy costs



Primary energy costs increased by 36.1% from 20.6 c/kWh as at 31 March 2012 to 28.1 c/kWh for the year to 31 March 2013



22

18

cents / kWh

20

24

26

28

22

increased by 24.2%

Cost of coal burnt

OCGT<sup>2</sup> costs increased by R3.5bn (235%)

> **Environmental levy** increase of 1.0c/kWh

Other items in aggregate

13% of the 4.7% increase

36.1%

31 March 2013:

14

12

10

Primary energy costs in c/kWh based on electricity sales

Open cycle gas turbine (OCGT)





53% of the

22% of the

12% of the

increase

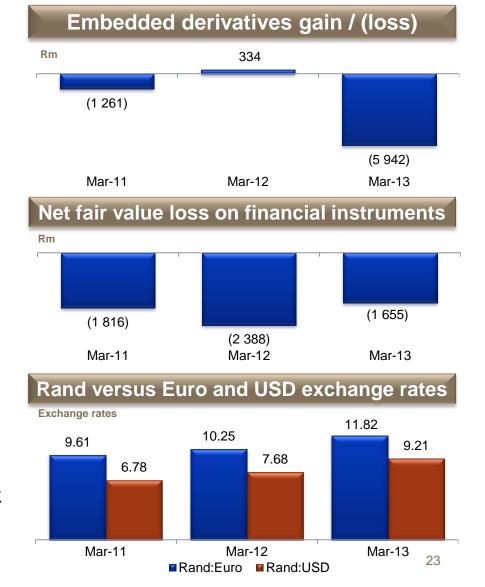
increase

increase

### Hedging policy



- Primary energy hedging:
  - No formal hedging against increases in coal prices
  - Limited correlation with international coal prices
- Commodity derivatives hedging:
  - Hedging in place to mitigate potential losses on embedded derivatives
  - Eskom submitted an application to NERSA to look into the last remaining special pricing agreement
- Foreign currency hedging:
  - All foreign currency exposure over R150 000 is hedged
  - Uses inter-alia forward exchange contracts with short maturities and roll-over at maturity as well as crosscurrency swaps
  - 86% of total debt as at 31 March 2013 has a fixed interest rate component
  - R80.1 billion of derivatives held for risk management as at 31 March 2013 (2012: R69.6 billion)

