

## **Geekonomics: South Africa's Electricity Problem**

Rolling blackouts and electricity rationing have had a widespread and serious impact. The media are not immune. As part of *Business Day's* commitment to cut energy usage by 20 percent, one in every five columnists is to be cut. The Geeks, as major emitters of hot air, have voluntarily agreed to withdraw this column and this will be our last regular contribution to *The Exporter* supplement. As the crisis eases and our own energy levels return, we hope to provide further occasional commentary. We are betting that there will be no shortage of good material.

The seriousness of the current electricity crisis extends well beyond this column. As is often the case in an emergency, immediate responses are coloured more by fear and other emotions, while basic economics takes a back seat. Cooler consideration of some basic principles might help to resolve many fears, help us minimize the overall economic and social impacts of the crisis and put the economy back on track.

Central to the short, medium and long-term approaches to the electricity crisis must be recognition that the cost of electricity in South Africa has been artificially suppressed for some time. Overinvestment in capacity in the 1970s and '80s created substantial surpluses in electricity generating capacity. Electricity was very cheap, and in the circumstances it made some economic sense to set prices at very low levels and to encourage the development of large, energy-intensive projects. But this could not last.

The new reality is that electricity is no longer cheap. Large and increasingly costly new investments need to be undertaken. Coal, our main source of fuel, is getting more expensive. And generating electricity in this manner imposes large external costs, especially in the form of CO<sub>2</sub> emissions. Failure to adjust electricity prices substantially to take account of its true cost will discourage electricity conservation and continue to steer investment into activities that are wasteful and inconsistent with meeting South Africa's long term development goals.

Will higher electricity prices be inflationary? Electricity accounts for less than 4 percent of output and consumption in the entire economy. South Africa has dealt with large increases in the prices of food and oil in recent years with modest inflationary consequences. In the UK, electricity prices have risen by 20 percent every year for the last 3 years, and consumers are expected to face a similar increase this year. And they have electricity! Compare this to the 14 percent 'crisis-hike' proposed for South African consumers.

Do we need energy-saving subsidies of the type being rolled out by Eskom?

Some of these measures could involve large expenditures of public funds. Before rushing in, it would be prudent to assess their costs and benefits and compare them with alternatives. By far the most effective energy conservation measure would be to increase the average level of electricity prices, to restructure prices for industrial and commercial users so that they pay the true differential costs of peak and off-peak demand, and to educate all other consumers about the costs of different usage patterns.

Can industrial policy be adapted to help deal with the crisis?

The DTI's Developmental Electricity Pricing Program (DEPP) was introduced recently just as South Africa was entering the electricity supply crisis. Despite the fact that it was tailored to the needs of one client (Alcan) and despite critical shortages of and the substantially higher long run cost of electricity now faced by South Africa, the program continues to be advertised as a lure to other new investors.

South Africa's long-term development needs require that all new investors pay the new, true cost of electricity they consume. Alcan has not made any investments based on its recent DEPP deal, and without a massive electricity subsidy it is unlikely to make financial sense for them to build a smelter in South Africa. In the absence of any major expenditures since the signing of the deal and in light of the new electricity supply situation, the DEPP deal with

Alcan should be cancelled. Then let Alcan decide whether this investment makes sense, based on real economic costs.

The DTI has also received some encouragement to take advantage of the current crisis to develop new “green” industries, such as manufacture of solar cells and geysers. While the likely growth of demand for such devices might well create opportunities for South African producers, any measures to increase import duties or raise local purchase requirements would increase the cost of these items in South Africa, provide a disincentive to their use, and thus directly contradict the country’s energy conservation goals. In forging new policy initiatives, the DTI must recognize the difference between supply and demand.

As has been our central message since we started this column, simple economics is a powerful tool. Central to this is an understanding of what markets can do well and where and under what conditions government intervention is essential. Price signals work extremely well. Industrial subsidies and protection do not. Let us leave it at that as we start our break—hoping for the best, but stocking up on candles just in case.

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