



## Apache Forties Field

Apache is currently one of the world's top independent oil and gas exploration and development companies. Their goal is to provide oil and natural gas for the purpose of advancing the quality of human lives.

Because of their common values it's of no surprise that HPI is working with Apache to upgrade their HSDE DIGICON based Ruston TB4000 Turbo-Compressor Packages on the Apache Forties Field Platform, which is located in the United Kingdom sector of the North Sea. The upgrade consists of a replacement control panel for the unit. Compressor capacity and anti-surge controls will be incorporated into the new units.

The new control panel was designed specifically to fit where the old HSDE DIGICON equipment was located. A HMI is located on the control panel door, which provides the user with all the necessary control and monitoring functionality. This HMI was expanded to provide additional diagnostics to improve the fault finding and troubleshooting capabilities of the system.

The upgrade comes with a FlexLogix system which provides a distributed approach to industrial control. This system is a member of Logix Platforms and part of Rockwell Automation's Integrated Architecture. This means Apache will get the maximum in control integration, program re-use, communication flexibility, and overall ease of use. By using FlexLogix, Apache will spend less on setup, operation, and maintenance.

The upgrade comes with a 1100 controller, which is used to protect the system speed and over-temperature. Each comes with 10 digital digital outputs, and 2 inputs.



MicroLogix a device from over-controller inputs, 6 analog

HPI also provides a new enclosure for the power supply module. The new 19" enclosure will provide recessed mounting for the MCB's and a new Perspex hinged door on the front to provide better protection and prevent accidental operation of the MCB's. This enclosure fits into



the same location as the old MCB's, and they will be refitted into the new enclosure.

As technological leaders in the supply of turbo-generator services, for both the OEM and retrofit markets, HPI use professional project teams with extensive experience in design of hardware and software, manufacture, testing, installation, commissioning and supporting of turbine systems. Former key VT Controls and HSDE staff with over 150 cumulative years experience in the industry make up the HPI engineering, project, organization and management teams; they have been proven through many years of providing turbine retrofits and are formed of highly qualified personnel who fully understand the demands of this specialized industry.