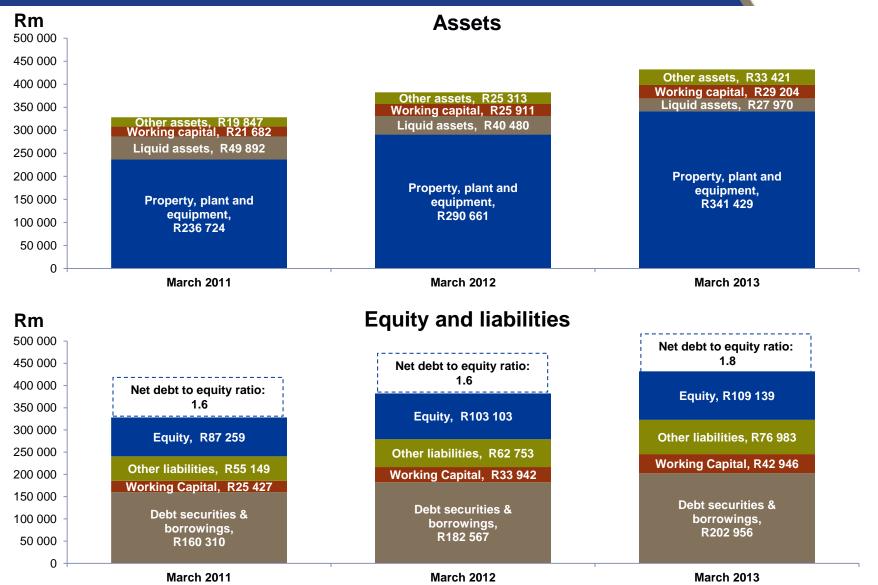






# Group audited financial position – growth in property, plant and equipment through debt raised









## Revaluation of assets – proforma if aligned to regulatory asset base



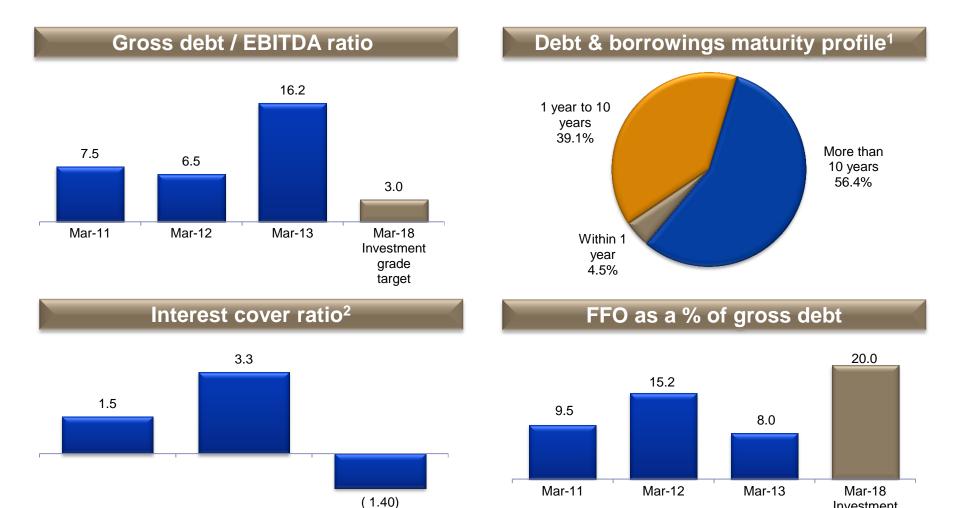
Rm	Historical cost: For the year to 31 March 2013	After revaluation: For the year to 31 March 2013	Historical cost: For the year to 31 March 2012	After revaluation: For the year to 31 March 2012
Total profit/ (loss) for the year				
Historical profit/ (loss) for the year	5 183	5 183	13 248	13 248
Adjustments: Depreciation and amortisation expense	-	(15 534)	-	(14 368)
Net impairment loss and other operating expenses	-	(105)	-	(250)
Net finance cost	-	(3 678)	-	(4 999)
Income tax	-	5 409	-	5 493
Profit/(loss) for the year	5 183	(8 725)	13 248	(876)
Equity (cumulative impact)				
Historical closing equity balance	-	109 139	-	103 103
Adjustments: Additional cumulative comprehensive loss	-	(63 150)	-	(49 241)
Revaluation of property, plant and equipment	-	252,781	-	277 703
Deferred tax on equity adjustments	-	(70 779)	-	(77 757)
Adjusted closing Equity balance		227 991		253 808
Statement of financial position				
Property, plant and equipment	341 429	506 502	290 661	499 974
Ratios				
Electricity operating costs - cents per kWh (Company)	54.2	61.4	41.3	47.8
Interest cover ratio (Group)	(1.4)	4.1	3.3	0.7
Return on assets % (Group)	1.3	(1.4)	3.7%	(0.1)%
Debt: equity ratio (Group)	1.8	0.9	1.6	0.7





## Debt maturity and leverage





<sup>1.</sup> Represents the repayment of nominal capital in the strategic and trading portfolio. Data as at 31 March 2013

<sup>2.</sup> The March 2013 interest cover ratio includes the impact of remeasuring the government loan of R17.3 billion



