NATIONAL ENERGY SUMMIT/Anton Eberhard

Pricing our way back onto a path to energy security

HE most important item agenda tomorrow's national energy summit will be the price of electricity. This is just as well, for if there is one policy instrument that will eventually rid us of blackouts, it is ensuring that electricity prices rise to economic levels that will fund new investment while at the same time inducing more efficient electricity consumption.

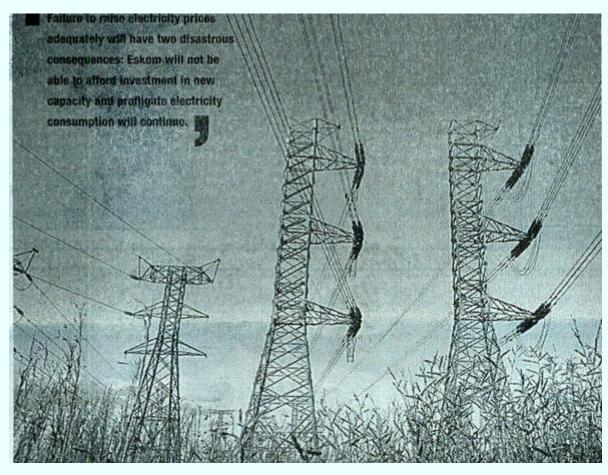
Few would now contest the logic of raising electricity prices. Current price levels are clearly sub-economic. Over much of the past two decades, prices have declined in real terms. Only in recent years have we seen aboveinflation increases. If the 1990 electricity price had been allowed to rise each year at the rate of inflation, electricity would now cost at least 50% more than it does.

Two further examples illustrate the unsustainability of current prices. Eskom's average generation price is less than half the cost of new supply. And the regulatory formula that determines Eskom's price is based, in part, on a rate of return on the historical value of Eskom's productive assets. Yet this book value represents only 5% of the current replacement value of Eskom's generation plant.

Thus the question is no longer whether electricity prices have to rise; it is rather by how much and how quickly. The African National Congress has taken the lead in calling for a national energy summit and the National Economic Development and Labour Council will help bring the government, business and civil society together to debate these issues.

I anticipate that sensible pricing proposals will be made: Eskom's 60% price hike is likely to be rejected — but perhaps a 30% increase this year and 20% in ensuing years will be palatable. What would this price path mean for Eskom's financial sustainability and its new build programme?

Eskom's cash flow, income statement and balance sheet are under severe pressure. Interest rate cover in the next few years may even become negative. The price path suggested above would almost certainly imply the need for additional shareholder (ie government) injections, or asset sales, if pretax interest cover is to recover to more acceptable levels of about three and if Eskom's debt: equity ratio is to stay below two. The involvement of the treasury and the public enterprises department



is thus critical to any agreement on a future price path.

This raises a crucial dilemma. Current legislation gives sole responsibility to the National Energy Regulator of SA to set Eskom's electricity price. It has established complicated multiyear price determination rules. But are these rules still appropriate? Will they provide an outcome that responds to the above challenges? I suspect that they will not.

What is now needed is for the regulator to reach an agreement on a desirable price path with key stakeholders, including the government, industry and consumers. This agreement should be informed by robust financial modeling on Eskom's funding requirements as well as the price level that is necessary to induce sufficient electricity conservation.

It is instructive to reflect on the consequences of not reaching such an agreement. A few years ago, the regulator, confronting the inevitability of electricity price increases, began to debate the need to agree a shareholder (the public enterprises department) and the treasury.

But no agreement was reached. Indeed, the regulator even struggled to obtain a copy of the shareholder compact between the department and Eskom, which contained relevant financial targets. At that time, Eskom had low debt levels and was not yet investing in new capacity. Above-inflation electricity price increases would have resulted in politically unacceptable free cash flows and profits for Eskom, which could have been ameliorated only by the government extracting additional dividends or creating a capital development fund for future investments. But there was no policy alignment on this issue and prices stagnated.

Now we face a linked, though opposite challenge. The problem is not excessive profits. Now we need increased revenue to fund new investment. But, as in the past, we also need a common understanding and approach on a future electricity price path between the regulator, the department and the treasury. This is no time for either turi wars or slavish adherence to mechanism to attain the necessary future price path with Eskom's regulatory methodologies that savings will be a predictable price may no longer be appropriate. The path that reflects the real mere fact that Eskom has twice

requested the reopening of the original price determination for 2008 and that its latest application is 10 times the original increase, makes a mockery of the multiyear price determination. The motivation of moving to the current multiyear pricing formula was to create pricing certainty and to incen-Eskom efficiency improvements. It has failed spectacularly to do either. That provides some cause to consider alternative pricing approaches.

Electricity price increases are necessary to fund new investment; they are also vital for encouraging energy efficiency. International data suggests that a price elasticity of minus 0.2 might be expected; ie a 10% price increase would result in a 2% reduction in electricity demand; or a 50% price hike would result in a 10% saving. There has been a great deal of contestation and unhappiness around Eskom's imposed load curtailment and pre-emptive load shedding. A much more efficient and effective economic value of electricity.

Yet there remain populist arguments that the government should subsidise the price of electricity. Unfortunately these arguments often seem to imply that the overall price should be subsidised rather than just the price for poorer households. The latter is obviously desirable. Poor households are struggling to cope with increased inflation and high food prices. Targeted electricity subsidies for poor households can be easily implemented through expanding free basic electricity provisions or through introducing a new social tariff. The proportion of electricity consumed by lowincome households is small and is easily cross-subsidised by other electricity consumers.

It is far less obvious why we would want to subsidise electricity for commercial and industrial users, or middle or higher income households. Considering the range of social services that the government has to provide, electricity should at least be one sector that can, as a whole, pay for itself. What is not often appreciated is that a supposedly once-off treasury subsidy, which results in electricity being priced below its economic cost, either simply delays the inevitability of prices rising in the future or implies a continuing and increasingly expensive subsidy in ensuing years.

Failure to raise electricity prices adequately will have two disastrous consequences: Eskom will not be able to afford investment in new capacity and profligate electricity consumption will continue. The ultimate consequence will be continued blackouts as supply fails to meet demand. Economic production, growth, employment and exports will be constrained, current account deficits will increase, the rand will depreciate, imported inflation and pressure on interest rates will increase, further depressing growth prospects. Hopefully the national energy summit will take bold decisions that will empower and motivate the regulator to move beyond its narrow price determination rules so that it raises electricity prices quickly to economic levels. Prices are surely our most effective instrument to restore electricity supply security.

■ Eberhard is a professor at the University of Cape Town's Graduate School of Business. This is the second is a series of articles assessing progress in restoring electricity supply security.

