

News from Fascinating Projects

## Drop in Lake Kariba water levels

### ***Gains from Kariba South Hydropower Extension Project reversed***

Reported by [Tasiyana Siavhundu](#) in Zimbabwe

19 September 2019 – Gweru, Zimbabwe - November 2014 saw the national power giant Zimbabwe Power Company (ZPC) embarking on a half billion dollar project to extend the existing sixty year old Kariba Hydropower Station. The project, whose contactor was Sinohydro (Chinese government owned hydropower engineering and construction company), saw the establishment of two additional hydroelectric power generations units on the Zimbabwean side of the Zimbabwe-Zambia shared power station, with each unit adding a capacity of 150 megawatts. After the completion of the project in March 2018, Kariba South Power Station became the largest power generation plant in Zimbabwe, moving the total generation capacity to 1050 megawatts. At least 60% of the project finances was accessed through a \$320 million financing agreement by the Export-Import Bank of China whilst ZPC chipped in with the remainder.



*Lake Kariba Dam-wall*

Whilst the completion of the 300 megawatts Kariba South Hydropower Extension Project was expected to bi-sect national power imports at the same time easing power shortages in Zimbabwe, dropping water levels at the world largest artificial lake has hampered the potential project gains. According to ZPC, water intakes at the power generation plant direct water from the lake into the power station and these intakes were designed at a depth of about 13 metres below the maximum water level. Therefore

only a certain amount of water in Lake Kariba, known as live water, is accessible for power generation. Dead water (water levels below water intake pipes) is however unusable for power generation.

Reduction in power generation capacity at Kariba, coupled with similar capacity issues at other power stations such as the Hwange Thermal Power Station (with 920 megawatts installed capacity) has turned Zimbabwean cities and towns into rural areas as power woes intensify. Severe electricity load shedding schedules in the Sub-Saharan country linger as the electricity supply authority try to manage power shortages. Zimbabwe's power import bill continues ballooning as neighbours such as South-Africa continue selling power to Zimbabwe. Capacity improvement at Kariba power station is only expected during the forthcoming rain season with the optimism that enough rains will be received and raise the live water levels.

Despite poor industrial capacity currently, power challenges in Zimbabwe linger. It is high time the government and the private sector partner in establishing sustainable solutions to this vice. Existing power generations plants need to be well refurbished and modernised for them to become efficient. On the other hand, new innovative projects in the energy sector are inevitable should the nation want to achieve sustainable power generation. Many experts have been advocating for the need for renewable energy revolution in Zimbabwe, with solar and biomass resources trending in such discussions. The government of Zimbabwe also seems to be buying solar energy ideas and this has seen it removing or reducing import duties on solar-related products