

**Eskom's pricing proposal**  
**presentation to NERSA public hearings**  
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# Eskom's request

- Eskom has made a request to NERSA for a price increase, above the 14.2% already approved.
- It says that it seeks a 100% real price increase over 2 years.
- It provides 5 scenarios, but recommends the scenario with a 53% real price increase in 2008/9 and 43% in 2009/10, and then 'marginally above inflation' thereafter.
- Its stated objective is to:
  1. Cover cost of its expansion programme
  2. Cover the rising primary energy costs, coal and liquid fuel in particular
  3. Cover the cost of its demand side management and power conservation programmes
  4. Ensure financial sustainability in light of S&P' having put it on 'credit watch'

# Background to our input

- The HSRC, with support from WSP Consulting Engineers, has prepared a study funded by TIPS/Commark on the request of the Sector Strategies Co-ordinator in the Presidency.
- The study investigates:
  - the potential economic impact of differently distributed pricing or rationing options aimed at reducing peak electricity usage and electricity consumption,
  - the potential impact of different pricing proposals on Eskom itself.
- This submission to Nersa summarizes our findings in respect of this latter aspect.
- We have shared our findings with Nersa, Eskom, Treasury and a number of other experts to obtain feedback. Significantly, Eskom *has* provided detailed feedback and we have revised our calculations on this basis.
- Please note that the views contained in this submission are that of the authors only, and do not represent the views of TIPS/Commark or the Presidency, or any of the informants listed above.

# How to use these results

- The financial modelling is indicative of the potential impact that different approaches to pricing might have on Eskom and on the economy.
- The model is not precisely the same as that used by Eskom, but we believe it is sufficiently close to give a solid indication of impacts.
- They are shared with the intention of offering an independent technical view on Eskom's pricing proposal.
- We are able to assist with other pricing scenarios, should Nersa find that helpful.

# **We consider 4 main scenarios**

- Scenario A: the 53/43 split proposed by Eskom (which amounts to a 119% compound increase),
- Scenario B: a 3 year introduction of 100% real compound price increase (26/26/26)
- Scenario C: a four year introduction of 100% real compound price increase (19/19/19/19).
- Scenario D: a five year introduction of 100% real compound price increase (14.85/14.85/14.85/14.85/14.85).

# Standard features

- Govt injection treated as equity by financial institutions, and interest free over this period
- Inflation is average of 8% over the period: this is much higher than the one used by Eskom. It has the impact of raising costs of borrowing relative to Eskom
- Primary energy costs included in 2008/9, as estimated by Eskom; thereafter increases by inflation
- Borrowing costs are 2% above inflation + premium (20%, 40%) if debt/equity ratios rise above 100% or above 200%.
- We show interest cover with and without DSM in Scenarios B, C & D.
- We assume that on average, each day 77% of projected usable generating capacity does produce energy, all of which is sold. (In 2008/9, this results in a 5% reduction in real sales, which is approx what Eskom has suggested to us.

# Economic impacts

- With the appropriate incentives, firms could substantially reduce consumption over 6 to 18 months.
- A price increase that is introduced too rapidly will have a disproportionate effect on reducing output.
- There are quite a number of other challenges currently facing the economy, including inflation and dampening growth. It is essential that where possible, the electricity price not introduce an additional challenge.
- We model the impact of introducing a sudden 72% or a 27% price increase.
  - While this is not precisely that being considered, it does give a sense of the economic impact.
  - The effects of this are not proportionate.
  - A 72% price increase would lead to 2.5% rise in inflation, a fall in GDP by 0.3% (or about R 67 bn) and a reduction in low skill employment by 1.4% (about 55,000 jobs).
  - If the electricity price increases by 27%, inflation rises by 0.9%, GDP falls by 0.1% and low skill jobs shrink by 0.3%.

# Findings – Scenario A & B

	Mar.07	Mar.08	Mar.09	Mar.10	Mar.11	Mar.12	Mar.13
<b>Scenario A - Eskom application</b>							
Application - real unit price increase (%)			53.0	43.0	1.0	1.0	1.0
Net profit after tax and interest (Rbn)	3.2	-0.8	6.7	27.4	35.3	42.2	48.5
Net profit before tax to Turnover	12.8	-1.9	15.1	38.0	37.7	40.2	40.3
Net profit before tax to Total Assets	5.7	-0.7	5.2	15.3	15.5	15.7	15.9
Increased borrowings (R bn)	-8	-31	-53	-36	-16	4	-5
Interest cover by profit before tax & interest	3.4	0.5	3.5	5.7	5.6	5.0	6.1
% Interest bearing debt over equity	58.3	114.4	196.3	189.5	165.2	134.2	106.2
<b>Scenario B - Double price over 3 years</b>							
Real unit price increase (%)			26.0	26.0	26.0	0.0	0.0
Net profit after tax and interest (Rbn)	3.2	-0.8	1.3	13.6	17.5	20.9	24.1
Net profit before tax to Turnover	14.3	-1.9	2.4	17.2	15.6	15.6	15.7
Net profit before tax to Total Assets	6.3	-0.7	0.7	5.2	5.3	5.3	5.4
Increased borrowings (Rbn)	-8.4	-30.9	-58.3	-49.4	-34.2	-17.0	-29.1
Interest cover by profit before tax & interest	3.4	0.5	1.3	2.5	3.3	3.2	3.5
Interest cover if no DSM	4.8	0.5	2.0	3.3	4.0	3.9	4.5
% Int. debt over equity	58.3	114.4	193.2	193.2	162.9	131.6	130.3



