Anglo American Coal – Greenside

Adding up the renewables

In 2022, loadshedding occurred for 3,773 hours – resulting in actual energy shed of 8,301GWh. It was also the first year that most loadshedding occurred at stage 4 instead of stage 2. The decarbonisation of electricity generation, lack of energy security and the high cost of electricity (which has increased more than 900% since 2007) has led to the mining industry opting to build their own power generation facilities.

Eskom's energy availability factor currently languishes around 50%, which means that about 24,000MW of generation out of the 48,000MW of Eskom installed capacity is not available.

The removal of the licensing threshold has unlocked massive investment by the private sector. More than 100 projects amounting to over R150 billion, representing about 9,300MW of new generation capacity, are now at various stages of development. Of these projects 7,500MW will be built by the mining industry.

Wheeling arrangements are still a challenge for municipalities and there is a need to develop a wheeling framework that will allow municipalities to have a system and human resources that they can use to ensure efficient wheeling agreements. The National Energy Regulator of South Africa (NERSA) requires cost of supply studies to approve municipal wheeling, which most municipalities have not been able to generate due to lack of capacity.

The Minerals Council is advocating the augmentation of the transmission grid, finalisation of the review of queuing rules and wheeling agreements to ensure that renewable energy generation projects can come online to reduce loadshedding and allow for economic growth. To this end the Minerals Council, the Ferro Alloy Producers Association and the Energy Intensive Users Group have each seconded an employee to the Presidency Embedded Generation Task Team, which will soon be replaced by the One-Stop-Shop.

To respond to the severe impact of loadshedding on households, small businesses and the economy, President Cyril Ramaphosa announced a range of measures in July 2022 to improve the performance of existing power stations and to add new generation capacity as quickly as possible. The Energy Action Plan was also developed by government to the same end. The National Energy Crisis Committee (NECOM) has since been established to coordinate government's response and ensure swift implementation of the plan. The Minerals Council was a lead player in lobbying for its establishment.

Gold Fields and Pan African Resources commissioned 50MW and 10MW solar PV plants respectively in 2022, while African Rainbow Minerals, Tronox Mineral Sands and Harmony Gold are currently constructing renewable energy plants amounting to 330MW.

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