Mar-11



Mar-13

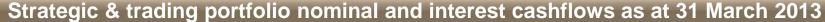
Mar-12

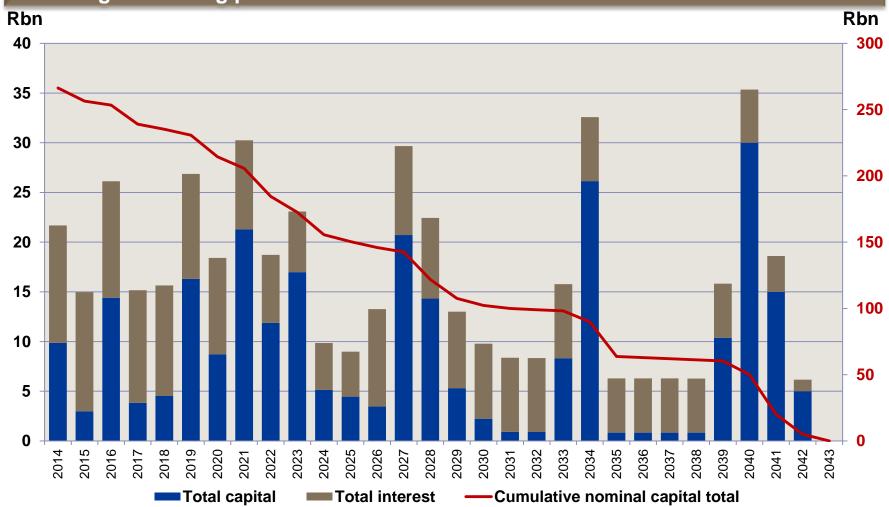
Investment grade

target

## Debt maturity profile









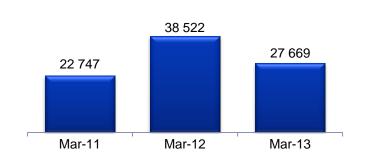


## Group audited cash flows<sup>1</sup>

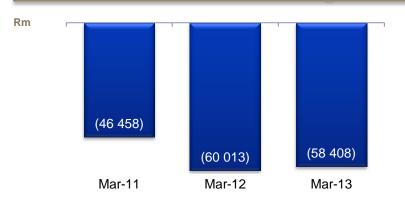


#### Cash flows from operating activities

Rm

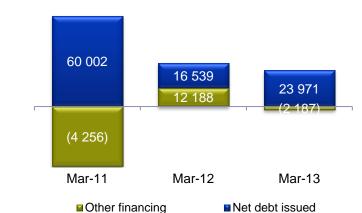


#### Cash flows utilised in investing activities

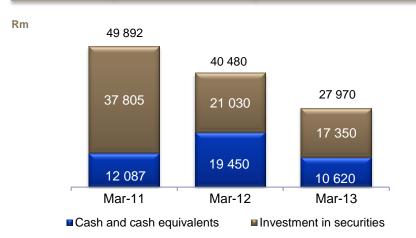


#### Cash flows from financing activities





#### Liquid assets at period end

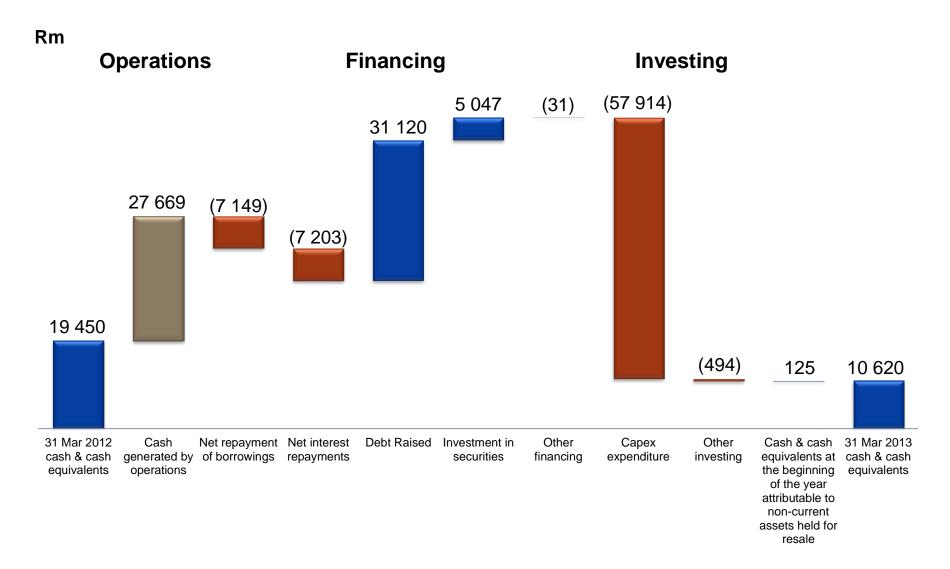






## Summary of audited cash flows







## Funding plan – R300 billion from 1 April 2010 to 2017



This plan was based on the assumption of a 16% MYPD 3 increase and will need to be extended

