

ESKOM AND THE SOUTHERN AFRICAN POWER POOL (SAPP)

The South African Government supports sustainable development of the region with its commitment to the African Union (AU), New Partnership for Africa's Development (NEPAD), Southern Africa Development Community (SADC), and Southern African Power Pool (SAPP), and has various inter-governmental agreements. In addition, Eskom's revised mandate supports regional trading of electricity [Eskom's Africa Strategy (Board, Oct 2005); Eskom's Strategy on African Investments (Board, Aug 2006)]. Eskom is an active and proud member of the SAPP and plays a major role in the SADC economic growth by providing a reliable and economical electricity supply to trading partners. Eskom has bilateral energy trade agreements with various utilities in SADC. Historically, associations during RSA's period of "excess capacity" resulted in a dependency on Eskom as it was not economical for other utilities in the region to construct their own generating plants as their national demands are relatively small. Some trading partners are thus dependant on Eskom for 60-80% of their energy needs and there would be significant socio-economic consequences for the region should supply be terminated or significantly curtailed.

The sub-Saharan Region

The region consists of 14 countries and has over 150 million people. Blessed with abundant natural resources, sub-Saharan Africa possesses all the primary energy sources required for its development, i.e. coal, water, gas and uranium.

The continent Africa comprises mainly of developing countries or emerging economies. The various countries are at different stages of development and economic liberation. The need to accelerate development in Africa is widely recognized and access to clean reliable energy is vital to that task. Excluding South Africa and Egypt it is estimated that no more than 20%, and in some countries, as little as 5% of the population of Africa has direct access to electricity. The lack of money available to finance new generating capacity and improve downstream infrastructure also hampers the economic ability of many people to pay for electricity. To deal with this challenge, some countries have sought to increase the level of generating capacity, and work towards the integration of national power grids and the creation of cross-border power pools.

The massive flows of the Zambesi and Congo Rivers are respectively 10 and 100 times greater than the flow of South Africa's Orange River. An estimated 100 000 MW of electricity could potentially be generated on the Congo River. By harnessing these resources to generate power for export, Southern African countries could develop the regional economy while mitigating the environmental impact often associated with development.

It is therefore evident that a strong economic incentive exists for the exchange of electricity between the countries of the Southern African Development Community (SADC).

The Southern African Power Pool (SAPP)

The SAPP came into effect on 28 September 1995 after the governments of SADC signed a memorandum of understanding. The Pool moved towards implementation in December 1995 when the national utilities of nine SADC member countries signed the Inter-Utility Memorandum of Understanding. SAPP is the first formal international power pool established outside Europe or North America.

At present its members are the utilities and ministries involved in energy usage in Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Tanzania, Zaire, Zimbabwe and South Africa.

The SAPP is based on co-operative principles, i.e. the utilities coordinate and cooperate in the planning and operation of their systems to minimize cost and maintain reliability. The SAPP sets out certain rights and obligations to member utilities covering aspects of quality, capacity, operations and access.

The positive results of the formation of the SAPP are the possibility of reduced generation costs and furtherance of a long held vision in the electricity supply industry: the Southern African Grid. An ingenious and effective way of countering crippling shortages of electricity by moving power around the sub-continent, the Southern African Grid has

long been seen as a vital tool to improve relations between African states and encourage economic and social advancement.

Eskom actively participates in the maintenance and development of the SAPP, pursuing the vision of a fully integrated electricity grid across the continent, which paves the way for enhanced cooperation and economic growth across Africa.

Produced by: **Transmission: Trade & Regional Development**
ES 0007 Revision 5 (October 2010)

For more information on Eskom related topics see the Eskom website (www.eskom.co.za).
Select the “Knowledge Centre” and “Facts and Figures”