

Tallawarra B Project

frequently asked questions



How long has there been a power station at Tallawarra?

EnergyAustralia's existing combined cycle Tallawarra power station (Tallawarra A) has been in operations since early 2009. It is one of Australia's most thermally efficient, large-scale gas-fired power stations, with a generation capacity of 435 MW – which is enough power to supply up to 200,000 homes.

What is the Tallawarra B Project?

New South Wales requires fast start gas fired generation to balance the energy system and EnergyAustralia has responded with the Tallawarra B project. The project is the development of a fast-start open cycle power station, which in peak periods will deliver reliable power to an additional 60,000 New South Wales homes.

Located at EnergyAustralia's existing Tallawarra power station, the project will be Australia's first peaking power station to be powered by a blend of gas and green hydrogen with direct emissions offset.

How does Tallawarra B fit with the existing power station?

The Tallawarra B project will expand the existing Tallawarra 132kV switching station and associated transmission line works. This work also extends to a new connection agreement, upgrading common site services and facilities, and transforming Tallawarra power station into a two-unit site to support New South Wales with improved energy security, reliability, and flexibility options.

Will Tallawarra B require more land?

No, the Tallawarra B project will be located entirely within the existing Tallawarra Power Station site boundaries.

When will the Tallawarra B Project be complete?

Construction at Tallawarra B commenced in late 2021 and is already well underway. The project will be ready for the summer of 2023-24, around the same time as the scheduled retirement of the Liddell power station.

When was the Tallawarra B Project approved?

Tallawarra B received major project approval (MP 07_0124) from the NSW Department of Planning and Environment in December 2010 following a detailed Environmental Assessment and Public Exhibition. The development was planned and approved as an extension of the Tallawarra A power station.

Further information about the development consent and associated modifications can be found on the Tallawarra B project website at: www.energyaustralia.com.au/about-us/energy-generation/energy-projects or by visiting the NSW Planning Portal: <https://pp.planningportal.nsw.gov.au/major-projects/projects/mod-2-tallawarra-b-power-station>

What is happening now?

A new modification application to the NSW Department of Planning and Environment is underway to seek approval for the introduction of up to five per cent green hydrogen to blend into the fuel mix, and to build associated infrastructure. This approval is required because although the turbine is designed to accept hydrogen the existing approval states that natural gas is the only fuel approved for firing the turbine at Tallawarra B.

Is the community being consulted?

Yes, community consultation is underway during September 2022. EnergyAustralia welcomes any feedback that the community or other stakeholders would like to provide on the proposed introduction of green hydrogen at Tallawarra B. You can provide feedback or ask questions by emailing our Community Relations Team at: Tallawarra.Community@energyaustralia.com.au

Is the Tallawarra B Community Liaison Group being consulted?

Yes, the Tallawarra B Community Liaison Group (CLG) has already been communicated with about the proposed modification. Energy Australia provided information about the proposed introduction of green hydrogen via the regular CLG newsletter process to let members know, offer a face-to-face briefing to answer questions if required, and seek any feedback that the CLG would like to offer regarding the proposal.

What other consultation is taking place?

EnergyAustralia is currently consulting with stakeholders, including the Tallawarra Power Station Community Liaison Group, about the proposed modification to introduce green hydrogen into the fuel mix at Tallawarra B.

EnergyAustralia is committed to open and transparent engagement with stakeholders about the proposed modification and welcomes the opportunity to receive feedback about the Project.

Community feedback about the proposed modification will be detailed in a publicly available report to the Department of Planning and the Environment as part of the planning and assessment process for the modification.

What is green hydrogen?

Hydrogen is most commonly produced by electrolysis using a device called an electrolyser, which uses electricity to split water into hydrogen and oxygen. To be considered green, hydrogen production from electrolysis must be powered by renewable electricity, which could include any combination of on-site renewable electricity generation or the use of an equivalent number of renewable energy certificates. You can find out more information in our Green Hydrogen Fact Sheet.

Why does EnergyAustralia want to introduce green hydrogen at Tallawarra B?

The introduction of green hydrogen will allow EnergyAustralia to move towards a cleaner energy blend at Tallawarra B.

EnergyAustralia is 'Doing Not Just Dreaming' when it comes to Australia's clean energy transition. The company has committed to be net zero (scope one, two and three) by 2050, to be out of coal by 2040, and to reduce its direct* emissions by 60 per cent by 2028/29 relative to 2019/20. The construction of Tallawarra B is just one of the ways EnergyAustralia is making its promises a reality.

What additional infrastructure will be required at Tallawarra B for green hydrogen?

The following additional infrastructure will be required at Tallawarra B for the introduction of green hydrogen:

- A hydrogen injection system capable of supporting four hours of full load continuous steady state operations
- A hydrogen receiving and unloading facility to enable green hydrogen to be delivered by road via tube trailers, potentially including two unloading points
- A hydrogen blending skid, complete with piping, instrumentation, and valves
- Purging, draining and venting systems where required
- Fire protection and gas detection systems where required.