Source of funds	Funding sourced Rbn	Currently secured Rbn	Draw-downs to date Rbn	Amount supported by government Rbn
Bonds	90.0	44.8	44.8	32.3
Commercial paper	70.0	70.0	30.0	-
Export Credit Agency backed	32.9	32.9	19.5	-
World Bank loan	27.8	27.8	8.6	27.8
AFDB loan	20.9	20.9	13.3	20.9
DBSA loan	15.0	15.0	7.0	-
Shareholder loan	20.0	20.0	20.0	20.0
Other sources	23.4	17.4	0.9	4.9
Totals	300.0	248.8	144.1	105.9
Percentages		82.9% <sup>(1)</sup>	57.9% <sup>(2)</sup>	42.6%(2)





## Credit ratings



Entity	Rating Status	Moody's	S&P	Fitch	
Eskom Holdings SOC Ltd	Foreign Currency	Baa3	BBB	-	
	Local Currency	Baa3	BBB	BBB+	
	ZAR Long-term	-	AA	AA+	
	ZAR Short-term	-	A-1	F1+	
	Outlook	Negative (1)	Negative (3)	Stable <sup>(4)</sup>	
Stand-Alone	Ratings	Ba3	В	None	
RSA Govt.	Foreign Currency	Baa1	BBB	BBB	
	Local Currency	Baa1	A-	BBB+	
	ZAR Long-term	-	AAA	AA+	
	ZAR Short-term	-	A-1	F1+	
	Outlook	Negative (2)	Negative (3)	Stable <sup>(4)</sup>	

- 1. Moody's downgraded Eskom's credit rating from Baa2 to Baa3 (negative outlook) on 1 October 2012
- 2. Moody's downgraded South Africa's sovereign credit rating from A3 to Baa1 (negative outlook) on 27 September 2012
- 3. On 12 October 2012 Standard & Poor's lowered the long term foreign and local currency ratings on the Republic of South Africa to BBB (from BBB+) and A-(from A+) respectively. In accordance with its criteria for government-related entities, Standard & Poor's lowered Eskom's long-term foreign and local currency credit ratings from BBB+ to BBB on 17 October 2012. It has also retained its negative outlook on Eskom as with the sovereign
- 4. On 10 January 2013, Fitch announced the following rating actions on the Sovereign; downgrade of the long-term foreign currency Issuer Default Rating ("IDR") to 'BBB' from 'BBB+';downgrade of the long-term local currency IDR to 'BBB+' from 'A'; downgrade of the Short-term IDR to 'F3' from 'F2'; downgrade of the Country Ceiling to 'A-' from 'A'; and outlook review from 'Negative 'to 'Stable. On 11 January 2013, Fitch downgraded Eskom's local currency rating by one notch to BBB+, following the downgrade by Fitch of South Africa's sovereign rating on 10 January 2013. Fitch has, however, revised its outlook on Eskom from negative to 'stable'. The sovereign downgrade also prompted a recalibration of the South African National Scale which resulted in the downgrade of Eskom's Long-term National Scale Rating to 'AA+/Stable' from 'AAA/Stable' on 16 January 2013. The Short-term 'F1+/Stable' has been affirmed





