



L&T Press Release

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L&T HYDROCARBON UNVEILS HIGH-TECH SPOOL BASE FACILITIES

Set to execute a first-time in India deep water project for ONGC

Chennai, November 25, 2016: L&T Hydrocarbon Engineering Ltd., a wholly owned subsidiary of Larsen & Toubro unveiled high-tech spool base facilities at L&T's fabrication facility at Kattupalli, in Chennai today. These facilities are being employed to execute a prestigious Lump Sum Turn Key (LSTK) Contract that has been bagged from ONGC for a subsea installation by a consortium of J. Ray Mc Dermott S.A., Berlian McDermott & L&T Hydrocarbon Engineering Ltd. in international competitive bidding.

The contract is part of ONGC's integrated development of Deep Water Vashishta & S1 Fields on India's east coast. It is their first project, involving three subsea wells in depths ranging from 400m to 700m involving a daisy chain field architecture with subsea tie back to onshore terminal at Odalaveru through a dual 14" pipeline.

"L&T, down the years, has been known to make things that make India proud and we are proud to be involved in this project that is being done for the first time in India," said Mr. Subramanian Sarma, CEO and Managing Director, L&T Hydrocarbon Engineering. "It is also for the first time that such high-end technology required for deep water operations is being transferred and embedded in India through our consortium partners, McDermott. Apart from seeking more sustainable deployment of this high-end technology, a very positive fallout of this project is the degree of local skill development which augurs very well for the future."

Commenting on the occasion Mr. Arunabha Sen, Country Manager, McDermott Inc., said that these were early steps and that they were looking at a long-term association with the consortium.

"It is indeed a proud moment from an Indian perspective and wonderful to see what was conceptualized in 2011 is being realized today," said Mr. T K Sengupta, Director - Offshore, ONGC. "For our deep water campaign, this is a very significant step because we are going towards a gas-based economy for which it was very important to prepare ourselves to the future

challenges. It is also commendable that Kattupalli has geared itself to adopt this new technology and I am delighted with the pace and progress already achieved," he added. He expressed confidence in the ability of the consortium to deliver such a complicated project on schedule and commence production by mid-2017 and achieve full capacity of 2 billion cubic meters of gas per annum by end 2017.

This approximate 91 km of pipeline laying from onshore terminal to offshore deep water field involves 55 km of shallow water lay and 36 km of deep water lay using the spool lay method. The pipeline installation involves specialized welding, NDT (Non Destructive Testing) and demands the highest levels of fabrication expertise to ensure operating life of 25 years in a harsh marine environment. Very few companies in the world have the expertise to execute such projects on EPC basis and a project of such magnitude is being executed in deep water for the first time in India in the Eastern Offshore Fields of ONGC, which will set a benchmark in project delivery milestones, execution efficiency and excellence. This is a landmark project in line with the 'Make in India' and 'Skill India' policies of the Government with technology transfer from McDermott."

L&T's state-of-the-art modular fabrication facility at Kattupalli near Chennai offers both, scale and sophistication. Located just 200 nautical miles from the KG basin, with all-weather delivery, the Kattupalli yard is ideally suited for executing deep water projects in the region. The yard has over a kilometer of length - a prerequisite for installing a spool base and reeling facility for sub-sea pipelines. While this yard will develop as a hub for deep water work on India's east coast, it also supports L&T Hydrocarbon's shallow water EPC projects.

BACKGROUND

L&T Hydrocarbon Engineering, is a wholly owned subsidiary of Larsen & Toubro - a technology, engineering, construction, manufacturing, projects and services conglomerate with global operations. L&T Hydrocarbon Engineering offers 'design to build' engineering and construction solutions that serve the Oil and Gas sector around the world. McDermott International, is a leading global deep water EPCI services company with over nine decades of experience.

Larsen & Toubro is an Indian multinational engaged in technology, engineering, construction, manufacturing and financial services with USD 16 billion in revenue. It operates in over 30 countries worldwide. A strong, customer-focused approach and the constant quest for top-class quality have enabled L&T to attain and sustain leadership in its major lines of business for over seven decades.