Entura appointed to deliver feasibility study for innovative pumped storage hydro project

Specialist power and water consulting firm Entura has been appointed by Genex Power to deliver a bankable feasibility study for the Kidston Pumped Storage Hydropower Project in North Queensland, Australia.

Situated some 270km North West of Townsville, near the township of Georgetown, the project is located on the site of the historic Kidston Gold Mine. The abandoned mine site contains two large adjacent pits with the potential to act as the upper and lower reservoirs required for pumped storage hydropower generation.

There are currently only three pumped storage hydro schemes in Australia. The Kidston scheme will have an installed nameplate generation capacity of 330 MW and power generated will be sold directly into Australia's National Electricity Market during times of peak demand.

Commenting to the market on the appointment of Entura, Genex's Managing Director Michael Addison said: "Entura is a world leader in the planning, design and construction of hydro power stations and we are pleased to have engaged them to manage the bankable feasibility study process.

"Initial engagements between Genex and Entura have been very positive and we look forward to working with the Entura team, which has already indicated scope for improvements on the initial project design. The Genex Board will work closely with Entura to deliver a bankable feasibility study on budget and is on track to complete the work by 30 June 2016."

Entura will partner with leading Chinese power and design consultants HYDROCHINA in the feasibility phase of the project. In November 2014 the two firms signed a Memorandum of Understanding to cooperate on the development of opportunities

in the energy and water sectors.

Entura's Managing Director Tammy Chu said: "As part of Hydro Tasmania, Entura brings a utility-owner perspective, deep local experience, regulatory knowledge and optimisation capability to the Kidston Pumped Storage project, while HYDROCHINA brings a wealth of specialist experience in the development and construction of pumped storage hydro stations.

"We look forward to working with Genex Power's team and our partners to study how best to deliver a practical and commercially sound solution that will help bring the Kidston Pumped Storage project to life."

In addition to the feasibility study, Entura will oversee subcontracted investigations, including geotechnical investigations and a bathymetric survey. The firm will also manage environmental and planning approvals for the project site, including specialist reports and community consultation.

Entura has been intimately involved in the planning, design, construction and ongoing operation and maintenance of the 30 hydropower stations, 55 major dams and 212 km of pipelines, tunnels and canals that make up the hydropower asset portfolio of its parent company Hydro Tasmania.

The firm has also worked with clients in more than 30 countries over the past few decades – including India, Laos, Malaysia, Papua New Guinea, South Africa and Tajikistan – assisting with developing, operating and maintaining hydropower assets of all sizes.