

Caring for dams, people and the environment

## **EVENING MEETING**

# MONDAY 16th JANUARY 2017 at 6:00pm

One Great George Street, London (Nearest tube: Westminster)

## Banja Dam and Devoll Hydropower Scheme, Albania

By

Mark Gill & Martin Deane, Mott MacDonald Ltd



For a brief synopsis see overleaf

Admission free Teas available from 5.30pm

For more information please contact Tim Fuller (BDS Secretary) on 020 7665 2234 or email : <u>bds@ice.org.uk</u>

This meeting will also be streamed live on the internet. For more details on how to view this meeting online please visit the BDS website.

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# Banja Dam and Devoll Hydropower Scheme, Albania

### **Synopsis**

The 80 m high Banja Dam and associated 73 MW hydropower installation constitutes the first phase of the Devoll Hydropower Project, which consists of two dams and hydropower plants on the Devoll River in southern Albania.

Construction of the scheme commenced in the 1980s but works were abandoned in the 1990s in a partially completed state due to collapse of the local economy. At that point, some embankment fill, the cofferdams, part of the grout curtain, grouting gallery and the headrace tunnel had been completed. The design and construction of the recent works were complicated by the need to test, if necessary remediate, and incorporate the already-constructed infrastructure. Works also needed to account for highly variable abutment conditions and source materials.

Construction work at the site recommenced at the end of 2013, and impoundment of the reservoir commenced on 15th April 2016 reaching its Normal Operating Level of 175masl in October 2016. The first export of power to the national grid occurred on 31st August 2016.

Mott MacDonald, in joint venture with Coyne et Bellier of France, provided Owner's Engineering services for the Banja HPP Project. This included design review, project and commercial management with construction supervision of the Works.

The presentation will describe the challenges and techniques used during the construction of the recent works. It will focus on the dam and spillway though will also refer to the intake tower, tunnel, penstock and powerhouse construction.

### **Biography details for the presenters**

#### Mark Gill

Mark is Senior Project Manager from the Hydro team in Mott MacDonald. He has worked on many hydro schemes in Nepal for over 25 years, getting involved in the wider institution building of the hydro sector there. For the last three years has been resident on Banja site as Team Leader and Owner's Engineer Representative.

#### **Martin Deane**

Based in Cambridge, Martin is a Senior Engineer within the Hydraulic Structures Portfolio of Mott MacDonald. His career has focused on dams and reservoirs, primarily in the UK. He has been appointed to the Supervising Engineer Panel since 2013. Martin was based on the Banja HPP project from start of construction (November 2013) to April 2015 as a Deputy Resident Engineer for the civil works.

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