Creating a ‘country compact’ to ensure a secure and sustainable future

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11-22 January 2010

NERSA public hearings

Eskom’s MYPD2 application

Creating a ‘country compact’ to ensure a secure and sustainable future

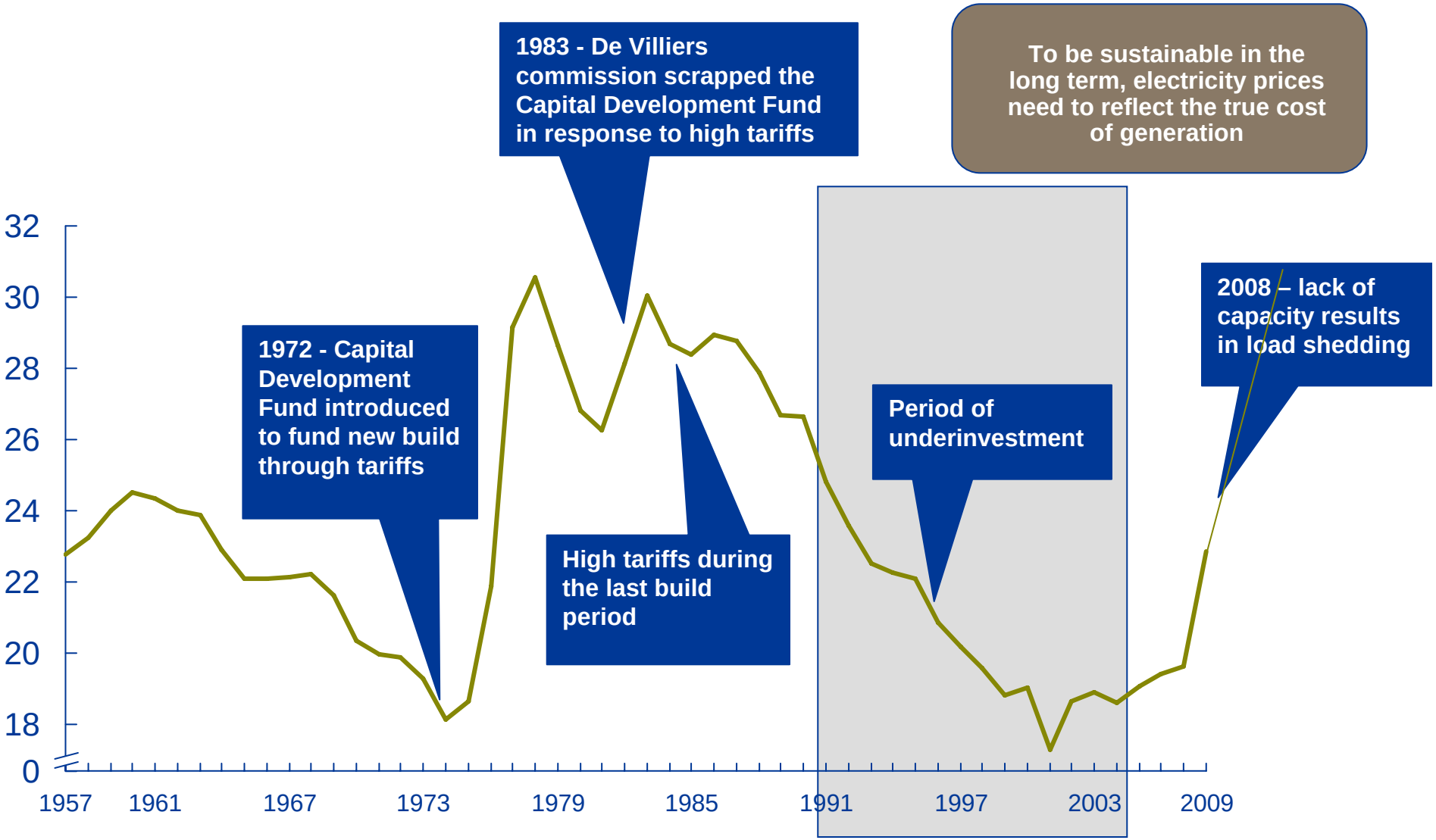
- Although we are dealing with this application in a 3 year context, it is important for continuity of supply to keep in mind the longer term requirements for the country
- As a country we need a long term perspective on what is required to achieve a sustainable and secure long term future for South Africa and its electricity industry
- The current reality is that:
  - We have a low reserve margin which results in increased operating costs, and the need for significant additional capacity.
  - The tariffs are too low to sustain the funding needs culminating in the current weak Balance Sheet.
- Eskom acknowledges that a strategic shift based on effective integration and alignment with stakeholders is required to achieve a successful outcome for Eskom and for South Africa.

