Equipment and packages projects

2010

September 2010 - Siirtec Nigi S.p.A. has been awarded two contracts by Saipem S.p.A. to design and supply 8 packages, each including Burner, Reaction Furnace, Steam Drum, Waste Heat Boiler, and 20 Sulphur Condensers. This equipment represents the core of the sulphur Claus unit. It will be installed at the Shah Gas Field in the United Arab Emirates. The field units will process around 1 billion standard cubic feet per day (SCFD) of sour gas to produce around 540 million SCFD of gas suitable for consumption.

Siirtec Nigi's scope of work includes the supply of know-how, design and supply of the equipment together with the relevant process guarantees. In addition, Siirtec Nigi will provide site services and specialists for commissioning and start-up.

This supply is a unique solution since it has no world analogues in terms of capacity. The total amount of acid gas fed to the equipment contains nominally 10,000 tons per day of sulphur (the world's largest sulphur recovery plant). There are four identical trains, each designed to process 25% of the total capacity. Each train consists of two parallel packages as described above.

Siirtec Nigi has been selected as exclusive specialized engineering partner able to provide its long-lasting know-how in the field of sulphur recovery (that dates back to the 70's), while supplying comprehensive engineering and performance guarantees, other than competitive price and timely and high-quality project implementation.

July 2010 - Iplom Italy awards Siirtec Nigi with the process study and the supply of a new Oxy Burner for Busalla Refinery, Italy.

July 2010 - Kawasaki Plant Systems Japan awards Siirtec Nigi with the thermal and mechanical design, procurement and fabrication of Multi Tube and Double Pipe Heat Exchangers for Ammonia and Urea Plants in Mary, Turkmenistan.

July 2010 - Siirtec Nigi is awards Siirtec Nigi with the design, procurement and fabrication of Finned Tubes for Ecopetrol, Colombia.

June 2010 - Enel Italy awards Siirtec Nigi with the engineering and site assistance of the new steam/condensation system for the Torrevaldaliga Nord Plant, Italy.

June 2010 - Eni Italy awards Siirtec Nigi with the engineering and site assistance of the partial revamping of Internal Refractory Furnace for the Taranto Refinery, Italy.

June 2010 - Eni Italy awards Siirtec Nigi with the design, procurement and fabrication of two Reaction Furnace and Waste Heat Boiler Packages to be installed in the Refinery of Sannazzaro as part of the Sannazzaro Est Project. Each package has the capacity to treat 80 tons per day. The Reaction Furnace and Waste Heat Boiler Packages are the core equipment of the Sulphur Claus unit. Siirtec Nigi's scope of work includes the supply of technology, and equipment. In addition, the company will also provide services for erection supervision and start-up activities. The award follows highly competitive international tender over several months. Siirtec Nigi's bid has been selected as it best matched the customer's needs in terms of comprehensive engineering, pricing conditions and the guarantees of timely and high-quality project's implementation.

April 2010 - Api Italy awards Siirtec Nigi with the engineering and site assistance of the boiler repair for the Falconara Refinery, Italy.

April 2010 - Tps Germany awards Siirtec Nigi with the design, procurement and fabrication of Finned

Tubes.

March 2010 - Api Italy awards Siirtec Nigi with the material supply for the Claus Burner Revamp for the Falconara Refinery, Italy.

February 2010 - Midor Refinery Egypt awards Siirtec Nigi with the design, procurement and fabrication of Tank Heaters.

January 2010 - Api Italy awards Siirtec Nigi with the engineering and site assistance of the Claus Burner Revamp for the Falconara Refinery, Italy.

2009

December 2009 - Galp Energia Portugal awards Siirtec Nigi with the design, procurement and fabrication of Oxygen Enriched Air Claus Burner for Sines Refinery Expansion, Portugal.

December 2009 - Hanil Heavy Industries Korea awards Siirtec Nigi with the design, procurement and fabrication of Claus Burner for IGC, Iran.

December 2009 - Tps Germany awards Siirtec Nigi with the design, procurement and fabrication of Finned Tubes.

