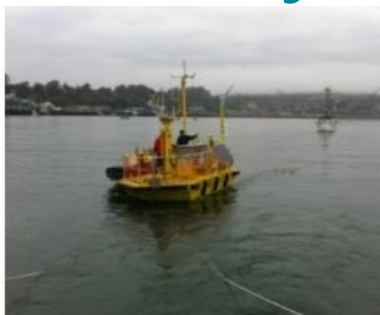


New Buoys for Mobile Wave Energy Test Facility



AXYS Technologies Inc. (AXYS), Canada, recently delivered an Ocean Sentinel buoy and TRIAXYS buoy to the Northwest National Marine Renewable Energy Center (NNMREC) at Oregon State University, USA. The delivered equipment is part of a mobile wave energy test facility that will be used by academic researchers and device developers to test wave energy technologies.

These new technologies will measure wave resources and assist in the study of the energy output and other environmental issues.

The Ocean Sentinel will provide a standardised, accurate system to compare various wave energy technologies, including systems that may be better for one type of wave situation or another, according to Sean Moran, ocean test facilities manager with NNMREC.

Moran explains that NNMREC has to find out more about which technologies work best, in what conditions, and what environmental impacts there may be. He adds: "We're not assuming anything. We're first trying to answer the question, 'Is this a good idea or not?' And if some technology doesn't work as well, we want to find that out quickly, and cheaply, and the Ocean Sentinel will help us do that."

The delivery of the Ocean Sentinel represents an important achievement by AXYS in the development of an advanced power and control monitoring buoy. AXYS engineers worked with NNMREC staff to develop this custom buoy system that interfaces with numerous custom control and monitoring devices, as well as basic meteorological and oceanographic parameters. The system also provides, real time communications that monitors all aspects of the system performance.

The Ocean Sentinel platform is based on a proven NOMAD 6m hull design with 4 large watertight compartments able to withstand the most severe oceanic weather. The base design allows for a high degree of flexibility and expansion capacity in system architecture and to allow incorporation of a variety of hybrid power solutions. Data from the buoys are collected by AXYS's proprietary onboard WatchMan500 data acquisition system and transmitted to a shore station by satellite and cell phone telemetry. In addition, this buoy also has an Automatic Information System (AIS) transmitter which transmits buoy position and environmental data to passing ships. Authorized users can access buoy status and environmental data from their remotely located base station.

The AXYS Data Management System (DMS) permits remote control and configuration for the entire buoy network, down to the individual sensor. The AXYS TRIAXYS directional wave buoy will be deployed separately from the Ocean Sentinel and will provide precision wave measurements to quantify the wave resources in the test facility local. AXYS also designed and provided a custom 3 point mooring and deployment procedures for the Ocean Sentinel.

In late July, AXYS technicians and engineers provided NNMREC personnel with the initial dockside system commissioning and training. On 19 August 2012, NNMREC personnel successfully deployed the Ocean Sentinel.

NNMREC will operate the facility which is a one-square-mile site located about two miles northwest of Yaquina Head Oregon in open Pacific Northwest Waters.