

# Solution for Industries: General overhaul of two drilling platforms for Transocean

**Customer:** Transocean  
**Country:** USA  
**Project:** Sedco 702 & 706  
**Date:** 2006-2008



## Scope of Supply

- Matlab Model
- 9 Network studies
- 8 SIPLINK main converter (1,8 kV)
- 8 SIPLINK auxiliary converter (1,0 kV)
- 32 Converter transformers (Geafol type)

## Requirements

Transocean together with Siemens E D MV 3 developed a new power supply system for the drilling rigs Sedco 702 and 706 that will increase the availability of the thruster drive units and reduce operating costs.

## Solution

Siemens developed a new solution for the two drilling platforms based on SIPLINK (Siemens Multifunctional Power Link), a flexible direct current (DC) network link in which two converters are interconnected by a DC link and are each connected to two independent power networks. In this way SIPLINK connects the two 11-kV medium voltage sub networks on board the drilling platforms via the DC link. If a fault occurs in one of the two sub networks, the DC link ensures that the drive units are supplied with power from the other 11-kV sub network.

## Highlights

The Siemens solution not only increases the reliability and availability of the drive units but also offers savings of up to a third of the fuel costs for the diesel generators accompanied by a reduction in CO<sup>2</sup> emissions. Generator maintenance costs can also be cut because the generators can run at a considerably more effective operating point controlled via a fail-safe energy bus.