Creating a ‘country compact’ to ensure a secure and sustainable future

- This outcome cannot be guaranteed by Eskom on its own – we need a compact between all South Africans to work together to overcome our challenges
- Accordingly, Eskom’s revised application is based on this collaborative and integrated approach and will involve making choices and trade-offs as a country to ensure a sustainable energy future.
- Eskom has therefore changed its tariff application from 45% to 35%, but this choice increases the risk profile relating to sustainability and fundability.
- Eskom is committed to work in partnership with stakeholders to address these risks.

As a country, we need to make up for a long period of underinvestment

Real c/KWh (2008 base)



The current low reserve margin has major implications for Eskom and for the country

Tighter reserve margin and rising costs since 2007/8

Reduced security of supply

- **Constrained supply**: Available capacity not able to meet increased demand
- **Planned load shedding**: balancing demand and supply require shedding specific users to prevent system collapse

Increased opex cost base

- New power stations resulted in increased human capital costs due to **new vacancies** to be filled
- Ageing power station fleet and high load factors results in **increased maintenance costs**

Higher primary energy costs

- **Higher volumes**: Tight reserve margins require higher energy output from stations and therefore more coal volumes
- **Higher coal price**: Reliance on more expensive short-term coal contracts due to depleting cost-plus mines
- **Higher transport cost**: Depleting cost-plus mines resulting in coal imports from mines further away and transported by road

Eskom's funding model, determined by government, covers both tariffs and other funding sources

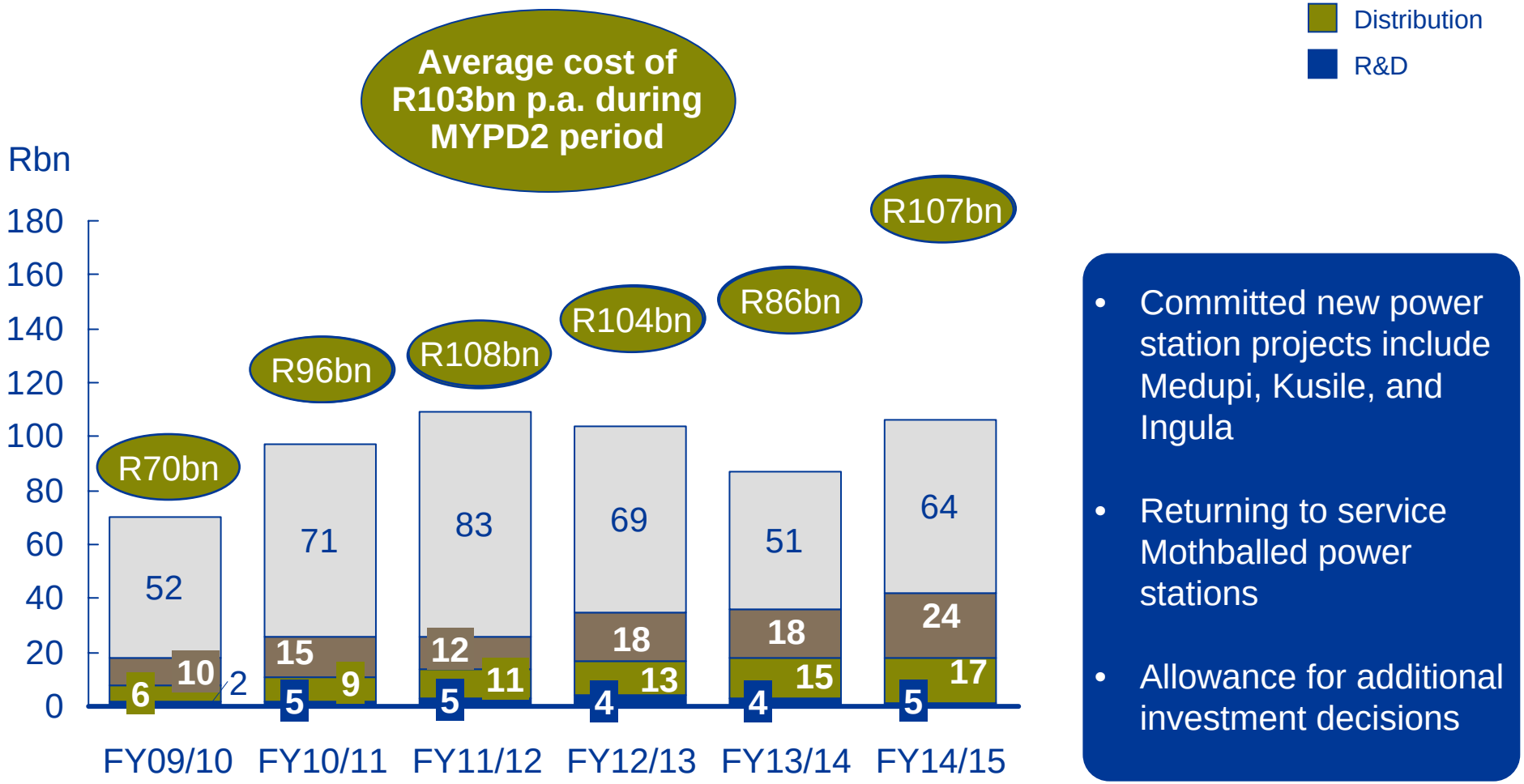
Eskom's regulated revenue (tariff) is intended to cover the cost of current electricity supply

