



40%

The share of Eskom electricity that members of the Energy Intensive Users Group consume. This accounts for up to 50% of their input costs

Delusions of grandeur jolt Eskom punters

'Unrealistic' planning forces big users to take business offshore

By CHRIS BARRON

● State capture and corruption at Eskom are not the only threats the power utility poses to energy security in South Africa, says Energy Intensive Users Group (EIUG) chairman Tsakani Mthombeni.

Of greater concern is its commitment to costly mega-build projects without proper and transparent demand planning and forecasting. Its assumptions about future electricity demand are dangerously out of date and unrealistic, he says.

When the demand Eskom has projected does not materialise it will go into a "downward spiral" of ever-higher tariff increases to pay for and maintain its assets, fewer customers and even less demand for those assets, until there will be no users left to sustain any level of tariff increases at all.

This will have devastating consequences for the utility and the country's energy security.

"This is what concerns us, because from where we sit this is how the future looks," says Mthombeni. "This is the path we are on. And it is a very dangerous path for the future of the energy industry in South Africa."

A sign of things to come is Eskom's recent application for a 20% tariff increase which Mthombeni says is "in no way justifiable, or sustainable for industry or for consumers".

Members of the EIUG consume 40% of Eskom's electricity, which accounts for up to 50% of their input costs. "They are very, very strained already," he says.

He says the way Eskom's increases are arrived at is as "problematic" as their size.

"There is so little predictability behind the

increases it asks for that industry doesn't know what to plan for."

Eskom, meanwhile, has been planning for a future that is not going to happen.

"They've constantly been planning for growth in demand when in fact it's been going dismally the other way."

Eskom's assumptions, which are contained in the Department of Energy's draft integrated resource plan 2016, "miss the reality" that many heavy consumers of electricity have moved to countries providing more policy stability.

"Perhaps they have not caught on to the structural changes that have happened as far as demand for energy is concerned," says Mthombeni.

Apart from high-end users quitting South Africa in growing numbers, another structural change Eskom's planners seem to have ignored is that companies are increasingly looking at alternative sources of energy, he says.

"Eskom's unrealistic demand projections mean that as a country we'll be investing in capacity that may not have uptake."

He says that even if Eskom's latest tariff application is denied, the damage has already been done.

"If we send a message that we're applying for a 20% tariff increase then people who need to make investment decisions will simply overlook us and go and invest elsewhere."

He says it's already happening.

Smelters are shutting down and moving to countries like Malaysia, which give them not only cheaper electricity but price certainty and predictability – "unlike the situation in South Africa where our members are groping in the dark".

When a smelter shuts down, 500 people lose their jobs – behind the smelter is a whole supply chain, he says. "That's a reality we need to begin to internalise and understand, so that we come up with a properly planned and managed energy future."



Energy Intensive Users Group chairman Tsakani Mthombeni.



People who need to make investment decisions will simply overlook us and invest elsewhere

Tsakani Mthombeni

Energy Intensive Users Group chairman

Does Eskom have the capacity for this?

Eskom has some "very good people" trying to do what needs to be done, he says.

But they are messed around by policies that are "convoluted and lack coherence" and make long-term planning difficult.

"If you're going to plan for the future, you need policy stability, and policies that are aligned with industry and thought through carefully," he says.

This is not happening.

"For example, you have one policy promoting decarbonisation, and another policy stifling the introduction of flexible low-carbon technology solutions."

A classic case was the decision of former Eskom CEO Brian Molefe to terminate renewable-energy agreements with independent power producers.

"This is not a situation where we want to find ourselves as a country, where we start a mega-investment project and stop it not even half way," says Mthombeni.

"We were teaching the world a thing or two about how to do this, and then all of a sudden we stopped. It raises a lot of risk issues around any other policies or initiatives we come up with."

He says the challenges at Eskom are on multiple levels: "There are governance issues at board level and leadership level, but also policy issues that prevent them from doing things we might want them to do."

The sooner investigations get to the bottom of state capture and corruption, the better, so that Eskom can get on with growing the economy, he says. "Our biggest concern at Eskom is around threats to energy security." These include corruption and state capture, which ultimately affect pricing and the availability of electricity.

And Eskom's commitment to an expansion plan based on unrealistic demand projections, which will expose it to the kind of ruinously expensive cost and schedule overruns seen with the Medupi and Kusile coal-

fired power stations project.

"We need to look at planning for scenarios that are more realistic and will bring more flexibility to the integrated resource plan model in terms of energy-generating technology."

Says Mthombeni, 37, a BSc electrical engineering graduate from the University of Cape Town with a master's and PhD from Clarkson University in the US: "We have warned them about their commitment to mega-build projects going forward without proper demand planning and forecasting."

He says the EIUG is not necessarily anti-nuclear as long as the process is transparent, the country can afford it and there will be demand for the energy it produces.

What also needs to be considered before a decision is taken is whether South Africa has the capacity to manage a nuclear build programme.

"After Kusile and Medupi, we have our doubts," he says.