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**POWER COLUMN Q1 2022**

The year 2022 started off well for ZPC with notable improvement in output in the first quarter. The quarterly target which was set at 1885.30GWh was surpassed by 18.55%. This is mainly attributed to improved reliability and plant optimisation at Hwange, as well as increased generation at Kariba hydro power station to cater for high system demand. Hwange generated with four units for the bulk of the quarter while all eight units at Kariba were available for peak generation on most days. The small thermal power stations missed their target which was pegged at 47.50GWh by 45.17% due to lack of coal stocks and low plant availability which resulted in the stations shutting for a total of 142 days during the quarter.

Kariba Power Station contributed 70% of the total energy production in the period under review, 4% of which was exported to NamPower. Hwange Power Station contributed 29% while the Small Thermals only contributed 1% to the total energy production. Kariba Power Station contributed more than planned as it was ramped to meet high system demand and compensate for low generation at the small thermal stations.

The Zambezi River Authority (ZRA) allocated 22.5Bm3 of water for power generation to ZPC for the year 2022. This translates to 5,312GWh and an average capacity of 606MW. As at the end of the first quarter, the station consumed 6.5Bm3 of water against a target of 5.1Bm3. This leaves the station with 16Bm3 of water for generation for the rest of the year. The lake level increased from 478.39m at the beginning of the quarter to 478.81m at the end of March 2022. This represents a 0.42m rise in lake level over the quarter.

Although the Hwange 7 and 8 expansion project has faced delays predominantly caused by the Covid – 19 pandemic, the project is proceeding smoothly and is on course to commission Unit 7 at the end of November this year, while unit 8 is expected to feed into the grid in April 2023. The project is currently at 83% complete.

The construction of a second pipeline and upgrade of the existing Deka pump station commenced on the 1st of October 2021, with the expected end being 31 March 2023. The scope of the project includes the construction of a new 42 km, 960mm diameter pipeline from Deka High Lift pump station to Hwange Power Station; complete with independent cathodic protection, supply of spare pumps and motors, supply of spares for Deka Low lift and High Lift pump stations, new SCADA and field instruments, refurbishment of ZINWA Water Treatment Plant in Hwange, and provision of three tap off points for supply of raw water to the Deka community. The USD$48million dollar project is being implemented in parallel to the Hwange Unit 7 and 8 Expansion project, and is expected to solve the perennial water supply problem at Hwange Power Station, the country’s largest coal-fired power plant

Plans to repower Bulawayo Power Station are on course. ZPC and BCC have initiated negotiations on ownership issues and the matter has been escalated to the Ministry of Local Government, Public Works and National Housing for assistance.

ZPC is stirring towards the use of renewable energy for power generation in order to achieve ZERO harm to the environment. Some of the projects on the cards include Gairezi Hydro Power Plant and Batoka Gorge Hydro Power Project. The Batoka project, which is being jointly developed by the governments of Zambia and Zimbabwe through Zambezi River Authority, has a capacity of 1 200 MW with an estimated cost of USD2.3 billion.

The ZPC Relocation Action Programme (RAP) has made admirable headway with overall progress of all construction sites on 89%. Two out of nine construction sites have been completed to date. In February, ZPC handed over 12 new houses at Epping Forest and Sawmills. The RAP project has not only improved the standards of living in the community, but has also created employment for over 400 individuals in Matebeleland North province.