

Executive Summary

South Africa is one of the few coal-based economies in the world. The extensive use of coal is due to its wide-scale availability and low cost, as well as past policies that stressed energy independence. While South Africa's coal supplies are prolific, it has virtually no oil and limited gas resources.

Large deposits of natural gas have been discovered north of South Africa in Namibia and Mozambique. In addition, South Africa has deposits of coal bed methane and one offshore gas field at Mossel Bay. The World Bank and the Southern African Development Community are encouraging the development of natural gas transmission pipelines from the northern gas fields to South Africa's industrial and urban regions.

The Republic of South Africa is developing a draft Natural Gas Policy Act, in response to suggestions made mainly by the World Bank. This Act will lay out the basic ground rules for the industry. The World Bank and the Republic of South Africa want to ensure that the emerging gas industry develops along competitive lines. With only a single pipeline from either Mozambique or Namibia there is concern that the owners would exercise market power and retard the industry's growth. The World Bank suggested a regulatory scheme modeled on that of the United States, while recognizing the significant differences between a mature gas market in North America and the emerging market in Southern Africa.

Although the World Bank believes the regulatory scheme it is suggesting would foster a competitive market, at the onset it is important to understand the nature of the regulatory programs being proposed. South Africa now has a free market for gas. Thus, the Bank's proposal is one that would impose regulation on the market. The crucial question for the government of the Republic of South Africa is not the desirability of competitive transportation through regulated open access pipelines, but how and when to do it. The history of natural gas regulation in North America and Europe has been a sorry one. In general, the regulations have created undesirable concentrations of economic power such as monopoly, and preserved and protected high prices.

Gas pipeline transmission is only one of three crucial sectors of the natural gas industry; production and distribution are equally important. A competitive

natural gas industry for Southern Africa requires that its gas policy and regulatory framework be coordinated between at least three countries — the Republic of South Africa, Namibia, and Mozambique. Attempts by the Republic of South Africa to establish independently a competitive natural gas market are doomed to failure because there are no local supplies of low-cost natural gas. Unless competition between gas suppliers throughout Southern Africa is assured, granting open access to pipelines within the Republic of South Africa will only solidify the potential monopoly of gas producers in Mozambique and Namibia.

In South Africa's gas distribution sector, there is little or no economic justification for cost-based price regulation at this time. Residential and commercial gas consumption is very low, due to the warm climate. Most gas demand in the Republic is from industrial activities; inter-fuel competition is vigorous. If a supplier of one type of fuel raises or threatens to raise prices too high, consumers can switch to a competing source of energy. In particular, the predictable cost of converting coal to gas (which is about \$3 per Gj) puts a far firmer cap on delivered natural gas prices than any regulatory body could imagine.