Overview

Darwin LNG (DLNG) has been operating in the Northern Territory (NT) for 13 years, processing gas supplied from the Bayu-Undan field in the Timor Sea. The end of field life for Bayu-Undan is expected to occur in approximately 2022.

DLNG is currently in discussions with potential offshore candidates regarding the supply of an alternative source of gas to maintain operations at DLNG beyond the end of field life for Bayu-Undan. If approved, this will be the first LNG backfill project in Australia. A decision is expected in late 2019/early 2020. This Notice of Intent Fact Sheet addresses plans to extend DLNG operations for another 20+ years and the changes associated with switching to a new feed gas supply. A program of works to enable transition to a new feed gas and to extend DLNG plant life is referred to as the DLNG Transition Work Program.

DLNG Transition Work Program Scope Details

The DLNG Transition Work Program consists of three main work scopes; (1) Feed Gas Modifications, (2) Preservation and (3) Extending Plant Life. These are further detailed below. Associated pre-transition work scopes will also be undertaken and include installation of a new sanitary treatment plant, connecting the plant to the power grid, temporary offices, a warehouse building, preparation of equipment laydown areas and decontamination facilities.

This activity is expected to be carried out over an approximate 24-month period, dependent on timing of end of field life for Bayu-Undan and the development of the new offshore project. Preparatory work scopes may commence from early 2021 dependent on project approvals. The main work scopes are expected to commence in 2022.

(1) Feed Gas Modifications
Brownfield modifications are required for the plant to accept a new upstream feed gas. The primary modification required is replacement of the existing acid gas thermal oxidiser. The new unit will adopt current best practice technology to optimise performance reliability. Other modifications include amine system upgrades, installation of new analysers, replacement of valves and instruments, and decommissioning of the nitrogen rejection unit. Air dispersion modelling has been completed to confirm predicted emissions [NO\textsubscript{x}, SO\textsubscript{2}, CO, H\textsubscript{2}S] from feed gas changes remain below ambient air quality criteria.

(2) Preservation
Preservation scopes will enable the plant to be placed into ‘warm standby’ for an extended period, to ensure the plant can be restarted with the new feed gas supply without failures. This will include plant ramp down, purging, preservation and executing routine shutdown activities prior to plant restart. Preserved equipment will be unpreserved and re-commissioned prior to re-starting the plant.

(3) Extending Plant Life - Asset Integrity
An asset integrity maintenance campaign is required to refurbish and replace equipment at DLNG to extend the life of the physical asset. This includes insulation stripping, inspection, grit blasting, painting and re-insulation of piping and vessels; upgrades of instrument control and electrical systems; valve replacement and overhauls, and general equipment maintenance. This work is similar in nature to the planned maintenance ‘shutdowns’ that are carried out regularly at DLNG during normal operations.

(3) Extending Plant Life - Obsolescence
This scope of work involves the replacement or upgrade of obsolete process systems, transmitters, switches and valves, metering and analysers, electrical switchboards, distribution panels, chargers, telecoms, and rotating equipment (including processors, generators and pumps).
Darwin LNG Environmental Regulation context

The DLNG facility received initial primary approvals from the Commonwealth and NT Environment Ministers in 1998 following assessment of a Draft Environmental Impact Statement (EIS). In 2002 a revised proposal was submitted for a maximum 10 million tonnes per annum (MTPA) plant to enable future processing of natural gas from additional offshore fields where economically viable. This was assessed as a Public Environmental Review (PER) and was approved under the NT Environmental Assessment Act 1982 (EA Act).

DLNG operates under an Environment Protection Licence (EPL 217-01) and Exceptional Development Permit (EDP02/0015G), valid until November 2026. The DLNG Transition Work Program is within the scope and limits of the existing regulatory approvals for DLNG.

All activities associated with the DLNG Transition Work Program will be undertaken on an existing industrial facility and no material change to the design premise or land-use is required. Plant modifications will maintain and prolong current operations. No significant change in environmental impacts is expected during the DLNG Transition Work Program or future operations. All activities will be managed under established regulatory processes.

Notice of Intent

In the NT, actions or development proposals that have the potential to have a significant effect on the environment require assessment under the EA Act. The EA Act is administered by the NT Environment Protection Authority (NT EPA).

A Notice of Intent (NOI) is the mechanism by which the NT EPA will assess the DLNG Transition Work Program and future operations under the EA Act. An NOI is a relatively brief document that allows a reader to understand the scale and scope of a proposed activity, the environment in which it is proposed, and the potential environmental impacts associated with the proposal.

The NOI will assess changes associated with the DLNG Transition Work Program and future operations, and where changes are significant, assess the environmental impacts arising from the work or continued operations to 2050.

ConocoPhillips is preparing an NOI for submission to the NT EPA in Q3 2019. ConocoPhillips understands the importance of thorough, meaningful and ongoing consultation with relevant and interested stakeholders as part of its regulatory commitments and social licence to operate. If you have any queries or concerns about the DLNG Transition Work Program, please send them in writing to: DarwinLNG@conocophillips.com by 17 August 2019.

ConocoPhillips is working closely with stakeholders to address any concerns and consultation outcomes will be incorporated into the NOI submittal to the NT EPA. Up-to-date information regarding activities at DLNG is available on the ConocoPhillips website: http://www.conocophillips.com.au/what-we-do/our-projects-activities/darwin-lng/

Darwin LNG has a 24-hour community hotline. Please phone 1800 267 600 if you have any environmental or safety concerns about the facility.

Darwin LNG operates on Larrakia country. We acknowledge the Larrakia as the Traditional Custodians of the Darwin region, and pay our respects to Larrakia elders past, present and emerging.