

# Opening of Australia's first dual-fuel gas and green hydrogen capable power plant in New South Wales

**Illawarra, New South Wales, Australia, 19 February 2024 -** GE Vernova's Gas Power business (NYSE:GE) and EnergyAustralia today announced the opening of the Tallawarra B Power Station, in New South Wales, Australia.

Powered by GE Vernova's 9F.05 gas turbine, Tallawarra B Power Station marks the first dual-fuel capable natural gas/ hydrogen power plant in commercial operation in Australia. EnergyAustralia is expected to operate on a blend of 5% (by volume) green hydrogen and natural gas in 2025 subject to the development of a hydrogen manufacturing industry of an appropriate size and scale. Tallawarra B is expected to be the first 9F gas turbine to operate on a blend of natural gas and hydrogen globally.

Tallawarra B Power Station can deliver up to 320 MW of dispatchable power to strengthen the reliability of the energy grid and help ensure New South Wales (NSW) energy consumers have continued access to affordable, reliable, and more sustainable power.

Following the closure of the Liddell coal-fired 1,680-megawatt plant located in the Hunter Valley region after 52 years of operation in April 2023, the Tallawara B plant will deliver capacity to partially replace the energy that is no longer produced by the Liddell coal-fired plant. In addition, Tallawara B can provide high operational flexibility needed during peak demand periods: the plant can start up rapidly when needed to stabilize the power grid and utilizes a blend of green hydrogen to decrease its emissions footprint.

"Tallawarra B is the first gas-fired power station built in New South Wales in over 10 years. The new station will play a vital role in the energy transition, providing flexible and reliable energy during periods of peak demand or low supply.

Tallawarra B enables and complements more renewables entering the system as coal-fired power stations retire" said Mark Collette, Managing Director of



# EnergyAustralia.

"Gas will continue to play a vital role firming renewables in the energy transition. We are positioning both Tallawarra stations to play a long-term role in New South Wales' energy future and our own plans to achieve net zero by 2050. Our ambition is for green hydrogen to enable zero emissions flexibility capacity at Tallawarra. We are already investing to enable hydrogen usage at Tallawarra. In 2024, we are investing in an upgrade of Tallawarra A which will improve the capacity and efficiency of the station, while also enabling the use of up to 30% hydrogen as a fuel when it is available commercially".

The 9F turbine is a dual-fuel unit, capable of burning two types of fuel at the same time. In addition to industry leading gas turbine experience, GE Vernova has deep expertise with wind turbines, solar and energy storage solutions, grid systems, and power conversion technologies, which are key elements to enable the (green) hydrogen value chain.

"Tallawarra B Power Station demonstrates the substantive role that gas technologies can play in reducing carbon emissions, ensuring reliable electrical supply, and fighting climate change," said **Ramesh Singaram, President and CEO, Asia of GE Vernova's Gas Power.** "We are committed on delivering reliable, stable, cost-effective energy that supports energy providers, like EnergyAustralia, to assist with developing a hydrogen supply chain and transitioning Australia to a lower carbon future".

Tallawarra B Power Station is located next to EnergyAustralia's existing Tallawarra A 435 MW gas plant, in Yallah on the western shore of Lake Illawarra in the State of NSW—approximately eight miles southwest of the city of Wollongong.

For this project, GE Vernova also provided an A78 generator, an exhaust stack with an innovate Plume Dispersion Device, a generator step-up transformer, a Mark\* Vie control system and gas turbine accessories packaged in modules for the project, which reduced on-site installation work while offering simpler and faster serviceability for the plant operator.



GE Vernova's gas turbine portfolio has the capability today to burn hydrogen levels from 5% (by volume) up to 100%. Having first entered commercial operation in 1991, with more than 450 GE Vernova 9F gas turbines orders since, GE Vernova's 9F fleet has accumulated over 24 million fired hours in over 40 countries across Europe, China, Middle East, Asia, Africa and South America. GE Vernova is developing dry low NOx (DLN) combustor technology for 100%hydrogen fuel with the goal to have solutions for the portfolio by 2030.

GE has been present in Australia for more than 120 years. In Australia, GE Vernova has more than 140 gas turbines in operation helping to address demanding local requirements with fast start-up, lower total cost of ownership, and increased flexibility. Existing and future gas power plants can reduce their carbon emissions by using hydrogen as a fuel.

### **Notes to editors**

**Video:** https://www.youtube.com/watch?v=aTU45JhUXSQ

#### **About GE Vernova**

GE Vernova is a planned, purpose-built global energy company that includes Power, Wind, and Electrification businesses and is supported by its accelerator businesses of Advanced Research, Consulting Services, and Financial Services. Building on over 130 years of experience tackling the world's challenges, GE Vernova is uniquely positioned to help lead the energy transition by continuing to electrify the world while simultaneously working to decarbonize it. GE Vernova helps customers power economies and deliver electricity that is vital to health, safety, security, and improved quality of life. GE Vernova is headquartered in Cambridge, Massachusetts, U.S., with more than 80,000 employees across 100+ countries around the world. **GE Vernova's Gas Power** business engineers advanced, efficient natural gas-powered technologies and services, along with decarbonization solutions that aim to help electrify a lower carbon future.

GE Vernova's mission is embedded in its name – it retains its legacy, "GE," as an enduring and hard-earned badge of quality and ingenuity. "Ver" / "verde" signal



Earth's verdant and lush ecosystems. "Nova," from the Latin "novus," nods to a new, innovative era of lower carbon energy. Supported by the Company Purpose, *The Energy to Change the World*, GE Vernova will help deliver a more affordable, reliable, sustainable, and secure energy future. Learn more: <u>GE Vernova</u> and <u>LinkedIn</u>.

https://www.gevernova.com/ GE Vernova

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