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ASX Announcement

KIDSTON PUMPED STORAGE HYDRO – TECHNICAL FEASIBILITY STUDY OPTIMISATION

HIGHLIGHTS

- **Completion of optimisation study for K2-Hydro project**
- **Optimised for 8 hours of continuous generation capability at 250MW for over 2,000MWh of energy storage (+25%)**
- **Adoption of variable speed turbines for significant operational and ancillary market benefits**
- **Construction timeframe reduced by up to 6 months**
- **Clear pathway to Financial Close in 2018**

Genex Power Limited (**ASX: GNX**) (**Genex** or **Company**) is pleased to provide an update in relation to the 250MW Kidston Stage 2 Pumped Storage Hydro (**K2-Hydro**) project at Kidston, North Queensland. The K2-Hydro project is part of the overall Kidston Stage 2 (**K2**) project, which includes a co-located 270MW solar PV project (**K2-Solar**).

Genex completed a technical feasibility study for the K2-Hydro project in November 2016 (**TFS**) which was managed by specialist power and water consulting firm, Entura, in conjunction with project partner, HydroChina. The TFS concluded that the K2-Hydro project was technically feasible, and that all the key risks identified would be appropriately addressed through detailed design augmentation and optimisation.

Genex has recently been working with Mott MacDonald, a global engineering firm which has specialist skills in hydropower including pumped storage hydro projects, on the optimisation of the K2-Hydro project design (**TFS Optimisation**). The optimisation process focused on taking into account recent shifts in the energy market dynamics as well as feedback from potential energy offtake parties.

TFS Optimisation Design Changes

Following a detailed review of the studies undertaken to date, it was concluded that an augmented design utilising the two existing mine pits as the upper (Wises pit) and lower (Eldridge pit) reservoirs, was the optimal choice for 250MW of installed capacity, in place of the Turkey's Nest design under the TFS. The rationale for the deletion of the Turkey's Nest design was as follows:

- The Turkey's Nest design proposed as part of the TFS was premised upon a larger storage requirement, given the initial preferred project configuration of 450MW for 5 hours;
- Given the optimised design of 250MW, the Wises pit can now be utilised as the upper reservoir for lower capital cost; and
- With minor excavation and dam works, the TFS Optimisation design provides for a channel connecting the modified Wises pit to the existing proposed location for the underground

power station cavern, which was subject to detailed drilling and geotechnical studies as part of the original TFS.

Diagrams summarising the new proposed site layout under the TFS Optimisation are set out in the figures below. Further images from the TFS Optimisation report are set out in Annexure A.

