Eskom's rebuttal of air pollution reports

The claim that people could perish every year from illnesses related to air pollution when all Eskom's power plants come on stream' is based on some incorrect assumptions, and has not taken into account measures that Eskom has and will be implementing to mitigate emissions from its power stations.

The bulk of the premature mortalities alleged by the media to occur once the new power stations are commissioned were calculated to occur due to the construction of two new large coal-fired power stations in the northern Free State and near Grootvlei in Mpumalanga, and due to the lack of SO_2 abatement technology on Kusile and Medupi. Plans to construct the two new power stations in the northern Free State and near Grootvlei have since been abandoned, and flue gas desulphurization which reduces SO_2 emissions by more than 90% will be installed on Kusile prior to commissioning, and on Medupi between 2021 and 2024, according to the current schedule. In addition, Kusile and Medupi will have fabric filter plants which reduce particulate emissions by more than 99.9%, and low NOx burners which lower NOx emissions. As a result, the commissioning of the new power stations will not result in a significant deterioration in ambient air quality, or a significant increase in health risks.

Preparation for an extensive emission reduction programme is underway at Eskom to reduce emissions through actions including installing filters at existing power stations. The programme will cost about R72 billion in nominal terms and requires substantial staff allocation and generation plant downtime over the next 12 years or so. The programme focuses on the highest-emitting and largest power stations. These major power station upgrades will commence in 2015 with the retrofit of fabric filter plants at Grootvlei Power Station and should be completed by 2026, and will:

- reduce relative particulate (ash) particle emissions by 67% between now and 2027;
- relative nitrogen oxide emissions by 25% between 2019 and 2025;
- and, relative sulphur dioxide emissions by 30% between 2021 and 2027.

This programme is a continuation of Eskom's emission reduction activities, which have already reduced relative particulate emissions from the coal-fired fleet more than tenfold in the last 30 years, through installing more efficient electrostatic precipitators and retrofitting flue gas conditioning plants and fabric filter plants at power stations.

Eskom is also pursuing emission offsets in order to improve air quality in residential areas where exposure to poor air quality is greatest due to domestic burning of coal and wood. From July 2014 to December 2015, Eskom will be conducting a household emission offsets pilot project in KwaZamokuhle, Mpumalanga, in order to

test emission reduction interventions. Once the most successful interventions have been identified, emission offsets will be rolled out on a larger scale.

It is well established that the brunt of poor air quality in South Africa, and the associated health risks, are borne by people who burn coal and wood in their homes for cooking and heating. The best way of improving this poor air quality is through the provision of affordable electricity.