- **Recovery of prudently incurred costs**
  - Primary energy
  - Operating expenditure
- **Depreciation on existing assets**
- **Return on existing assets**

New plant should ideally be funded from sources other than tariffs

- Retained earnings (reserves)
- New equity from the shareholder
- Borrowings

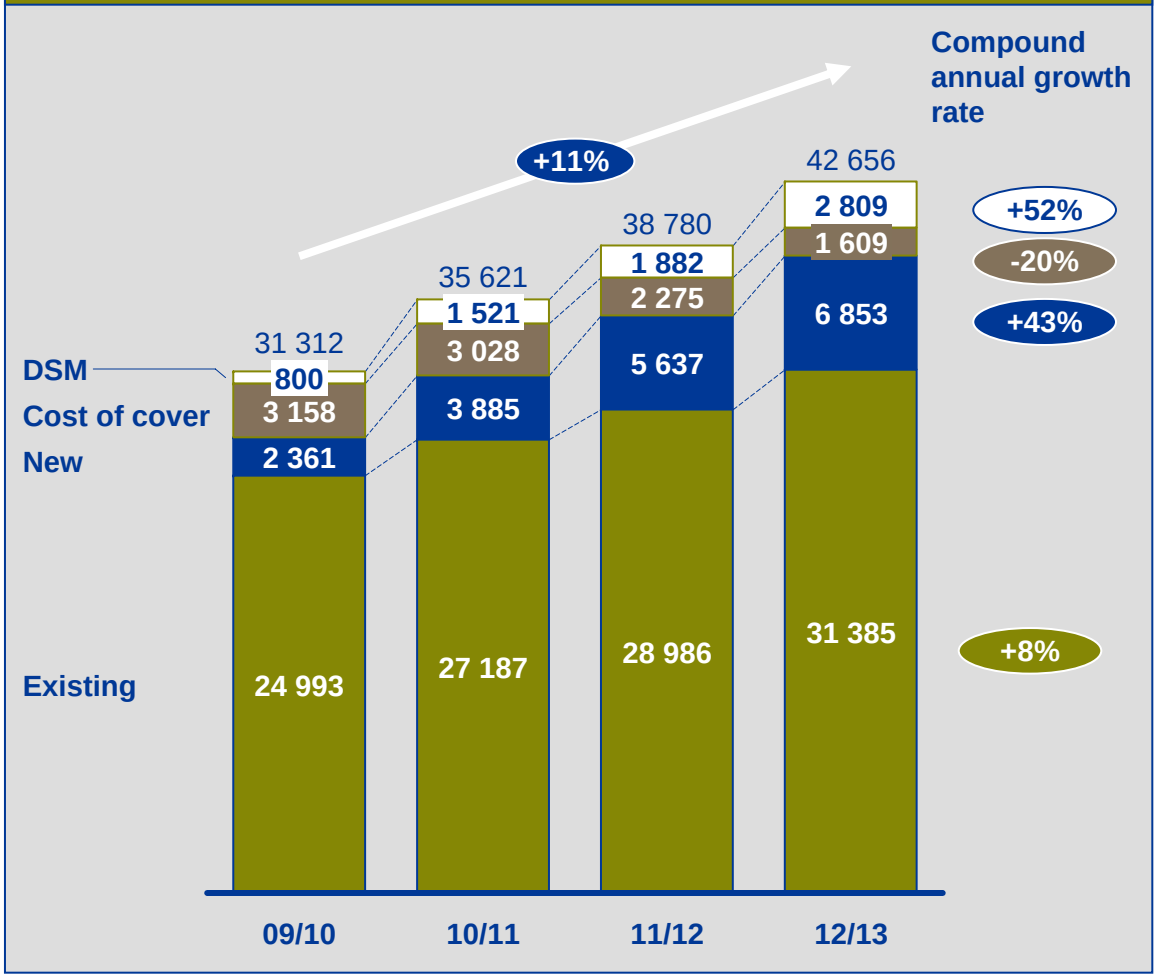
We need massive capital expenditure to keep SA's lights on for the future



