

South Korea Researches Tidal Power

South Korea has suffered a set-back in its plan to be the first nation to trial commercial-sized power generation from ocean currents, with the first of its pilot turbines in place at Uldolmok, in the country's south-west. Researchers at the Korea Ocean Research and Development Institute chose the site because it has flows up to 12 knots, believed to be among the fastest in Asia. "The purpose of the power plant is to do some experiments under the most severe conditions," says KORDI president Yum Ki-dai. However, the project has been set back at least a year because during installation of the one-megawatt pilot plant, one of the two tug boats involved lost control. Borne along by the powerful current, the barge carrying the 1000-tonne rig rammed into a bridge, closing half of it for three months. The experiment was intended to study the structural stability and efficiency of helical turbines which adjust automatically to the changes in tidal flows. The South Korean Government began researching tide and tidal current power in 2000, and researchers hope to identify commercially viable technologies by 2010. Along with the Uldolmok pilot project, KORDI is also trying to improve the efficiency of more conventional barrage-type tidal power plants. The leading project involves building a power plant with a capacity between 240 MW and 260 MW at the entrance to Lake Sihwa by 2009, with another of as much as 520 MW being considered for Garolim Bay, both on the country's west coast.

[Source essa news]