

OPF – ON-SHORE PROCESSING FACILITIES EXPANSION



Sector: Oil&Gas

Year: 2010-2011

Place: Chayvo, Sakhalin Island (Russia)

Direct Client: Renco Spa

Final Client: Exxon Neftegas Limited

OBJECTIVES

The COE project consisted in the expansion of the **Chayvo On-shore processing facilities**, in the framework of the Sakhalin 1 project. A first phase of the Project took place in 2005.

MAIN ACTIVITIES AND SOLUTIONS

The activity carried out by Trillini Engineering was divided into 2 main parts:

- 1- **Engineering, procurement and prefabrication** of two buildings, namely the Local Equipment Room and the Power Generation Building;
- 2- The support to the in site installation of the engineered materials, purchased by the main contractor in the first phase of the project.

LER – Local Equipment Room

- Basic design of HVAC system, of the electrical rooms, of the prefabricated container designed to accommodate the switchgear and the instrumentation for a future gas turbine installation;
- Coordination of the interfacing between the various vendors during the prefabrication phase;
- DCS + SIS – Distributed Control System;
- UPS – Uninterruptible Power Supply;
- Quadri elettrici MV-LV;
- ECS – Electrical Control System;
- Turbine;
- Support for the testing and start-up activities of the HVAC and of the electro-instrumental systems, manufactured, in Italy, in Franzisella – Casciago (VA).

PGB – Power Generation Building

- Design of the HVAC and of the pressurization systems for the buildings hosting the two 6 MW gas turbines;
- Technical specifications, coordination of the purchasing activities and support for the FAT of the purchased equipment.

Features:

- Design for saline environments and for a range of working temperatures of -44° to +32°C;
- Control units with a SIL2 reliability (LER and PGB);
- ATEX installations (PGB);
- Basic and detailed design;
- Drafting of purchase specifications;
- Support to the purchase department and technological uniformity of economical offers;
- Final acceptance tests (FAT);
- Site preparation activities;
- Standards: SNIP, GOST-R GOST-R + Fire.