- Committed new power station projects include Medupi, Kusile, and Ingula
- Returning to service Mothballed power stations
- Allowance for additional investment decisions

New build will also drive increases in Eskom's operating costs

New build drives the above inflation increase in operating costs (Rm)



- Over the MYPD2 period, operating cost increases in Eskom's existing business will stay in line with inflation
- The overall 11% increase in Eskom's operating costs during this period will be driven by building new capacity

Progress on Funding the operations and capacity

In the first instance we have explored the alternative funding options to the tariff increase, these are:

- Equity/quasi equity: Government has provided R60bn and approved exploring additional equity options
- Borrowings:
  - Three ECA transactions totalling R27bn
  - AfDB of R20,7bn
  - Ongoing negotiation with World Bank (USD $3.75bn)
- Guarantees: R176bn government guarantee
- We tailored our cashflow to 'live' within our means, which translates to savings in opex and capex of R22bn by March 2010.

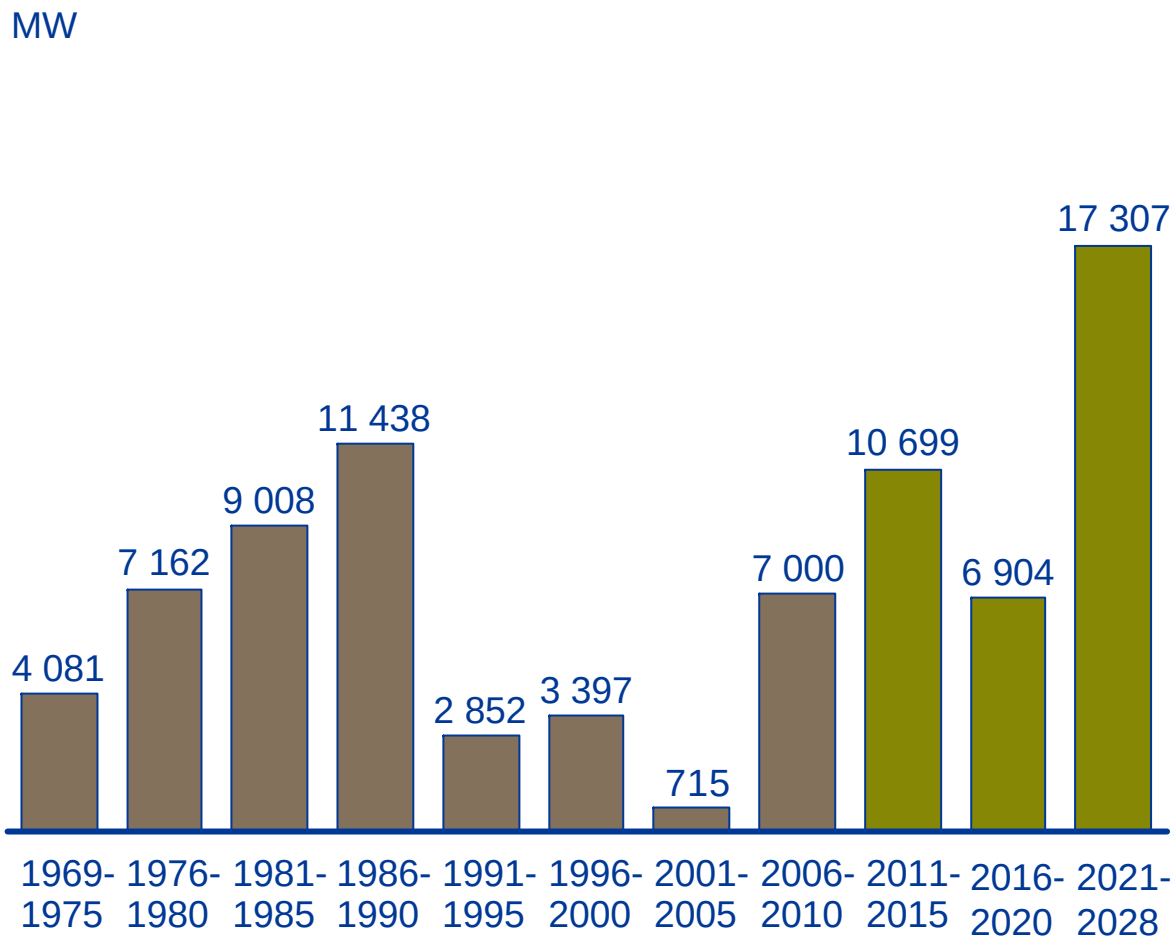
Eskom still has a R14bn cash shortfall within the MYPD 2 Period

