

**Question on Notice
No. 973
Asked on Thursday, 22 August 2024**

MR B HEAD ASKED MINISTER FOR ENERGY AND CLEAN ECONOMY JOBS (HON M DE BRENNI)

Will the Minister advise of all government (including government owned corporations) gas and/or hydrogen peaking plant proposals in Queensland including (reported separately by project), (a) all budgeted allocations for their construction and development, (b) their total expected construction cost, (c) expected construction start and completion dates and (d) whether the Minister is aware of any private projects being considered in Queensland?

ANSWER

The 2022 Queensland SuperGrid Infrastructure Blueprint indicated that approximately 3,000 MW of new low to zero emission gas-fuelled generation would be required to support Queensland's energy transition.

Queensland's government owned corporations (GOC) have been developing projects – and in discussion with project proponents – to enable Queensland to build the necessary low to zero emission gas-fuelled generation to enable the transition.

The Government has announced the advancement of two gas and hydrogen peaking plant proposals by Queensland government owned corporations at Brigalow and Barcaldine as set out below. While there are more projects are in early stages of development, disclosure may prejudice commercial negotiations between GOCs and counterparties.

Brigalow Hydrogen-ready Gas Peaking Plant

CS Energy is developing Queensland's first hydrogen-ready, natural gas power station to provide crucial firming capacity to support the transition to renewable energy.

The Brigalow Gas Peaking Power Plant will be located at CS Energy's Kogan Clean Energy Hub next to the Kogan Creek Power Station, near Chinchilla on the Western Downs.

The 2024-25 State Budget provides funding of \$174.6 million for the 2025 financial year, as detailed in Budget Paper 3, out of a total budgeted funding of \$642.4 million.

The project's total expected construction cost is still to be determined, and the project is subject to Final Investment Decision and shareholding Ministers' approval.

Subject to approvals, construction is anticipated to start in early 2025 with the plant to be operational in 2027.

The Brigalow Peaking Power Plant will feature up to 12 individual turbines, which can use a blend of renewable hydrogen and natural gas.

The plant will be capable of running on 35 per cent renewable hydrogen, with a pathway to 100 per cent renewable hydrogen over time. The project will be capable of producing up to 400 MW of power, which is enough to power more than 150,000 homes during peak periods.

Barcaldine Power Station Upgrade

Commissioned in 1995, the gas turbine at the Barcaldine Power Station is nearing the end of its asset life. To support the objectives of the Queensland Energy and Jobs Plan (QEJP), Energy Queensland intends to construct an additional 30-megawatt (MW) hydrogen-ready gas-fired generator. This generator would be capable of using a gas-hydrogen fuel blend to produce low to zero emission electricity in the future.

The new generation unit will be located alongside and eventually replace the existing gas-fired generation unit, supporting the future transition of the power station to lower emission electricity generation while ensuring the necessary firm generation is available in the interim. The expanded power station will primarily operate as a "peaking" generation facility, supplying firming energy and dispatchable capacity to meet National Energy Market requirements on short notice.

The project will be constructed by Yurika, enhancing its brand and capabilities in the electricity generation, gas, and hydrogen sectors. Construction is expected to start in 2025 and finish by early 2026.

The 2024-025 State Budget provides funding of \$44.5 million for the 2025 financial year, as detailed in Budget Paper 3, out of total expected construction cost of \$75.4 million.

Private projects

In relation to private projects, the Department of Energy and Climate (DEC) is made aware of private projects via the application for generation authorities. These are assessed and decided by delegated officers within the Department. Newly granted generation authorities are publicly disclosed on the Department's website and local newspapers. There are currently no applications for generation authorities related to gas and/or hydrogen projects.

Other Local, State and Federal government departments and Ministers also may be aware of private projects in Queensland through their engagement with proponents for various reasons outside my portfolio but which relate to those projects, such as regulatory approvals including tenure/licensing, environmental and development approvals.