Real-time Current Measurement Systems

Metocean Services International (MSI, Australia) has completed the installation of three real-time current profile monitoring buoys offshore Curtis Island at Gladstone in Queensland, Australia, for Arrow Energy as part of a 3-year monitoring programme.

With a tidal range at site in the order of 4m and currents in excess of 2 knots already observed in the first week, the buoys will provide important real-time current profile data to assist with future planning as well as current vessel operations.

Each buoy comprising a 1.25m data buoy fitted with a TRDI current profiler as well as Satel radio and JouBeh iridium transmitters. Data is transmitted from each buoy via radio to a PC on site where it is displayed in real-time, as well as via satellite to MSI's offices where it is uploaded onto a password-protected website for the client to access. MSI monitors the incoming data to check that the systems are operating correctly, and a daily report is automatically e-mailed to the client's nominated distribution list.

During mobilisation, onsite operations were conducted by the MSI team without any incidents from a vessel supplied by MIPEC. Instrumentation and mooring servicing is planned on an initial three month cycle.

Data acquired will be used as part of development of the proposed Arrow LNG Plant on Curtis Island that will be supplied with coal seam gas (CSG) from Arrow's reserves located in the Surat Basin in south east Queensland and the Bowen Basin in central Queensland. Expected to produce up to 18 million tonnes per annum (mtpa) of LNG, and include the phased construction of up to four trains or processing plants, the Arrow LNG Plant has been declared a 'significant project' by the Queensland Government reflecting the importance of this project to national, state and local economies.

https://www.hydro-international.com/content/news/real-time-current-measurement-systems