Ultimately, electricity tariffs need to be aligned with long term economic growth

Existing capacity added

New capacity to come online

Total system capacity added per 5-year period



- **The MYPD2 application only deals with the next 3 years**
- **The country will need to decide how much of this Eskom will build**
- **For this to happen, tariffs need to be both economic and competitive**

Eskom's MYPD2 application is based on six pillars

1. The role of Eskom in the economy
2. Resolving the funding model for the new build
3. Meeting the cost of keeping the lights on
4. A sustainable economy, protecting the environment and mitigating climate change
5. Allowing for entrance of IPPs
6. Addressing the impact on economically vulnerable communities

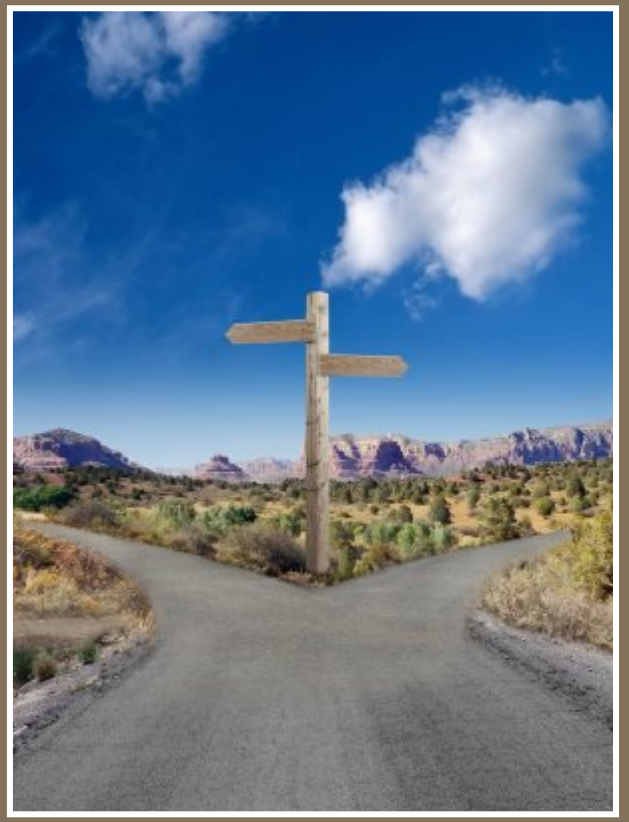
Eskom's tariff proposal

- 35% per year over three years
- Price increase over period to 82c/kWh
- R14bn cash shortfall for Eskom in 2011/12 and R8bn in 2012/13
- Eskom will look into other funding interventions to address the expected shortfall
- A re-opening of the application may be necessary if our funding and other assumptions do not materialise

