

**Solar / Wind / Diesel Hybrid project North Sea**

Hollandia in cooperation with Tss4U recently installed and successfully commissioned a Tss4U designed, engineered and supplied solar/wind/diesel hybrid power system on the “Newfield Grove 49/10a” platform.

In this project solar panels and wind turbines are chosen for the renewable energy supply due to their maturity and proven technology. Another reason is the complementary output provided by these three forms of energy under seasonal variation in weather conditions. During drilling activities, the diesel will recharge the batteries, while the solar modules are covered with sheets.

The scope of the solar/wind/diesel hybrid power system for a continuous 1300 Wc power in a explosion proof offshore environment consists of:

- 2 pcs. Wind Turbines of 2.5 kW each (length of towers is different to minimize interference between the turbines).
- 72 pcs. Solar Modules of 85 Wp each
- 9600 Ah/24Vdc Battery storage
- 400A/24Vdc external charger
- Charge control and data monitoring systems

The solar modules and wind turbines are installed on the upper deck of the platform and the control package is installed in a shelter at a lower deck.