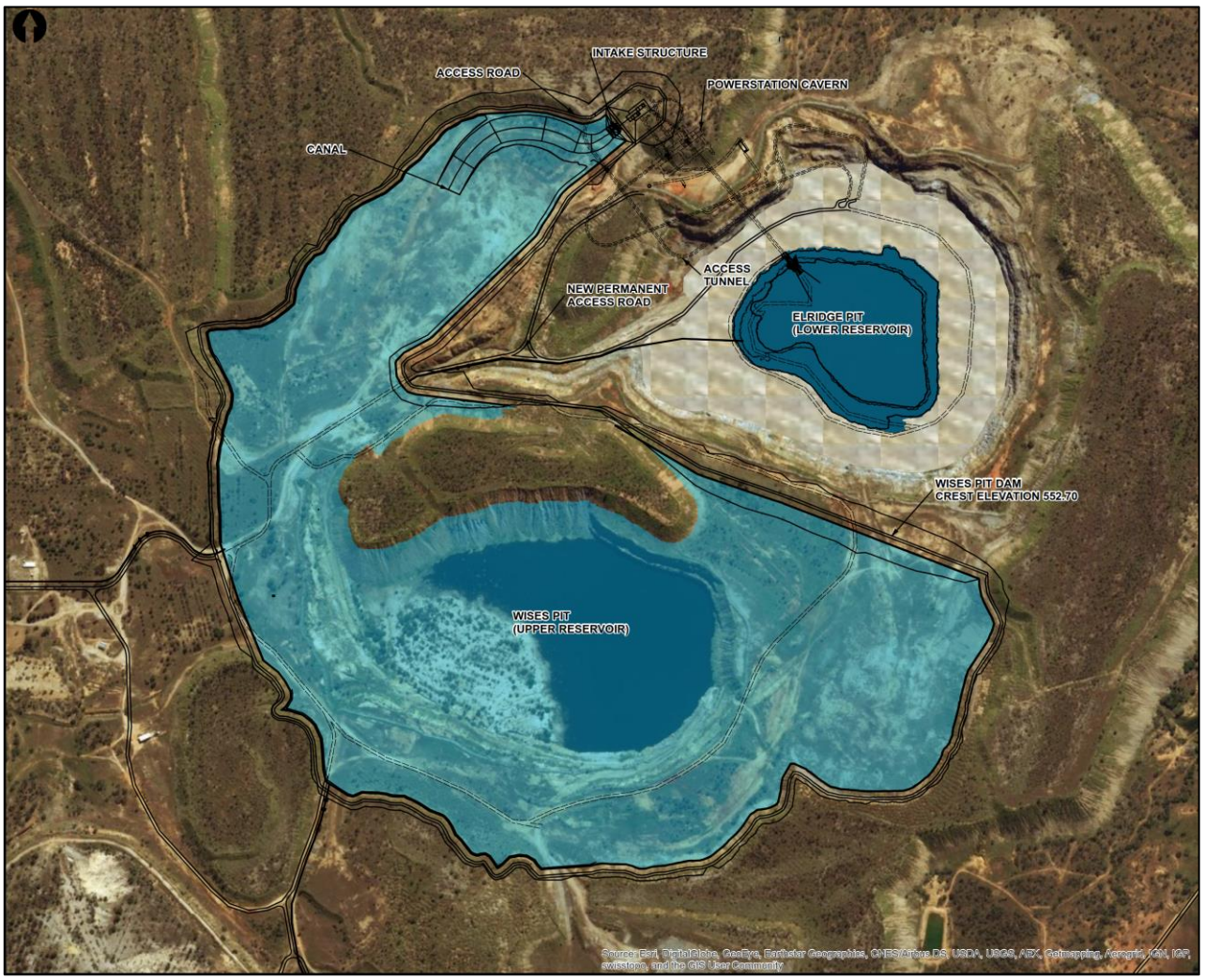

Figure 1: K2-Hydro project proposed general arrangement plan (TFS Optimisation, October 2017)

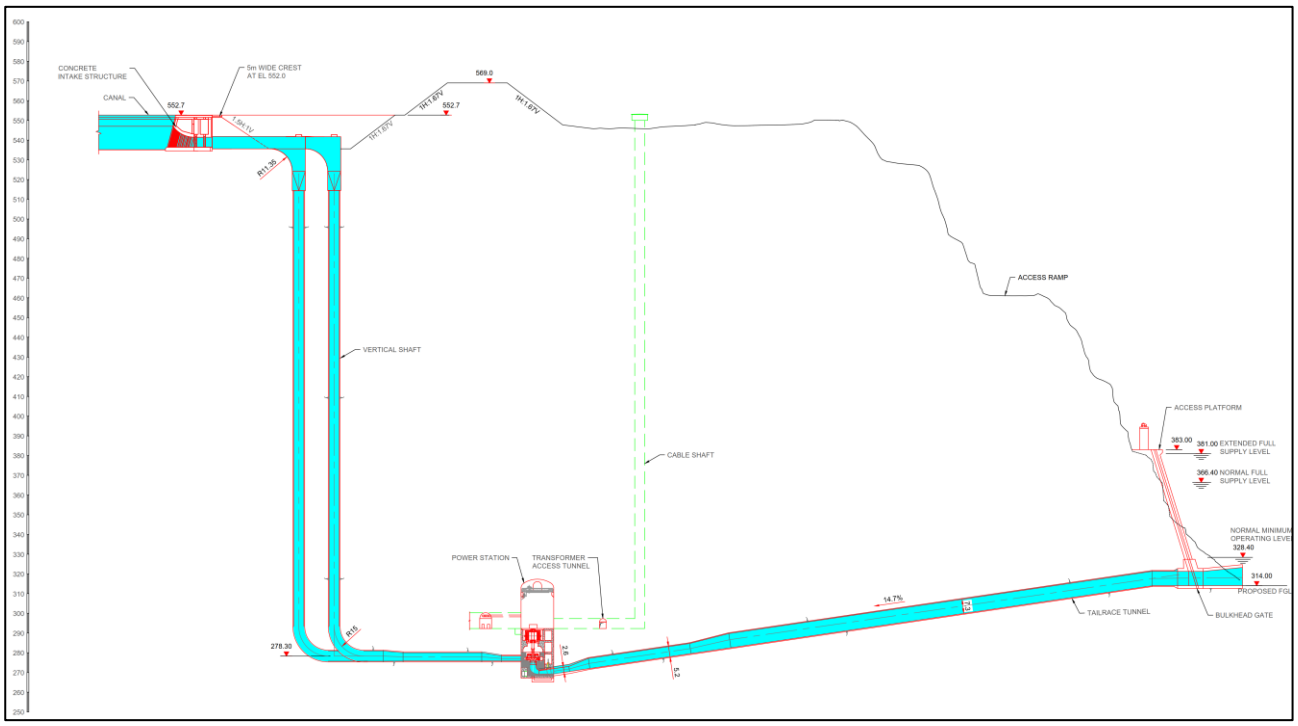

Figure 2: K2-Hydro project proposed cross sectional plan (TFS Optimisation, October 2017)

