

RTsys Listens in on Tidal Turbine



The environment of the Sabella D10 tidal turbine, including underwater sounds, currents, wave, etc., is analysed using a sensor system developed by RTsys (France). Having been tested over the course of a year, between 2015 and 2016, Sabella D10 will be submerged once again in spring 2017 for further testing in the Fromveur Passage, off the coast of Brittany.

The system offered by RTsys enables the simple, reliable, remote use of a set of sensors for measurements such as current and wave measurements in addition to underwater video cameras and hydrophones. The objective is to better understand the parameters of the underwater environment to help optimise tidal turbine operation by assessing the way that it interacts with its environment as well as any impacts.

Sound Sources and Data Communication

For example, the hydrophones record different sounds: those of the underwater fauna, demonstrating its activity, but also those made by the tidal turbine, in order to better understand and manage it. The sensors are placed on and around the tidal turbine and the data is sent by a cable data acquisition station on the mainland, which enables the tidal turbine's environment and production to be monitored continuously, in real time.