

Press release

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Tianjin Southwest Picks Up Option for LPG Carrier Dual-Fuel Retrofits

Further two vessels bound for conversion in collaboration between MAN PrimeServ and CMS

The COSCO Shipping Heavy Industry (Guangdong) yard has announced that it will retrofit the main engines aboard two LPG carriers from the fleet of Tianjin Southwest Maritime Ltd., the Chinese liquefied-gas carrier operator. In doing so, it is exercising the option in a contract signed with MAN Energy Solutions's aftersales division, MAN PrimeServ, in October 2022 to similarly retrofit two LPG carriers to dual-fuel operation.

Accordingly, the individual MAN B&W 6G60ME-C engines aboard vessels, 'Gas Libra 'and 'Gas Scorpio', will be retrofitted to dual-fuel MAN B&W 6G60ME-LGIP units capable of running on LPG, to which end they are scheduled to enter drydock in January 2024. As with the previous two vessels, MAN PrimeServ will jointly carry out the work with CMS (CSSC Marine Service Co. Ltd.), the after-sales subsidiary of CSSC Marine Power Group.

Per Rud – Senior Vice President, MAN PrimeServ – said: "It's crucial to nurture partnerships to successfully pull off dual-fuel retrofit projects and we are very happy to collaborate with CMS on these – now – four vessel retrofits. Significantly, this will be our first time working with a licensee's own after-sales division; the after-sales market should know that MAN PrimeServ is open to working with partners in order to support shipowners globally. Our negotiations with CMS have concluded to our mutual satisfaction and will strengthen our partnership."

The taking up of the original contract's option also follows Oslo-listed BW LPG – the world's leading owner and operator of LPG vessels – announcement in June 2022 that it, under MAN PrimeServ's supervision, had converted the main engine of the 'BW Malacca' to dual-fuel running. The last such conversion for a series of 15 LPG carriers, all work was carried out at Yiu Lian Dockyards in Shenzhen, evidence of China's ability to successfully execute such retrofits.

Klaus Rasmussen, Head of Projects and PVU Sales, MAN PrimeServ, said: "Switching to low-carbon fuel is the most effective way to decarbonise the existing maritime fleet. In this respect, dual-fuel retrofits are an excellent device for shipowners to maintain their assets' value moving forward. Additionally, for Very Large Gas Carriers, their ability to operate off their own cargo makes for a very positive business case. Before the original signing of this contract, Tianjin Southwest had already ordered six vessels powered by ME-LGIP main engines and LPG is quickly becoming the de facto standard in this segment. Currently, we estimate that there are over 150 VLGCs with single-fuel engine technology that could benefit from conversion to LPG-running."

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Strong business case

Cost-wise, LPG is a better option than compliant fuel-oil with high lifetime-savings prospects. By leveraging LPG as a marine fuel, vessels benefit from savings due to lower fuel consumption and full dual-fuel flexibility, which guards against price sensitivity to post-2020 fuel-price fluctuations. Furthermore, the ability to use LPG cargo as a supplemental fuel source also reduces time and fees for fuel bunkering.

Harnessing LPG propulsion also translates into cleaner, more efficient engines that are cheaper to maintain. In addition, the fuel flexibility of dual-fuel engines ensures full redundancy for uninterrupted operations.

Compared to 2020-compliant fuels, using LPG as a fuel would reduce: SO_x by 99%, CO_2 by 15%, NO_x by 10%, and particulate matter by 90%.



The MAN B&W 6G60ME-C main engines aboard Tianjin Southwest's 'Gas Libra' and 'Gas Scorpio' will be retrofitted to dual-fuel MAN B&W 6G60ME-LGIP units capable of running on LPG

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