

# **PPIWINDFLOAT 1** Wind turbine installation

## **Project description**

Principle Power Inc. contracted Bourbon Subsea Services to deploy & tension mooring lines, tow the WF1 floater and perform its hook up. In addition, the dynamic power cable was connected to the export cable, laid towards the floater and connected through I-tube. Principle Power Inc.

Location North of Portugal

50m WD

Duration August – October 2011

#### Resources

- Bourbon Liberty 228
- ObsROV Falcon
- Light diving spread

### Services

- Project Management & Engineering
- Procurement of installation aids
- Installation of 4 Mooring lines
- Towing and hook up
- Power cable installation

## **Challenges**

Windfloat 1 (2MW prototype) was the first windturbine with a floater based on semi-sub design. The installation was carried out in autumn, with adverse environmental conditions. Allocated budget was low.

## **Our solution**

Bourbon Subsea Services provided a turnkey solution inclusive of project management, detailed engineering, procurement of installation aids and installation services.

Marine asset utilisation was optimised with a single versatile DP2 vessel (80t BP Anchor Handling Tug vessel, Bourbon Liberty 228) fitted with ObsROV and used to perform all offshore tasks (mooring pre-lay and tensioning, towing, hook up and cable lay) on a minimal budget.