# Findings – Scenario C & D

	Mar.07	Mar.08	Mar.09	Mar.10	Mar.11	Mar.12	Mar.13
<b>Scenario C - Double price over 4 years</b>							
Real unit price increase (%)			19.0	19.0	19.0	19.0	0.0
Net profit after tax and interest (Rbn)	3.2	-0.8	-0.8	7.0	9.0	10.7	12.3
Net profit before tax to Turnover	14.3	-1.9	-1.4	9.7	9.3	8.5	8.1
Net profit before tax to Total Assets	6.3	-0.7	-0.4	2.7	2.7	2.7	2.8
Increased borrowings (Rbn)	-8.4	-30.9	-60.4	-56.0	-42.7	-27.2	-40.8
Interest cover by Profit before tax & interest	3.4	0.5	0.8	1.7	2.1	2.8	3.3
Interest cover if no DSM	4.8	0.5	1.4	2.4	2.8	3.2	3.9
% Int. debt over equity	58.3	114.4	203.3	225.1	204.5	176.5	188.9
<b>Scenario D - Double the price over 5 years</b>							
Real unit price increase (%)			14.9	14.9	14.9	14.9	14.9
Net profit after tax and interest (Rbn)	3.2	-0.8	-2.0	0.9	1.2	1.4	1.6
Net profit before tax to Turnover	14.3	-1.9	-3.8	1.4	1.3	1.3	1.1
Net profit before tax to Total Assets	6.3	-0.7	-1.1	0.4	0.4	0.4	0.4
Increased borrowings (Rbn)	-8.4	-30.9	-61.6	-62.1	-50.5	-36.5	-51.6
Interest cover by Profit before tax & interest	3.4	0.5	0.5	1.1	1.4	1.8	2.5
Interest cover if no DSM	4.8	0.5	1.1	1.9	1.9	2.4	3.3
% Int. debt over equity	58.3	114.4	209.6	257.6	253.3	233.9	273.9

# Our recommendations

- Impact on Eskom *and* on economy impact must be considered
- 100% price increase does seem necessary for eskom, especially in light of massive investment, limited shareholder injections, and lack of historic build up funds due to low price
- But pace is unnecessarily rapid
- Cash flow and interest cover is central concern for ratings agencies and creditors
  - Eskom targets interest cover of 3.0.
  - Interest cover below 1.5 is of concern
  - Scenario C will be tight in 2008/9, and perhaps 2009/10.

# Recommendations

- 100% real price increase over 4 years (19% real) with DSM cut is very safe option. Cash flow tight in 2008/9, but could be remedied with slightly higher price increase in earlier years, or by slightly larger upfront loading of state's R 60 bn injection.
  - For eg we assumed R 6bn injection in year 1. Adding R3bn to R 4bn, would solve this problem.
- 100% real price increase over 5 years (14.85% real; approx 22% nominal) does seem feasible if DSM-cut, although cash flow weak especially in 2008/9.
- Price determination must be made with new levy in mind (R0.02/kWh). This will add a further 10% to the average price.
  - 14.85% + inflation + levy = minimum of 32% nominal
  - It is not a good year to be introducing this tax. It should ideally not be introduced in next 2 years.
  - If Treasury does go ahead, we recommend that the earnings be retained by Eskom for one year at least. This would make the 14.85% real price increase absolutely feasible.
- In future years, may need adjustment to primary energy costs
- Financial ratios would improve with:
  - greater efficiencies in obtaining primary energy, finance or operations;
  - with larger shareholder injection
- More coordination is needed in the decision making process: while we make recommendations in respect of the proposed levy or the slightly higher up-front loading in the state's capital injection, these are not within the ambit of the current decision making process by Nersa.

# Purpose of price increase

- The price needs to be increased for 2 reasons:
  - To cover cost of investment
  - To reduce demand in industry and amongst high income households
- 100% price increase is not needed to reduce consumption by 10%
- Eskom not yet clear about what needs to be achieved.
  - It says need 10% reduction in peak usage – almost achieved?
  - but not clear what savings needed in consumption and over what period.
- The pricing proposals need to take this into account