

Our next generation of power stations will use water much more efficiently.

Liquid fuels

Before 2008, Eskom operated only two gas-fired peaking stations. During 2007, two new open-cycle gas turbine (OCGT) stations were built and commissioned. The cost of electricity generated by the OCGTs is high due to fuel costs, so their use is ideally limited to peaking and emergency generation. However, with the power shortages in 2007/8, these plants were used much more than was budgeted. The two new OCGT stations used 318 million litres of diesel during the year:

Fuel procurement for the OCGT plant is particularly challenging because of uncertainty around the timing and extent of usage of the plant. With suppliers requiring long lead times for new orders of liquid fuel, it is particularly challenging to meet such production requirements, while at the same time maintaining economic stock levels.

The price of diesel fuel fluctuates with changes in the price of crude oil and the exchange rate. The effect of the increasing oil price combined with a weakening R/USD exchange rate has increased the cost of diesel by 60% during the financial year. The average cost per litre consumed has increased by 34% over the last year. Hedging opportunities for diesel fuel are being investigated.

	2008	2007	2006
Diesel usage (million litres)	345,9	11,3	25,3

Nuclear

Two government-authorised contracts for the supply of enriched uranium were negotiated and signed in 2004. These contracts, along with fuel-fabrication contracts concluded in 2002, ensure that Koeberg power station's nuclear fuel supplies are secured until the end of 2010. Commercial processes to secure supplies beyond 2010 are in an advanced stage.

Supply for the 2010 World Cup

An Eskom project team is working with the metro and municipal electricity departments to ensure the reliability of electricity supply to the stadiums, broadcasting centres, base camps and venues for the 2010 FIFA World Cup South Africa™.

Our process is comprehensive: besides checking equipment and facilities, we are also preparing simulation exercises to test readiness across all operations to prepare our teams for possible emergencies. Municipalities, through the AMEU – their



Lethabo power station in Vereeniging.

representative body – are co-operating with this planning and discussions are underway to form joint 2010 energy task teams with Eskom.

Eskom is also investigating the creation of dedicated 2010 electricity command centres to oversee regional delivery of power. We are working closely with the other members of team South Africa – government at national, regional and local levels, as well as representatives from the municipal and metro electricity departments; host cities; FIFA; the local organising committee; tourism authorities and the information and communication industries – to meet the demands of the main event and related events during the build-up.

FIFA and South Africa have stated that the 2010 FIFA World Cup South Africa™ will be an African celebration. As such, the event has received the support of the Southern African Power Pool (SAPP), who will contribute to powering 2010. The details of the SAPP contributions for the event are currently in discussion.

Eskom is concentrating its efforts on a combination of existing and new 2010-specific initiatives to improve the national power supply capacity. We are also continually reviewing the status of vital transmission and distribution networks across the country.

A successful 2010 FIFA World Cup South Africa™ also depends on a concerted national effort to use electricity more efficiently.