## Construction



## Paul O'Flaherty **Finance Director**

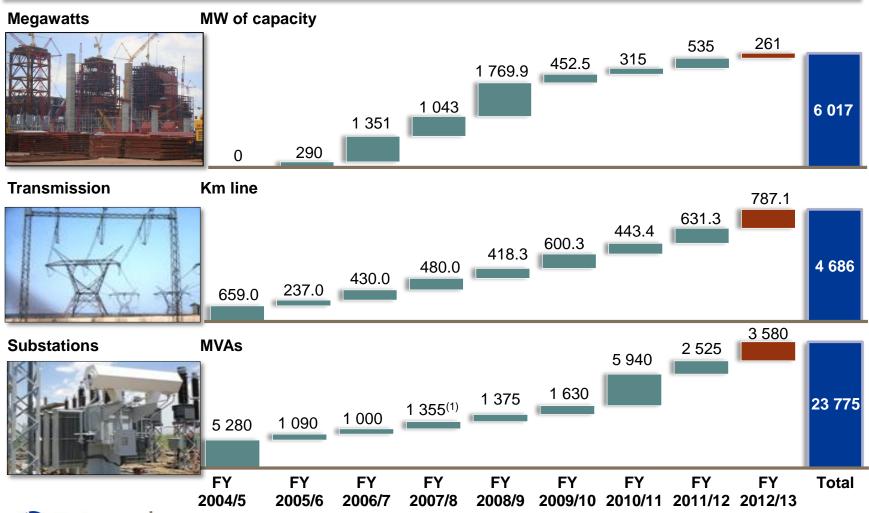




## Build progress to date



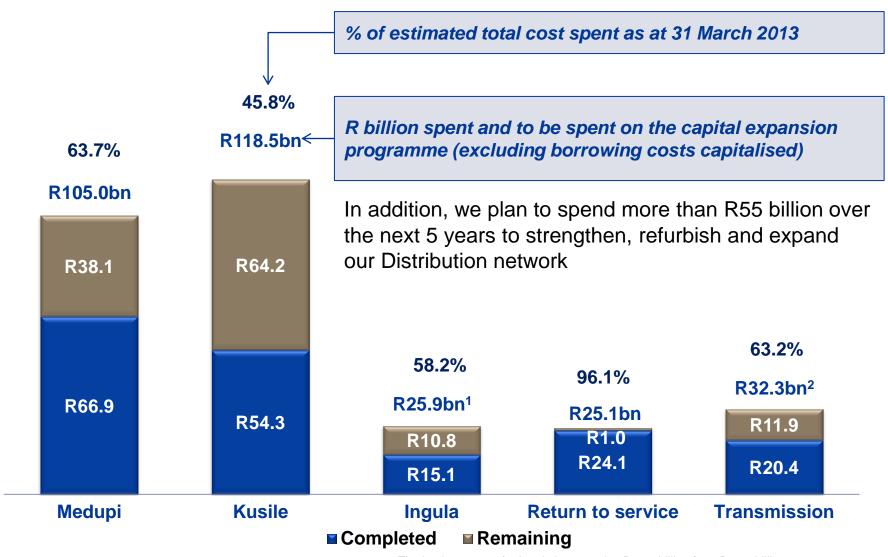
To date, a large amount of construction work has been completed, adding ~ 6 017MW of capacity, ~ 4 686km of transmission network and ~ 23 775 of MVAs





# Significant progress in build programme – began in 2005 with completion in 2018









The business case for Ingula increased to R25.9 billion from R23.8 billion as at 31 March 2012

## Current planned installed capacity expansion plan



	Planned						
Project	Year to 31 Mar 2014	Year to 31 Mar 2015	Year to 31 Mar 2016	Year to 31 Mar 2017	Year to 31 Mar 2018	Year to 31 Mar 2019	Total
Grootvlei (return to service)	30						30
Komati (return to service)	100						100
Medupi (coal fired)		1 588	1 588	1 588			4 764
Kusile (coal fired)		800	800	800	1 600	800	4 800
Ingula (pumped storage)		1 332					1 332
Sere wind farm (renewable)		100					100
Total (MW)	130	3 820	2 388	2 388	1 600	800	11 126

#### In addition, Eskom has commenced the development of a 100MW CSP plant













## Operations



## **Brian Dames Chief Executive**





# Primary Energy

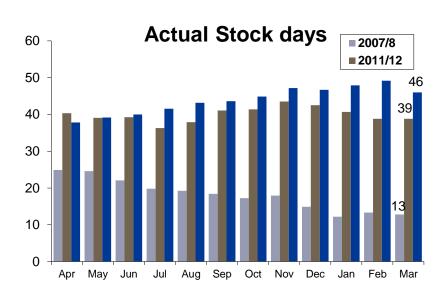


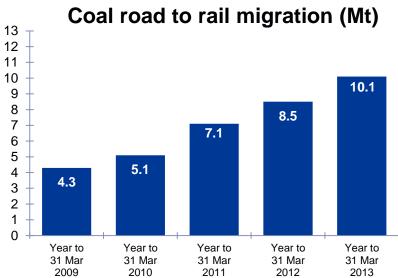
## Highlights

- 31% decrease in year-on-year public fatalities on the coal heavy-haulage road network
- Average coal stock levels improved to 46 days as at 31 March 2013 (2012: 39 days)
- Construction of Komati water scheme augmentation project on track for water delivery by the end of May 2013
- Tutuka coal rail terminal is fully operational

