

Marulan Gas Fired Power Station

Explore water options with us

EnergyAustralia recognises that the proposed site for the Marulan Gas Fired Power Station is on the traditional Country of the Gundungurra peoples and respects and acknowledges their continued connection to Country and culture.

Water is a precious resource, and we are committed to using it wisely and respectfully.

We expect to need about 140 million litres of water each year to run the facility. We're looking at different water sources that could support our operations. We're also planning to design the station so it can use less water during droughts.

How we use water

Open-cycle gas power stations don't need as much water as traditional thermal power stations, but they still rely on it for cooling the air intake, reducing NOx emissions when using diesel, and for maintenance. That's why managing water carefully is important, especially in areas where water is limited.

We reuse water as much as possible. For example, the air intake cooling system recycles water up to five times before it goes to wastewater treatment. Most of the water used in this process is lost through evaporation.

High purity demineralised water is also produced on site from raw water. We need highly purified water for

two reasons: (1) occasionally injecting water into the gas turbines to clean them and help maintain their high operating efficiency. (2) High-purity water is also injected into the combustion process—only rarely—when diesel fuel is used, to help lower NOx emissions and keep them within legal limits.

Being responsible and compliant

When we manage water, we need to comply with Sydney Waters Neutral or Beneficial Effect requirements or NorBE. It means that any water we need to discharge – which would be a small amount – needs to be the same or better than the water source receiving the discharge. This requires strict monitoring by both an operator and regulators.

We are exploring options that:



Minimise impacts



Drought proof



Operational flexibility



Image: Artist impression of the proposed Marulan Gas Fired Power Station.

What do you think?

We are sharing our water options with the community to help identify a solution which minimises social and environmental impacts. We are interested in your views on water management in helping us decide the best option.

A combination of these options may minimise impacts, provide drought proofing and create operational flexibility.

Explored Option 1

Highland Source Project

We explored building a water pipeline along our proposed gas pipeline route to connect to the Highland Source Project (HSP) water pipeline.

We were informed that the HSP is at capacity, and this would not be a viable option.

Viable Option 2

Wastewater pipeline

We attain most of our water from the proposed Marulan Wastewater Treatment Plant in a commercial arrangement with the Goulburn Mulwaree Council.

We work with Council to get the water piped to site through existing easements where possible. We would do this to minimise operational water truck movements.

This option provides a potential community benefit as the reuse of wastewater is an important consideration in the approval for the proposed Marulan Wastewater Treatment Plant and the future growth of Marulan. It is also a drought proof option.

Viable Option 3

Wastewater trucking

We attain most of our water by trucking wastewater from the Mittagong Wastewater Treatment Plant to site in a commercial arrangement with the Wingecarribee Council or from the proposed Marulan Wastewater Treatment Plant in a commercial arrangement with the Goulburn Mulwaree Council

This is a drought proof option, however water truck movements to site may be daily and create a significant impact on local road networks and neighbours to the site.

Viable Option 4

Combination – site water plus wastewater trucking

We use water we can source at the site through rainfall and ground water bores and supplement with recycled water from wastewater treatment plants.

This option could minimise water truck movements and impacts on local roads and to neighbours, but may not be drought proof.

Viable Option 5

Combination – site water, wastewater and water licence

We use water we can source at the site through rainfall, groundwater and a small allocation from the Wollondilly River under a water licence. We supplement this with wastewater transported from sewerage treatment plants for drought proofing.

According to public data from NSW Water, the Wollondilly River allocation is significantly undersubscribed – meaning there is ample water available.

5111 mega-litres available and we would require approximately 100 mega-litres, which is just 2.7 per cent of the total water allocation available.


This option could minimise water truck movements further, provide operational flexibility and some drought proofing but would require water from a natural water source.

How we will use your feedback


Your views will play a key role in shaping the final decision.


All feedback will be carefully reviewed and considered alongside technical, environmental and economic assessments. This input will help us understand local priorities, identify potential impacts, and ensure the preferred option reflects both expert advice and what matters most to the community.

For more information, please contact us on:

 community@energyaustralia.com.au

 marulangasfiredpower.com.au

 Marulan Project Team c/- EnergyAustralia Pty Ltd,
PO Box 587, Goulburn NSW 2580

 1800 574 947