In addition to the deletion of the Turkey's Nest design, the TFS Optimisation determined several other key changes to the original TFS design as follows:

- Increased upper reservoir volume from 6 hours to over 8 hours of continuous generation;
- Proposed adoption of variable speed pump-generator turbines which provide significant operational flexibility, including:
    - Fast generation ramping via speed adjustment;
    - The ability to better match the hydro pumping profile to generation from the co-located K2-Solar project;
    - Better pumping efficiency across the head range; and
    - Overall suitability in the ancillary service market with increased operation flexibility;
- Reduced excavation and civil works requirements; and
- Construction estimated to take less than 3 years.

A summary of the key outputs of the TFS Optimisation is set out in the table below:

Parameter	TFS – November 2016	TFS Optimisation
General		
Installed capacity	250MW	250MW
Storage capacity	1,500MWh	>2,000MWh
Continuous Generation Duration	6 hours	>8 hours
Turbine Configuration	2 x 125MW Reversible Fixed Speed Turbines	2 x 125MW Reversible Variable Speed Turbines
Upper Reservoir Parameters		
Upper Reservoir Volume	2.8 gigalitres	3.9 gigalitres
Upper Reservoir FSL	579.0m	551.0m
Upper Reservoir MOL	571.0m	546.90m
Upper Reservoir Fluctuation	8.0m	4.1m
Lower Reservoir Parameters		
Lower Reservoir FSL	376.6m	381.0m
Lower Reservoir MOL	349.0m	328.4m
Lower Reservoir Fluctuation	27.6m	52.6m
Head		
Maximum Gross Head	230.0m	218.0m
Minimum Gross Head	194.4m	181.0m
Net Head Ratio	1.23	1.35
Time to Ramp Up to Full Generation Capacity	>30 seconds	<30 seconds

The TFS Optimisation concluded that the K2-Hydro project was feasible based on a capital cost estimate of approximately $330 million (including contingency). Following completion of the TFS Optimisation, Genex is now focused on confirming the final capital cost estimates for the K2-Hydro project via an early contractor involvement (**ECI**) process. This process will involve the appointment of a preferred EPC contractor, who will work with Genex and its advisers to complete the final design optimisation and the full EPC and O&M contracting process for the K2-Hydro project. Genex will provide further updates on the ECI selection process in due course.

Project Financing and Energy Partner Update

The K2-Hydro scheme was optimised based on an assessment of future energy market price forecasts, capacity requirements and direct engagement with potential energy partners.

It is clear that the National Electricity Market is undergoing a rapid shift from a traditional baseload dominant market to a new dynamic where dispatchability and storage of renewable energy will underpin future generation. In such a system, the role of large-scale economic energy storage becomes increasingly relevant. The updated design will enable energy off-takers to take full advantage of the flexibility offered by the integrated project and, in doing so, allow Genex to extract maximum value from the offtake arrangements.

Based on positive engagement with energy offtake and project finance parties to date, including the Northern Australia Infrastructure Facility (refer to ASX Announcement dated 12 July 2017), Genex believes it has a clear pathway to Financial Close in 2018.

Genex Power Managing Director Michael Addison said:

"We are pleased to provide an update on the K2-Hydro optimisation, which is the culmination of months of work alongside our advisers. The optimisation study outcomes have been developed in response to direct feedback from potential energy partners amid the ongoing backdrop of the national debate on Energy Policy, and the importance of ensuring dispatchability of renewable energy via energy storage.

The Kidston renewable energy hub is currently the most advanced, lowest cost, large-scale energy storage project in the country. Energy storage is likely to play a critical role in future energy development and Genex is well placed to benefit from these dynamics.

We look forward to providing further updates to the market as we advance the K2 project toward financial close, targeted in 2018."

The Federal Government, through the Australian Renewable Energy Agency has continued to support the K2-Hydro project through the TFS and TFS Optimisation programs. To date, Genex has drawn down a total of approximately $2.85 million of its $4.0 million ARENA funding facility in relation to the project.

