



PRESS RELEASE **(For Immediate Release)**

EXCAVATION WORKS ON THE PLUNGE POOL COMPLETED

Lusaka, 26th December 2023 – The Zambezi River Authority (*the Authority*) is pleased to announce that excavation of the plunge pool, a key milestone in the Plunge Pool reshaping sub-project of the Kariba Dam Rehabilitation Project (KDRP), has been successfully completed. In total, about 300,100 m³ (about 750 000 tons) of rock have been excavated through meticulous drilling and controlled blasting, coupled with the stabilization of 20,000 m² of slopes using anchors and shotcrete.

Progress on the Plunge Pool Reshaping works:

The Plunge Pool Reshaping works contract, supervised by the Zambezi River Authority with Gruner Stucky (a Swiss company) as Engineer, is being financed through a grant from the European Union. The National Authorising Office (NAO) of the European Development Fund under the Ministry of Finance and National Planning (Zambia) contracted the services of Razel-Bec (*a French company*) as the contractor who commenced works in May 2017. While the excavation works are now 100% complete, the overall project is now 93% complete. In total, 550,000m³ of water (99% of the plunge pool volume) have been pumped out of the 80m deep plunge pool. Of note is the fact that despite the high- risk nature of the project, no adverse environmental, health and safety standards have been violated, nor fatalities recorded thus far.

As 2023 draws to a close, we commence the final phase of this extraordinary engineering marvel and remain focused on the upcoming challenges related to the strengthening of the geological fault zone that is located immediately downstream of the dam. This will be achieved through constructing a reinforced concrete slab that will cover the weak-rock zone to protect it from possible future erosion. Upon completion of this concreting work, the plunge pool will be rewatered (*i.e., re-filled with water*). This refilling will not in any way affect river levels downstream.

The objective of the plunge pool excavation works was to widen and change the shape of the 80m plunge pool which was created by the immense pressure of the ejected water jets during spilling episodes. This major milestone has been made possible through joint collaborative efforts between a resolute and hardworking team of experts from the Authority, the NAO, the contractor, subcontractors, co-financiers of the KDRP (the African Development Bank, the European Union, the Swedish Government and the World Bank) and, indeed, relentless commitment from exceptionally skilled project support staff. The target date for completion of the Plunge Pool Reshaping Project is by end of the second quarter of 2024.

Progress on the Kariba Dam Rehabilitation Project

It is worth noting that the ongoing works are an outstanding engineering feat, with the Plunge Pool Reshaping component particularly taking the trophy for an unprecedented scope of works. Upon completion, the KDRP will be recorded in history as the first project of this magnitude ever undertaken with open-pit excavation at the foot of a 60-year-old dam with underground power houses on either banks of the river in full operation. To date, the overall project (*including the Spillway Refurbishment sub-project*) is about 80% complete. The project is a symbol of engineering excellence and a testament to what can be achieved through collaboration, expertise, and dedication. The 294.2 million- United States Dollar project's main objective is to address dam safety

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concerns and restore the structural integrity of the Kariba Dam for its long-term reliability and safety of operation.

The KDRP comprises three main components, namely, the Reshaping of the Plunge Pool, the Refurbishment of the Spillway Upstream Control Facility, and Institutional Strengthening. It is anticipated that the project will close in 2025 upon completion of the spillway refurbishment sub-project.

The pictures below depict project milestones from December 2020.



About the Zambezi River Authority

The Zambezi River Authority is a Bi-National organization mandated to contribute to the economic, industrial, and social development of the Republics of Zambia and Zimbabwe by obtaining the greatest possible benefits from the natural advantages offered by the waters of the Zambezi River (between Zambia and Zimbabwe) through the most economical and effective means of providing water for generation of electricity and for other purposes which the Contracting States may decide upon.



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