What will change as a result of introducing green hydrogen at Tallawarra B?

The introduction of green hydrogen will allow EnergyAustralia to move toward a cleaner energy blend at Tallawarra B, as combustion of hydrogen produces zero greenhouse emissions. Additional infrastructure will be required to be built for the introduction of green hydrogen into the fuel mix, as outlined above. Environmental and other assessments are currently underway to determine what impact, if any, the introduction of green hydrogen will have at Tallawarra B.

How will green hydrogen be transported to Tallawarra B?

It is proposed that compressed green hydrogen gas would be transported by road to Tallawarra B using tube trailers (semi-trailers).

*Relates to Scope 1 emissions

How will green hydrogen be stored at Tallawarra B?

It is not intended that green hydrogen will be stored at Tallawarra B. The tube trailers will deliver green hydrogen to the power station site for use when the unit is online and then taken away to be replenished as needed. The modification application proposes that a maximum of four tube trailers only will be on-site at Tallawarra B at any one time.

Is there any danger to the community from green hydrogen?

A number of new safety systems are included as part of the proposed modification for hydrogen, including instrumented protection systems, leak detection systems and fire protection systems. These systems are in addition to the safety systems already provided on site at Tallawarra and as part of the existing development consent. Detailed hazard assessments and modelling has also been undertaken as part of the modification application to ensure that the introduction of green hydrogen complies with all relevant risk criterion.

Will traffic movements at Tallawarra B increase because of green hydrogen?

The introduction of green hydrogen at Tallawarra B will result in tube trailers (semi-trailers) bringing hydrogen to the site as needed. Traffic modelling indicates that the key intersections near the site are currently operating with low delays and would continue to operate at the same level of service during the operational and construction period of the project. The proposed modification is not expected to have a significant impact on the road network efficiency or road safety.

Will noise increase because of the proposed modification?

No, with recommended treatment in place, predicted noise levels from the project and cumulative noise levels are expected to comply with the noise trigger levels at all receivers. Predicted cumulative noise levels also comply with the existing Environment Protection License approval. The proposed heavy vehicle movement change is expected to comply with the set criteria for NSW Road Noise Policy.

Will there be any air quality impacts because of the proposed modification?

The change to the air emissions profile for the project as a result of introducing green hydrogen is negligible. Plume rise also has also been assessed to have a negligible change to emission parameters and when operating on blended gas, an emission reduction is anticipated.

Will local biodiversity be impacted because of green hydrogen?

The project has been designed to ensure there is no impact to any mapped biodiversity values. The project area does not support any threatened species or ecological communities and no significant habitat features have been identified. Based on the long history of vegetation clearance and disturbance across the site from the existing Tallawarra Power Station operations, it is unlikely that the project would result in any significant impacts on listed ecological values.

Will there be any impact on Aboriginal Heritage at the site?

No Aboriginal objects have been identified within the project area for the proposed modification. No harm to potential Aboriginal objects within the broader context of the site and immediate surrounds is expected.

Will EnergyAustralia offset greenhouse gas emissions from Tallawarra B?

Tallawarra B will be Australia's first peaking power station to be powered by a blend of natural gas and green hydrogen with direct emissions offset.

How many new jobs will the Tallawarra B project create?

During its construction Tallawarra B will create 250 jobs.

How does Energy Australia contribute to the local community around the power station?

The Tallawarra site currently employs around 35 people, and each year contributes in-kind and financial support through its community grants and workplace giving program where employees can make pre-tax donations to local charities. When major maintenance is undertaken, EnergyAustralia has a standing commitment to hire and procure locally.

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How can I find out more information?

You can find more information on the Tallawarra B project website at:
www.energyaustralia.com.au/TallawarraBproject

You can also contact the Community Relations Team at: Tallawarra.Community@energyaustralia.com.au or call us on our toll-free Project Information Line for Tallawarra B: 1800 574 947, which is monitored 24 hours a day, 7 days a week.

You can also write to the Tallawarra B Project Team if you prefer by using this postal address: PO Box 20, Dapto NSW 2530.

About EnergyAustralia

EnergyAustralia is a leading energy retailer and generator serving 1.6 million customers across eastern Australia. We supply energy to our residential and business customers from a modern energy portfolio, underpinned by coal and gas power plants, as well as renewable energy sources and utility-scale electricity storage.

We operate Australia's largest energy sector carbon offsets program, with more than 5 million tonnes of CO₂e already fully offset and accredited by Climate Active. Under our offsets offering, more than 500,000 of our customers receive carbon neutral electricity and gas at no extra cost.

Find more information on the Tallawarra B project website at:
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Contact the Community Relations Team at:
Tallawarra.Community@energyaustralia.com.au



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