PROJECT SUMMARY

PROJECT NAME: Victoria Dam
PROJECT DATE: December 2019
CLIENT: MAHAWELI Authority of Sri Lanka
CONSULTANT: Sigma Geotechnical
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SPECIALIST CONTRACTOR: ELS Construction (Pvte) Ltd

OVERVIEW

Victoria Dam is an arch dam located 10 miles from Kandy. It is 130 mi (209 km) upstream of the Mahaweli River’s mouth and 4 mi (6 km) from Teldeniya. Its main purposes are irrigation and hydroelectric power production.

It is the tallest dam in Sri Lanka, and supports a 210 MW power station, the largest hydroelectric power station in the country.

Construction of the dam commenced in 1978, and was completed April 1985.

MONITORING

As part of on-going monitoring two 3D vibrating wire crack meters were installed on the upstream and downstream faces near the crest of the dam. The vibrating wire displacement sensors were cabled back to a datalogger located within the central control room.

PRODUCTS USED

VWTCM-4600 3D Crack Meters

Monitor three-way displacement across cracks and joints in concrete, rock, soil and structures. The central reference block allows the vibrating wire transducers to show independent movement in all directions, irrespective of each other.

The VWTCM-4600 comprises a 3D mounting frame comprising two arms and two groutable anchors and three VWD6000 vibrating wire displacement transducers complete with built-in thermistors.