## Challenges

- Achieving contractual performance on coal supply agreements
- Purchasing more expensive coal from the short-/medium-term market due to the poor volume performance of some contracted mines
- Extended strikes in the transport and mining industry affected the coal-supply value chain
- Both Eskom and Transnet experienced operational challenges regarding the rail transport of coal







# Generation



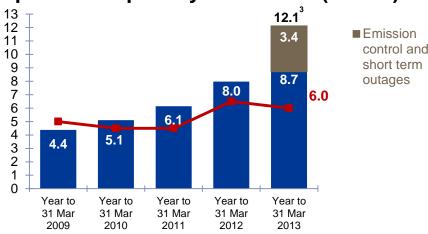
#### **Highlights**

- There was no rotational load shedding
- 30MW of additional output capacity achieved on Koeberg Unit 2
- Effective on-going roll-out of the power station enhancement and the energy efficiency programmes

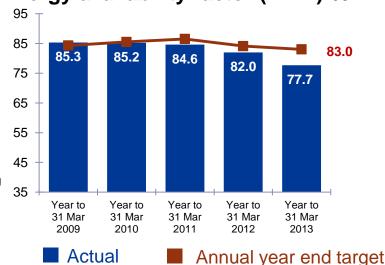
## Challenges

- Lack of adequate space to do planned maintenance, coupled with the demand to keep the lights on, negatively affected plant performance
- Coal-related energy losses mainly at Tutuka and Arnot
- Availability of strategic spares due to long lead times
- EAF measures plant availability, plus energy losses not under the control of plant management
- UCLF measures the lost energy due to unplanned production interruptions resulting from equipment failures and other plant conditions
- The 12.12% cumulative UCLF consists of energy losses of 7.54% plus energy losses of 1.17% for the Duvha Unit 4 outage and energy losses of 3.41% due to decisions by management for emission control and short-term outages (figures are only available from April 2012)

## Unplanned capability loss factor (UCLF¹) %



# Energy availability factor (EAF2) %



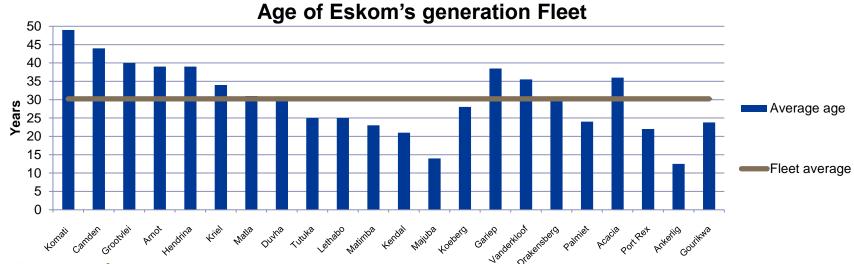




# Strategy to ensure a sustainable generation fleet



- Eskom's power stations are ageing and needs focus to maintain and improve performance
- Planned maintenance has often had to be shifted or deferred to ensure we have the capacity available to meet demand and keep the lights on
- This approach is not sustainable it is essential that planned maintenance be done to enable predictable and sustainable performance from Eskom's power stations
- Eskom has put in place a five year strategy for generation sustainability which includes a firm commitment not to postpone critical maintenance. This is based on an 80:10:10 principle that is, on average, an Energy Availability Factor of 80%, planned maintenance of 10% and a projected unplanned outage ratio of 10%







# **Transmission**



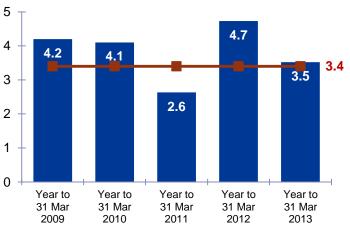
#### Highlights

- The number of transmission line faults per 100km has been significantly reduced
- The 2012-2021 Transmission Development Plan was published and includes details of a network strengthening plan to achieve Grid Code N-1 compliance
- Future trading opportunities in the Southern African region have been identified

