



Upper Hunter Hydro Pty Ltd secures tender from WaterNSW

26th February 2024

Upper Hunter Hydro Pty Ltd has welcomed the decision of WaterNSW to award it a development agreement to explore pumped hydro energy projects in the NSW Hunter Valley.

The agreement allows UHH to investigate and design two Pumped Hydro Energy Storage (PHES) systems, with an opportunity for integrated wind energy, located on WaterNSW land at Glenbawn and Glennies Creek.

Long duration electricity storage is vital to making renewables reliable; to taking the abundant, affordable but intermittent wind and solar generation and firming it so that NSW can be provided with zero emission electricity that is secure, reliable and affordable.

The 2018 NSW Pumped Hydro Roadmap made it clear that pumped hydro energy storage is an established and proven technology that can balance new generation by offering bulk energy storage over days or even weeks and on a utility-scale not currently viable with other storage technologies.

The two projects are proposed to support energy security in NSW and help replace ageing coal-fired generation capacity. Together the two PHES projects could deliver dispatchable power with long duration storage of over 1000MW for 8-12 hours and provide the critical firming capacity required to optimise renewables.

“Wind and solar are both intermittent sources of generation and once coal fired generation is phased out, we will be left with abundant, and much cheaper, variable generation but no continuous, baseload generation. That’s why long duration energy storage in the form of pumped hydro is critical to ensuring energy is affordable and reliable,” Mr Turnbull said.

“Lucy and I have been landowners and part of the Upper Hunter community for over forty years and are acutely aware of the need to create sustainable, long-term industries that support the economic diversity of the region as the world transitions away from fossil fuels. These projects are part of that solution.”

The transition to a zero or low emission energy supply is more heightened in NSW than in most other parts of the world because the state has been so dependent on coal fired generation. The NSW Electricity Infrastructure Roadmap notes that in the next fifteen years four large coal fired power stations, delivering 75% of the state’s electricity, will be retired and close.

Across the country, ageing coal fired power stations are being retired. The Australian Energy Market Operator (AEMO) predicts the National Energy Market (NEM) will need a 7-fold increase in grid scale wind and solar by 2050. To ensure there is sufficient storage to support our clean energy transition, batteries, virtual power plants and pumped hydro will need to increase from 3GW to 57GW by 2050.

“Australia currently has all the tools to deliver a zero-emission energy reality. We don’t need to invent new technologies, we have all the resources we need; the one resource we don't have is time. By deploying a mix of variable renewable energy including wind and solar, supported by pumped hydro storage it is possible to transition away from coal and meet our climate targets,” Mr Turnbull said.



“We are excited to be moving forward with these critical projects, providing NSW with long duration energy storage, creating local jobs and lasting economic benefits to the Upper Hunter region.” Mr Turnbull said.

The projects will proceed to a detailed design phase that incorporates wide ranging community and stakeholder engagement together with thorough environmental assessment, to secure planning approvals and investor confidence to allow development of these projects. This includes engaging with the local community and users of the WaterNSW dams to deliver benefits to the broad community” Mr Turnbull said.

About Upper Hunter Hydro

Upper Hunter Hydro Pty Ltd (UHH) is a renewable energy company founded by Malcolm and Lucy Turnbull who are joined on the board by international hydropower expert, Roger Gill. UHH is committed to delivering the deep energy storage essential for a net-zero carbon world.

About the WaterNSW Tender

Through its Renewable Energy and Storage Program WaterNSW has identified opportunities to use its land and assets to support renewable energy generation and storage projects, through private sector investment.

Through a competitive tender process, WaterNSW has evaluated private sector proposals against requirements including the contribution to future energy security, compatibility with WaterNSW assets and operations and maximising the value of the State’s investment in WaterNSW.

For more information about the Program refer to [Renewable Energy and Storage Program - WaterNSW](#).

Contact

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