

### CHANNEL ISLAND ELECTRICITY GRID PROJECT SUBMARINE CABLE SHORE LANDINGS

**Operator :** Channel Island Electricity Grid

**Client :** VDS Cable bv

**Location :** Guernsey - Jersey - France

**Water Depth :** 0 - 35 msw

#### PROJECT OVERVIEW

VDS Cable bv, a Dutch Submarine Cable Installation Contractor, was awarded the contract for the installation of 2 HVAC power cables and 2 (bundled) fibre optic cables by the Channel Island Electricity Grid. The submarine cables were installed between the Channel Islands Guernsey and Jersey, then on to mainland France.

The power cables were manufactured by ABB High Voltage Cables of Norway; the fibre optic cables were manufactured by Ericsson of Sweden. The VDS Cable Installation Vessel 'SEA SPIDER' was used for the installation and burial of the cables.

Due to large currents and tidal ranges, combined with restricted vessel access for the shore approaches, Seaflex was contracted by VDS Cable to supply their patented cable flotation system - SeaSerpent.

#### SEAFLEX INVOLVEMENT

Seaflex Ltd. supplied 2000m of SeaSerpent cable flotation system Type 2350/2/10 giving a linear buoyancy of 106kg/m. The SeaSerpent was supplied in 100m (16 off) and 50m (8 off) sections delivered on steel transport, deployment, recovery (TDR) drums. To complement the flotation system two pedestal deployment and recovery systems (DRS) were also supplied. One manual brake DRS was stationed on the CLV SEA SPIDER for controlled deployment and one hydraulic DRS was stationed with the beach party.

For the start up of the project at Havelet Bay, Guernsey, Seaflex personnel were present to set up and initiate the first shore approach. During this first approach the cable was deployed at 260m per hour, 600m of SeaSerpent in total, cable towed to shore and laid in position within one tide. During the project the SeaSerpent spread was successfully used for a total of four HVAC and four F/O landings.



#### PHOTOGRAPHS :

- 1 - Early morning SeaSerpent equipment load-out on to CLV SEA SPIDER off Cowes, Isle of Wight.
- 2 - SeaSerpent being attached to the HVAC cable showing Seaflex manual brake RDS.
- 3 - The HVAC cable and SeaSerpent being deployed at Havelet Bay.
- 4 - Small work boats are used to tow and position the cable.