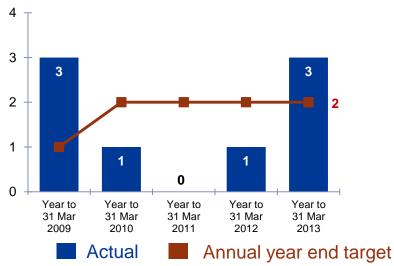
## Challenges

- Three major incidents occurred during 2012/13
- Increased theft of transmission-tower steel members remains a serious risk
- Purchases from Hydro Cahora Bassa were lower than anticipated due to equipment failure in Mozambique

#### Severity of interruptions (System minutes lost ≤ 1)



#### **Number of major incidents**







# Independent Power Producers (IPPs)



- Eskom remains committed to facilitating the entry of IPPs into the South African electricity market
- Renewable Energy Independent Power Producer Procurement (REIPP) Programme:
  - Eskom supports Government's renewable energy programme, which aims to bring 3 725MW onto the national grid
  - On 5 November 2012, Eskom signed 28 power purchase agreements for the first bid totalling 1 441.7MW
  - The procurement process for the second round of submissions has been concluded and Eskom's board approved the purchase of 1 043.8MW of renewable energy capacity
- Department of Energy's (DoE) open-cycle gas turbine ("Peakers") programme
  - Eskom is awaiting NERSA and PFMA approval to be the buyer of the 1 005MW of capacity for this programme
- At 31 March 2013 Eskom contracted a total capacity of 1 135MW from IPPs (2012: 1 008MW) on short and medium term programmes. Actual energy purchases amounted to 3 516GWh (2012: 4 107GWh) and the amount paid to IPPs and municipal purchases in the year to 31 March 2013 was R2.9 billion or 83.6 c/kWh (2012: R3.3 billion or 77 c/kWh)





# Distribution



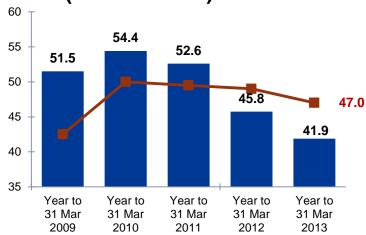
#### **Highlights**

- Several safety initiatives have been implemented
- Sustained improvement in the SAIDI and SAIFI performances during the year to 31 March 2013
- Electrification connections exceeded the target and created 4 320 job opportunities

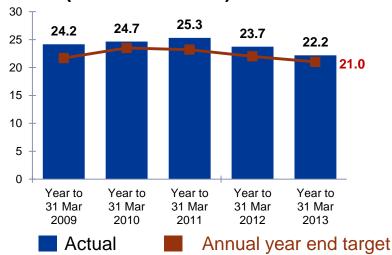
## Challenges

- Employee and contractor safety performance and lost-time injuries Employee security remains a concern in certain areas
- Ageing networks makes maintenance a challenge
- Acquisition of land and servitudes for electricity infrastructure

## SAIDI (hours/annum)<sup>1</sup>



#### SAIFI (number/annum)<sup>2</sup>



- **SAIDI:** System average interruption duration index
- SAIFI: System average interruption frequency index





# Customer services



#### Highlights

- Partnering with large industrial customers through demand-response programmes to help manage the power system during peak periods
- KeyCare customer satisfaction results for large industrial customers were above target
- The Grid Access Unit for IPPs and generators processed more than 700 applications for connection to the grid

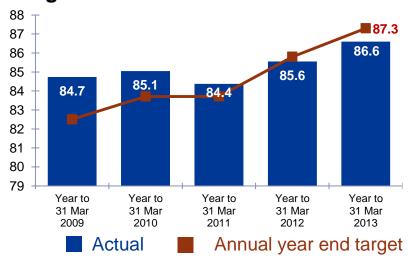
## Challenges

- Municipal debt remains high despite various interventions with municipalities
- Residential Gauteng and Soweto debt remains high. Customer debt levels are increasing and there is a negative trend in debtors' days of both large and small power users

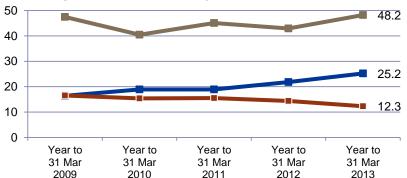
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# 1923-2013

## Weighted customer service index<sup>1</sup>



## Average debtors' days



Customer service (large power users, municipalities and other), average debtor days

 Customer service (small power users excluding Soweto debt), average debtor days

 Customer service large power top customers excluding disputes, average debtor days

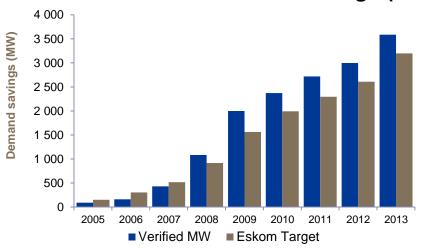
Eskom uses a composite index to measure the service delivered to its residential, small and medium customers.