The country's wish for a lower tariff increase will thus mean making choices and trade-offs

Areas of opportunity

- Demand reduction
- Responsibility for new capacity and re-phasing
- Cost reductions
- Additional funding



Choices and assumptions: Demand

Eskom

Demand forecast	• Sales forecast reduced to include 8.5TWh in savings from DSM over five years (roughly equivalent to the full output of half of a big coal station in one year) • Lower electricity demand helps reduce SA's carbon footprint and is crucial to ensuring security of supply • All South Africans will need to work together to save electricity

Choices and assumptions: Supply

Responsibility for new capacity and re-phasing

- Introducing more IPPs after the MYPD 2 period, in a longer term plan, means capital expenditure for the following projects is now excluded from MYPD2
  - Coal 3
  - Nuclear
- We will optimise the following build projects within reasonable timeframe given contractual and funding constraints
  - Kusile power station
  - Sere (wind) power station
- We recommend delaying DoE's IPP until after MYPD2, based on our revised demand forecast

All choices made in the revised submission are subject to government's final Integrated Resource Plan

**Where cashflows are deferred, it implies that the project, if required to be built by Eskom will be built later. Where the IRP calls for capacity, & if such capacity is to be built by another party, the timelines would remain unaffected.*

In addition, if any recommendation regarding deferral of cashflows is not aligned with the expectations of Eskom's role in terms of the final IRP, additional funding may be required to ensure complete alignment.

Choices and assumptions: Operating costs

Cost Reductions	• During the MYPD2 period, Eskom will work to reduce its overall costs by >R12bn – We will further reduce operating costs by R6.9bn – Reduced demand from DSM will result in R3,4bn in projected primary energy savings over the period – We will further reduce primary energy costs by R1.6bn – Maintenance and road repairs to be excluded after the first year, and covered by provincial government or SANRAL (Eskom to pay a shadow road toll for coal haulage) • These are highly ambitious stretch targets

Choices and assumptions: Additional funding

New sources of funding

- We have assumed total borrowings of R123bn over the MYPD2 period:
  - R40bn in 2010/11
  - R43bn in 2011/12
  - R40bn in 2012/13
- Compared to our September submission, we are assuming additional borrowings of R8.5bn
- We also assume we will source private sector equity of at least R20bn within 24 months – and our target will be R40bn if possible
- However, the current funding plan still requires an additional R7bn for FY10/11 and FY11/12, to close the R14.1bn cash shortfall
- Interest cover will breach the targeted ratio of 3 by FY12/13, improving financial flexibility

