

Marulan Gas Fired Power Station

2009 approval versus 2025 modification

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.

The proposed Marulan Gas Fired Power Station already has an approval which was granted in 2009 and this renewed focus seeks to modify the existing approval to reflect modern technical and environmental standards and to extend the approval by 5 years..

As Critical State Significant Infrastructure, a modification is also sought to recognise the role the Marulan Gas Fired Power Station can play in meeting NSW's energy needs when renewable power is not available like during wind or solar droughts.

This modification will make sure the project is and fit-for-purpose in today's energy and environmental context.

The table below summarises EnergyAustralia's proposed changes from the Approved project (2009) to the Modified project (2025), which have been identified in the *Marulan Power Station Scoping Report*.

	Approved project (2009)	Proposed Modified project (2025)
	Construction and operation of two gas-fired power stations	
Power station capacity and turbine configuration	<p>Combined 700MW of OCGT capacity</p> <p>Power Station 1 – 350MW OCGT power station</p> <p>Power Station 2 – 250-350MW OCGT power station. Option to convert to CCGT with capacity up to 450MW for a total capacity of 850 MW.</p>	<p>Up to 1.43 gigawatts (1430MW) of OCGT.</p> <p>Updates to how gas turbines, operational plant and ancillary operational equipment would be configured on-site.</p> <p>Approx 1.8x original approved capacity</p>
Fuel	Natural gas only	<p>Natural gas, with diesel backup fuel supply for emergencies such as gas supply shortages or critical grid events.</p> <p>The use of diesel would be subject to stringent environmental controls.</p>
Operational water	<p>Estimated to use 20.6ML annually, sourced from:</p> <ul style="list-style-type: none"> • Site stormwater runoff captured in a new, on-site dam • Delivered from the Marulan water supply network or sewage treatment plants at Marulan and Moss Vale • Contemplated using water from Highland Source Project water pipeline 	<p>Increased annual water demand, up to 140ML annually.</p> <p>Options to source water are being investigated, and it is likely to be from one or more of the following:</p> <ul style="list-style-type: none"> • Highland Source Project • Wastewater pipeline – constructed alongside the lateral gas pipeline for water from the Marulan Sewerage Treatment Plant. • Wastewater trucked – from either Marulan, Mittagong or another location • Site water – where surface water extracted under licence • Site water – stormwater runoff captured in a new, on-site dam. • Allocation – small amount from the Wollondilly River

Approved project (2009)

Proposed Modified project (2025)

Construction and operation of two gas-fired power stations

Water discharge (to treat and dispose of any wastewater generated by the project)	Transported by truck for off-site disposal at authorised waste facilities.	Wastewater management options being considered include: <ul style="list-style-type: none"> Retention of process wastewater within an evaporation pond and offsite solids disposal Offsite trucking to wastewater facilities Site stormwater not required for operations will be retained in a sedimentation pond and discharged per WaterNSW NorBE*
Site access road	New sealed, seven-metre wide, site access road off Canyonleigh Road through land not owned by EnergyAustralia	To avoid and minimise impacts on biodiversity and adjacent landowners, the new access road would be constructed through EnergyAustralia-owned land
High voltage grid connection	1.2km of new overhead 330kV transmission line to the Transgrid's Marulan 330kV substation.	Slightly amends where the new overhead transmission line would be constructed on the site.
Gas pipeline	New lateral gas supply from the Moomba to Sydney natural gas pipeline, to the project site. Eight approved new gas pipeline potential routes were identified in the approved project within a broader 'gas pipeline corridor'.	To minimise landholder, environmental and economic impacts and to improve constructability, one preferred gas pipeline route has been selected. This preferred gas pipeline route is subject to obtaining landowner agreements and further consultation with stakeholders will be undertaken to confirm the final pipeline route.
Construction phase ancillary areas	One construction laydown area (covering around 4ha) within the project site.	Slightly amends where the new overhead transmission line would be constructed on the Transgrid site based on feedback from Transgrid.
Temporary worker accommodation	Not considered	In response to community feedback about accommodation and local housing, EnergyAustralia establishes a site for a 300-person temporary accommodation village. A nearby temporary accommodation site is identified in consultation with private landowners and confirmed as part of the modification applications.
Public road upgrades	Converting 12km of Canyonleigh Road to sealed road. No upgrades to accommodate oversize over mass (OSOM) vehicles.	EnergyAustralia is working with Goulburn Mulwaree Council to determine the most effective approach to upgrade Canyonleigh Road, which may include road sealing and additional works to improve flood immunity for residents and other nearby projects. The modified project would require Over Size and Over Mass vehicles to deliver equipment to site, which could require additional public road upgrades.



Image: Artist's impression of the Temporary worker accommodation

Being responsible and compliant

When we manage water, we need to comply with WaterNSW 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.