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About Genex Power Limited:

Genex Power is a power generation development company listed on the ASX. The Company is focused on innovative clean energy generation and electricity storage solutions which deliver attractive commercial returns for shareholders. Following Financial Close of the 50MW Kidston Solar Project (Stage One), the Company's focus is on the development of its 250MW Kidston Pumped Storage Hydro Project and the integrated 270MW Kidston Solar Project (Stage Two) located at the Kidston Renewable Energy Hub, in Northern Queensland.

About ARENA

ARENA was established by the Australian Government to make renewable energy technologies more affordable and increase the supply of renewable energy in Australia. Through the provision of funding coupled with deep commercial and technical expertise, ARENA provides the support needed to accelerate the development of promising new solutions towards commercialisation. ARENA invests in renewable energy projects across the innovation chain and is committed to sharing knowledge and lessons learned from its portfolio of projects and information about renewable energy. ARENA always looks for at least matched funding from the projects it supports and to date has committed $1.1 billion in funding to more than 270 projects. For more information, visit www.arena.gov.au.

ANNEXURE A: FURTHER DIAGRAMS FROM TFS OPTIMISATION

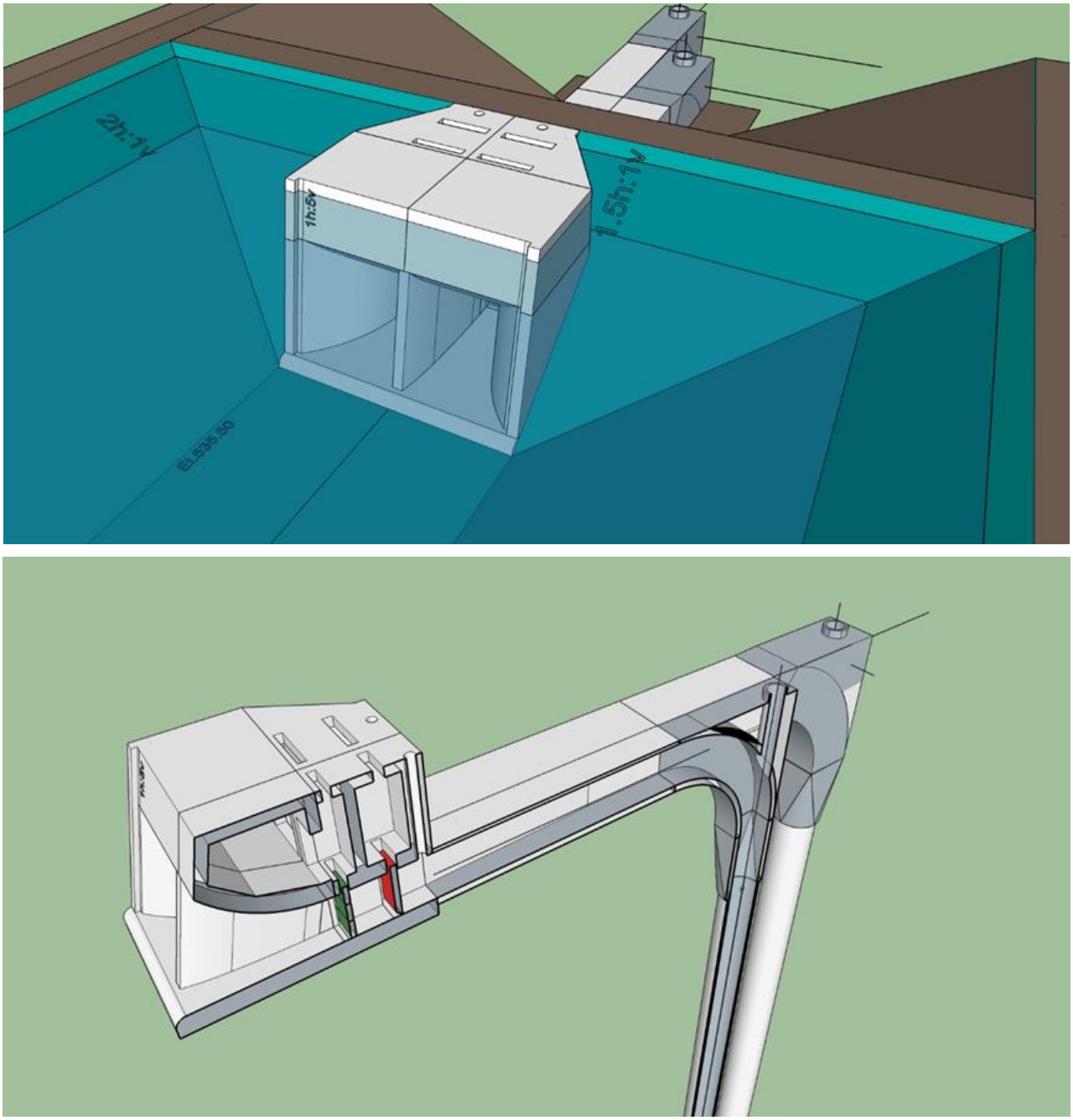

Figure 3: K2-Hydro project upper reservoir intake gates (TFS Optimisation, October 2017)