Country risks as a result of these choices

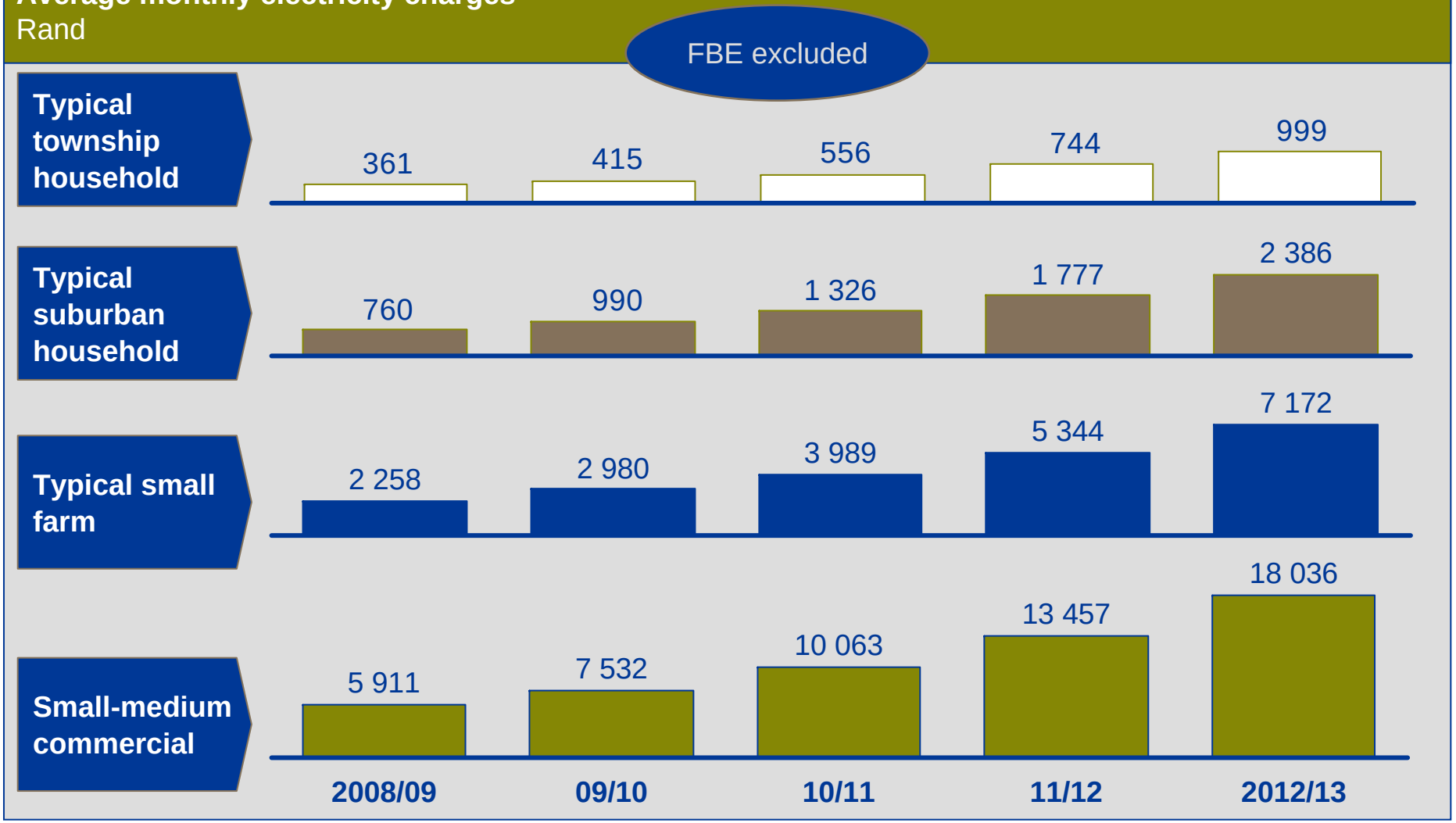
	Risk	Implication
Demand	• Faster recovery in economic growth and electricity demand	• Potential insufficient capacity to meet demand
Capacity	• Potential delays to Kusile, Sere, Nuclear 1, • Regulatory framework for IPPs not put in place in time	• Potential insufficient capacity to meet demand
Primary energy	• Dependency on 3rd party for road quality (timing and safety)	• Coal delivery, safety and power outages
Cost reductions	• Financial risk of not realising efficiency gains sustainably • Slowdown in maintenance activities	• Further cash flow challenges • Compromising maintenance and security of supply
Additional Funding	• Assumed high level of borrowings • Access to equity	• Cash flow challenges • Need to re-phase capital investment programme

Participation of all stakeholders necessary to manage risks, as not all risk within Eskom's control

Last resort, to re-open price determination

What the tariff increase will mean for Eskom's customers

Average monthly electricity charges
Rand



The role of Eskom and stakeholders

Government

- Publish a country electricity plan for the next 20 years, clarifying the role of Eskom and IPPs
- Clarify policy on renewable and nuclear energy
- Create an enabling framework for funding and implementing DSM
- Promulgate regulations to implement PCP
- Ensure funding to maintain roads to transport coal
- Take account of the key role Eskom plays in the economy

NERSA

- Approve and publish rules for the following
  - Cost recovery mechanism
  - Procurement for renewable energy
  - Power conservation programme
- Set a tariff path for completing the build programme and introducing IPPs

SANRAL/ provincial government

- Ensure repairs and maintenance of roads on which coal for certain power stations is transported

The role of Eskom and stakeholders

Independent Power Producers

- Commission the capacity indicated in the medium-term power purchase programme and the first phase of the renewable energy feed-in tariff programme
- Commission the required capacity on time, based on the country plan

Eskom

- Ensure 86% energy availability is achieved for current power stations (excluding RTS)
- Commission return to service plants as planned
- Finalise power purchase agreements for IPPs (subject to cost recovery mechanisms and tariff level)
- Implement DSM programmes
- Support customers with education on energy efficiency

