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ADVANCING MODULARIZATION OF COIL-WOUND HEAT EXCHANGER EQUIPMENT

Global LNG demand continues to grow as a significant part of the world energy market. While projects require operational, schedule and capital efficiencies; modularization is a proven strategy that aims to increase the certainty around project cost and overall schedule by decreasing workload in the field. As accessible natural gas reserves are being developed, projects are either looking at expansions in costly areas or new projects in remote areas, both of which bring challenges concerning project viability. The modular execution model is ideal for phased capacity, mid- or large-scale LNG investments at a single or planned multiple plant locations. In this study, the development of fully modularized CWHEs for mid-scale and baseload LNG applications is investigated. This approach provides customers with:

(i) reduce and/or eliminate fieldwork at height

(ii) faster prefabricated heat exchanger modules

(iii) options for the incorporation of adjacent equipment (e.g.- separators) into the modules

(iv) optimized modules for logistics and reduced crane capacities for the construction site(v) provides discrete connection and hookup points per module at lower, more-accessible levels.

The pre-engineered module approach reduces the engineering effort needed between the equipment supplier, EPC, and customer, requires fewer interfaces for tie-points and model reviews, and allows fabrication at lower-cost module yards. It provides an opportunity to minimize cranes with long lead ..