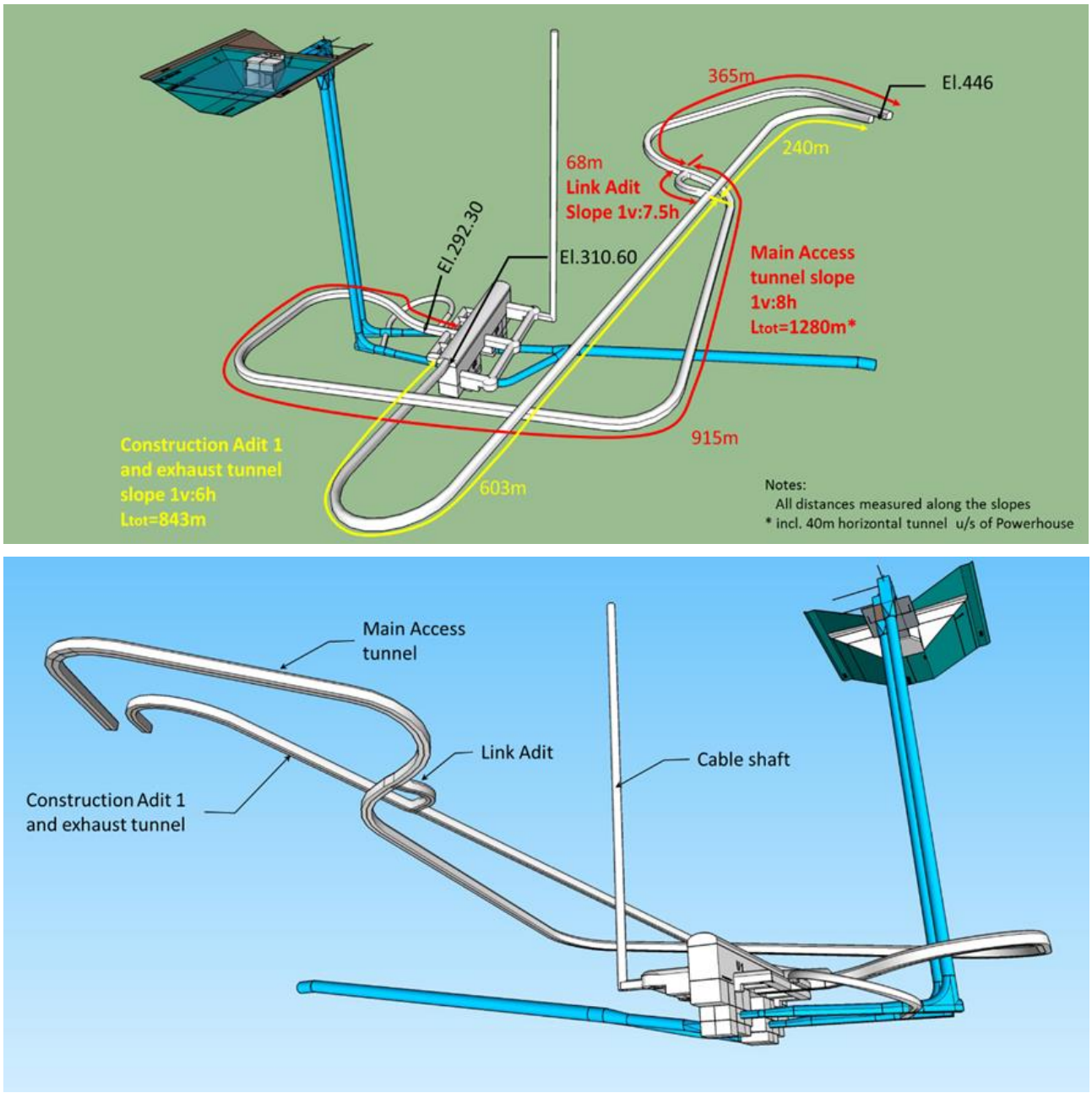

Figure 4: K2-Hydro project underground intakes, power station cavern and access tunnels (TFS Optimisation, October 2017)