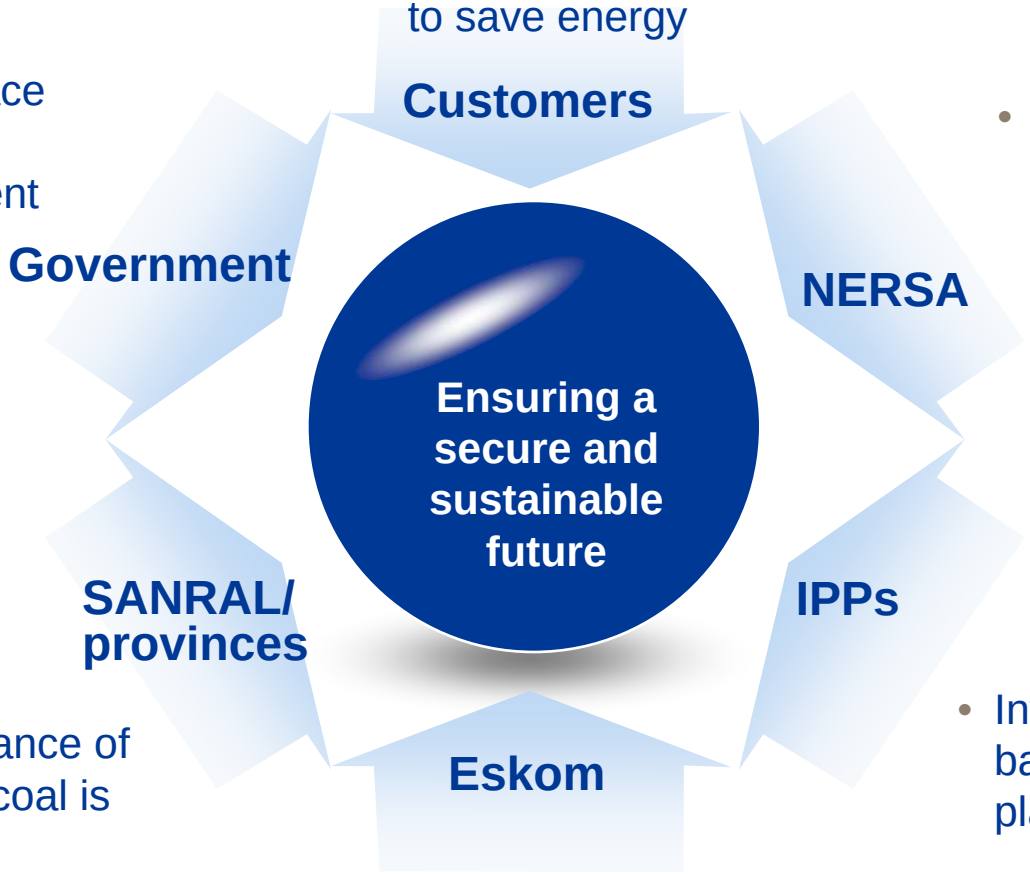
Customers

- Large industrial and commercial customers to confirm their energy base-line and targeted savings to provide greater demand certainty
- Make changes in behaviour and technology to bring down electricity utilisation
- Consider an overall target of 8 - 15% energy efficiency improvements for the country over five years

Managing these trade-offs will require a compact involving all stakeholders

- Develop a country electricity plan
- Put all required regulation in place
- Enable demand side management programmes

- Change behaviours to save energy



- Approve funding mechanism and tariff path to complete the new build

- Ensure maintenance of roads on which coal is transported

- Invest in new capacity, based on the country plan

- Build new plants on time
- Run plants efficiently
- Finalise IPP purchase agreements

MYPD2 needs to be seen in the context of a long-term country vision

- South Africa needs to define overarching objectives for the long term success and sustainability of the economy and the electricity industry
- The contribution of various parties to the solution is required, and their respective roles should be made clear
- An enabling environment is also required to attract new entrants to the market
- A collaborative effort is required between Government, Eskom and all stakeholders - including business, communities and customers

- Eskom should focus on what is within its own capability and capacity, while other role players execute their own specific mandates

Conclusion

The value proposition of this application remains unchanged

- Ensuring continuous supply of power
- Setting a foundation for a cleaner and greener future
- Building capacity for SA's future needs
- Empowering industrial development and economic growth
- Creating employment opportunities
- Building confidence in the future

Thank you