

Eskom revenue application

groundWork

3 November 2017

Bad Energy

On MYPD 2, we said the issue is not the funding model. We are being asked to pay for the wrong energy model: Wrong on:

- Choice of power generation
- What power is for
- Social and environmental externalities
- Eskom wants people to pay for its choices without consulting them.

It is **STILL WRONG** on all those grounds.

IN 2009, we said:

“Eskom’s choice of very large generating plant creates unaffordable funding requirements. The costs of Medupi and Kusile have risen exponentially. Total costs for Eskom’s new build were estimated at R84 billion in 2004. These two plants alone are now put at R260 billion and it seems that this is not yet the final price.”

Medupi & Kusile costs

	Overnight costs			Cost to completion		
Est. at:	2005	2007	2009	2010	2014	2016
Medupi	R30 bn	R69 bn	R100 bn	R125 bn	R154 bn	R195 bn
Kusile	R30 bn	R84 bn	R110 bn	R140 bn	R172 bn	R225 bn

- Choice of big base load to supply energy intensive energy.
- Then: we pointed to likely over-investment.
- Now: Eskom wants to be compensated for that over-investment
- Then: EIUG complaining of rising costs.
- Now: EIUG approaching Nersa for ‘structural changes’ in tariffs to big industry.

Coal costs

On Eskom's own account

- the Highveld coal resource is in decline;
- big old mines are reaching the end of life,
- more coal is coming from smaller mines,
- more is transported long distance,
- coal quality is declining,
- environmental impacts are increasing.

Eskom does not mention of procurement scandals

Demand side management

Eskom is now focused on 'demand stimulation'.

In 2009, we said:

“As with Eskom, government’s record suggests that getting a return on its infrastructure investments will trump conservation as soon as an expanded power supply is secured and irrespective of any rhetorical devotion to climate mitigation.”

Prudent & Efficient???

Protecting the poor?

Over half of South Africans are poor and another quarter are vulnerable to being pushed into poverty.

- Block 1: 17.5% for Eskom 20amp customers
- Block 2: increase just below 19.9%

Does not protect the poor.

- 27% for municipalities – what's the pass through to poor people?

Externalities

- Full life-cycle externalities from Kusile would raise the levelised costs by between 91 and 205c/kWh. “Accounting conservatively for the life-cycle burdens and damages of coal-derived electricity thus doubles to quadruples the price of electricity”
- Kusile is a supercritical plant and designed with sulphur scrubbers. The rest of Eskom’s fleet will therefore have higher externalities.

Health externalities

- It is also conservatively estimated that Eskom emissions of PM_{2.5} result in over 2,000 'equivalent attributable deaths' every year and a heavy burden of ill health, affecting tens of thousands, is imposed on the population.

Climate change

- 1.5° target = no remaining carbon budget.
- 2° target requires Southern country ~4% pa reduction from 2020 (no plateau) or ~7% pa reduction if left till 2025.
- We exclude 'net negative' fairy tale.
- This budget does not allow for climate feedbacks
- More realistically, 2° by 2036.
- PPD trajectory is wholly inadequate.

Calls on Nersa

- - demand that Eskom itemise and quantify corruptly incurred costs and that those costs are taken off its allowed revenues;
- - reject Eskom's proposed residential tariff increase and calls for a universal inclining block tariff with a wider lower band for which the tariff is set at 0c/kWh and more bands at the top;
- - call for the repudiation without compensation of the special pricing agreement with South32, inherited from BHP Billiton;
- - propose that the cost of base-load new build be attributed to energy intensive industrial corporations in proportion to their consumption;
- - call on NERSA to consider the externalised costs of construction and operation to the environment and to people's health and well-being – which makes the price hikes even more burdensome;
- - call for the closure of equivalent capacity in Eskom's old coal plants as Medupi and Kusile are brought on line;
- - call for expanded and sustained energy conservation to be made a core component of the energy system;

Call on government

- - call on government to conclude the IRP 2016 process in an open, participatory and democratic manner;
- - call on government to create a socially owned systems operator independent of Eskom;
- - call on government to turn away from fossil and nuclear technologies and focus national capacity on building a sustainable energy system under people's control and based on energy conservation and efficiency and renewable generation technologies;
- - call on government to plan for a just transition through an open, participatory and democratic process.

Conclusion

If SA wants to

- supply the energy needs of its people,
- respond to unemployment (just transition),
- avoid catastrophic climate change,
- clean up air pollution to let people breathe,
- conserve water and prevent the further destruction of whole watersheds, and
- avoid bankrupting itself,

it should focus national resources on developing renewables under democratic control while shutting down coal plants.