# **Integrated Demand Management**



- Successfully implemented and executed the comprehensive suite of IDM solutions to exceed NFRSA and shareholder targets
- The total evening peak demand savings achieved of 595MW (2012: 365MW) against a target of 459MW as at 31 March 2013
- The accumulated verified demand savings for the combined financial years 2005 to 2013, is 3 587MW. This is almost equivalent to the output of a typical power station
- The current verified internal energy efficiency savings for the year to 31 March 2013 is 28.9GWh (2012: 45.0GWh) against a target of 20.0GWh as at 31 March 2013

## Cumulative verified demand savings (MW)



## **Energy Savings (GWh)**







# Energy losses and theft



Energy losses reflect the difference between the quantity of energy sent out from the power stations and the quantity sold to the various customers at the end of the value chain

Energy losses	Budget 31 Mar 2013	Actual 31 Mar 2013	Actual 31 Mar 2012
Distribution loss	≤6.1	7.1	6.3
Technical losses	-	4.3	3.8
Non-technical losses	-	2.8	2.5
Transmission loss <sup>1</sup>	≤3.4	2.8	3.1
<b>Total Eskom loss</b>	≤8.9	9.1	8.7

- High levels of theft of copper and pylons persist, which are affecting plant performance and increasing costs
- Implementation of the new Second Hand Goods Act on 30 April 2012, followed by aggressive policing of the scrap industry by law enforcement agencies contributed to a decrease in incidents and losses.
- The joint industry working group formed by Eskom, Transnet, Telkom, SAPS, NPA, BAC and SACCI continues to contribute positively in the fight against this crime
- The Operation Khanyisa strategy and initiatives have assisted to arrest and contain energy losses within acceptable parameters despite the negative pressures of the general economic climate and tariff increases





# Concluding remarks



# **Brian Dames Chief Executive**





# Three big agendas





Continuing to keep the lights on while the gap between supply and demand is extremely narrow, and high levels of planned maintenance are needed to ensure the sustainability of ageing power stations, distribution and transmission networks

Ensuring that the Medupi project delivers its first power to the national grid, and that significant progress is made towards the delivery of first power from Kusile and Ingula within the next two years

Re-engineering our business to adapt to the limits imposed by the 8% annual average tariff increase that the National Electricity Regulator of South Africa (NERSA) granted us for the next five years



# Systematic approach to closing the R225 billion gap



- Reprioritisation, efficiency drive to identify cash reduction opportunities
- Regulatory Clearing Account mechanism to claw back
- Address mandate with key stakeholders to reduce mandatory spend
- Re-engineer the business to realise longterm efficiency gains
- Explore funding alternatives
- Align capex programme in line with available funding options
- Confirm additional shareholder support
- Roll-out of Business Productivity Programme (BPP)
- Re-open the tariff discussion with NERSA





# Conclusion



- Power system
  - Eskom has kept the lights on through a challenging year
  - Eskom will for the first time plan to do extensive maintenance work, even during the coldest winter months, to improve reliability
- MYPD 3 determination and the way forward
  - Re-engineer the business to work within the revenue allowed by NERSA
- Financial sustainability
  - Four years of sound financial results show stability, predictability and progress
- Capacity expansion programme
  - Special focus on bringing the first unit of Medupi online
- **Transformation** 
  - Initiatives have been implemented to transform Eskom and improve its operations
- Eskom is 90 years old this year and it is investing in the future we are looking ahead to provide the electricity South Africa needs to power growth and development





# In transition



- Eskom is in the midst of a far-reaching and complex transition. When this process is complete, we will be a very different company.
- There will be lasting benefits for our customers and communities









# gjoin us,

Remember your power Be part of the solution!

REMEMBER YOUR POWER