

THERE WILL BE A DELAY OF ABOUT FIVE MONTHS TO COMPLETE THE PROJECT

By John Odyek

A joint technical committee on Karuma Hydropower Project has raised concerns about defects in the electro-mechanical erection works in the project.

The committee said the defects pose a risk to the safety of operators, reliability and operability of the plant and, therefore, must be rectified immediately before energising any part of the power plant.

The committee, in its report that focuses on defects and non-conformances in the electro-mechanical installation works, said many non-conformances previously identified had not been attended to by the contractor.

Conformance is how well something, such as a product, service or a system, meets a specified standard.

The \$1.4b (sh5.3 trillion) 600MW project is intended to increase Uganda's power generation capacity. However, it has been dogged by a number of challenges since construction commenced in 2013.

The joint technical committee was set up by the permanent secretary of the energy ministry and was headed by Eng. Abdon Atwine, the commissioner of electric power department at the energy ministry.

Other members of the committee were Peter Kakeeto, the manager of technical compliance at Electricity Regulatory Authority; Eng. Enock Mwebesa, the senior compliance engineer at Uganda Electricity Distribution Company Ltd and Eng. Richard Matsiko, the manager operations and maintenance of the Uganda Electricity Transmission Company Ltd.

In its report dated May 2020, the committee says it was informed by

# EXPERTS RAISE CONCERNS OVER KARUMA DAM DEFECTS



Mutikanga



Robert Kasande

## BETWEEN THE LINES

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Dr Eng. Harrison Mutikanga, the chief executive officer of Uganda Electricity Generation Company Limited (UEGCL), said the project cannot be commissioned when critical defects have not been corrected. The projection completion deadline was set for November 30.

"We insist the defects must be corrected now, not in the defects liability period," Mutikanga said.

He said the contractor has requested for a seven-month extension to correct the defects and make up for time lost during the COVID-19 lockdown.

Mutikanga said the contractor cited delayed land acquisition for constructing power lines and the dam reservoir as the cause of the delay for meeting completion deadlines.

The committee report noted that rectification of some defects would require re-design, manufacturing, shipping and installation of equipment.

UEGCL said they will continuously engage Sinohydro and AF Consult to ensure harmony.

The committee urged AF Consult and Sinohydro Corporation to professionally have technical engagements and desist from verbal exchanges.

## CONTRACTOR SPEAKS OUT

Hou Fuqiang, the deputy project manager of Sinohydro Corporation, said the request to change drawings and designs causes delays because new materials have to be ordered or wasted as construction has to be redone.

Fuqiang said their standards of construction were different and it is being looked at as defective. He argued that many remedial measures have been made on the areas of concern.

Robert Kasande, the permanent secretary at the energy ministry, said every big project hits some snags.

"Karuma is not different from any other project that gets challenges. When these red flags of non-conformities and defects were raised, I put up a team to assess what could be done. Some things can be corrected now before the project is commissioned, while others can be corrected after the project is commissioned," Kasande said.

He noted that many of the conformities and defects can be corrected and cannot affect the project.

"Because of the global lockdown, some equipment that arrived at Entebbe airport could not undergo acceptance testing because the airport was shut down. Some of the expatriates were unable to travel from China to Uganda," Kasande said.

"There will be a delay of about five months into next year to complete. The completion date of end of November is not possible," Kasande said.

AF Consult, the owner's engineer supervising the construction, that on December 18, last year, they stopped Sinohydro Corporation Ltd from carrying out electro-mechanical erection works without their supervision. But Sinohydro Corporation Ltd carried on with construction, insisting that the non-conformities and defects would not compromise the operation and safety of the hydro power plant.

The contractor argued that the defects would be corrected during the defects liability period. This is a period of two years provided for such correction after the plant is commissioned.

The committee observed that it

is prudent practice to rectify non-conformities and defects during the construction phase of the plant.

It noted that there was use of communication cables as power cables in the switch yard and mix-up of electrical cables colour coding for the diesel generator in the switch yard.

The technical committee recommended: "Non-conformances or defects that risk the safety of operators, reliability and operability of the plant such as poorly terminated cables due to missing glands, inappropriately installed glands or use of wrong glands, undersized cubicles and overfilled cable trays must be rectified