



## Coastal Liquefaction Facilities

CLIENT - Excelerate Energy  
CONTRACTOR - TBC  
CONTRACT VALUE - Circa \$450M  
PROJECT DATE - 2010

GGP Consult have provided Civil, Structural and Marine Engineering services for two international floating liquefaction and offloading facilities. The work package also included the onshore civils and services.

GGP take a lead role and drive projects for our clients. From the initial select stage the analysis GGP undertake influence the facility positioning, layout, orientation, vessel approach, civils, structures and mooring.

Particular emphasis is placed on the mooring analysis, as during ship2ship transfer a dynamic passing vessel analysis is required. This is critical to ensure that the deflections are within a permissible envelope for the flexible hoses, gas arms and mooring equipment.

Planning the approach turning circle and berthing velocities, along with a review of the metocean conditions can ensure optimal positioning and orientation of the facility. This minimises the dredging and marine works.

GGP Consult have liaised with the American Bureau of Shipping (ABS) and the Federal Energy Regulatory Commission (FERC) to ensure a fully compliant facility and that best practice operating procedures are applied.

Mooring analysis, structural analysis and foundation design are all carried out by our Marine team, including civil infrastructure and services. The team also partners with Mechanical, Process, Electrical and Instrumentation Engineers to complete the project.

Installation procedures and schedules are produced incorporating all disciplines along with procurement of equipment, tender scope and RFQ production for installation contractors.