November 2009 - BAGCR JV Iran awards Siirtec Nigi with the thermal and mechanical design, procurement and fabrication of Multi Tube and Double Pipe Heat Exchangers for the Bandar Abbas Refinery, Iran.

November 2009 - Hellenic Petroleum Greece awards Siirtec Nigi with the thermal and mechanical design, procurement and fabrication of Bayonet Heat Exchangers for the Thessaloniky Refinery, Greece.

November 2009 - Saipem Italy awards Siirtec Nigi with the Process Study of New Operating Condition of the Existing Claus Tail Gas Incinerator for ENI Val d'Agri Refinery, Italy.

September 2009 - Ehsan JV Iran awards Siirtec Nigi with the design, procurement and fabrication of Degassing Package for the Tehran Refinery, Iran.

September 2009 - Api Italy awards Siirtec Nigi with the site assistance and maintenance for their Claus Unit in the Falconara Refinery, Italy.

September 2009 - Tamoil Raffinazione Italy awards Siirtec Nigi with the engineering for Sulphur Pit Upgrading for the Cremona Refinery, Italy.

July 2009 - Hellenic Petroleum Greece awards Siirtec Nigi with the thermal and mechanical design, procurement and fabrication of Multi Tube and Double Pipe Heat Exchangers for Thessaloniky Refinery, Greece.

July 2009 - Genesis Oil & Gas Consultants UK awards Siirtec Nigi with the Process Study for Debottlenecking of two existing MEG Regeneration Packages to be installed in Port Said, Egypt.

June 2009 - IES Italy awards Siirtec Nigi with the engineering services for their SRU Plant in Mantova Refinery, Italy.

January 2009 - Sarp Consortium China awards Siirtec Nigi with the design, procurement and fabrication of Instrumentation & Piping for Thermal Reactors Packages for the Shazand Arak Refinery, Iran.

2008

August 2008 - Enppi Egypt awards Siirtec Nigi with the design, procurement and fabrication of Water

Bath Heater Package for Total E&P Yemen.

July 2008 - Sarp Consortium China awards Siirtec Nigi with the design, procurement and fabrication of Degassing Package for the Shazand Arak Refinery, Iran.

July 2008 - Sarp Consortium China awards Siirtec Nigi with the design, procurement and fabrication of Sulphur Condensers and Tail Gas Treatment Waste Heat Boiler for the Shazand Arak Refinery, Iran.

June 2008 - Sarp Consortium China awards Siirtec Nigi with the design, procurement and fabrication of Claus Thermal Reactor Burners and Engineering Services for the Shazand Arak Refinery, Iran.

January 2008 - Sarpom Italy awards Siirtec Nigi with the engineering services for the Revamping of the SRU Plant of the Trecate Refinery, Italy.

January 2008 - Eni Italy awards Siirtec Nigi with the engineering services for the Revamping of the Sulphur Burner of the Venice Refinery, Italy.

January 2008 - Technip Italy awards Siirtec Nigi with the design, procurement and fabrication of Claus Thermal Reactor Burner for the Barrancabermeja Refinery, Colombia.

2007

December 2007 - Tecnicas Reunidas Spain awards Siirtec Nigi with the thermal and mechanical design, procurement and fabrication of Multi Tube and Double Pipe Heat Exchangers for Saudi Kayan Petrochemical Co. in Saudi Arabia.

December 2007 - Infineum Italy awards Siirtec Nigi with the engineering and site installation of the Refractories for their SRU Plant.

April 2007 - Statoil Asa The Netherlands awards Siirtec Nigi with the design, procurement and fabrication of Thermal Incinerator and Claus Packages for the Mongstad Refinery, Norway.

February 2007 - Apisoi Service Italy awards Siirtec Nigi with the engineering services for the Revamping of the Sulphur Burner.

March 2007 - JGC awards Siirtec Nigi the design (thermal and mechanical), procurement and fabrication of eighteen fully welded-up multi-tube hairpin heat exchangers in oxygen service and six multi-tube heat exchangers in general service. The multi-tube hairpin heat exchangers will be installed at the Qatar Shell GTL Plant within Raf Laffan Industrial City. Design, engineering and fabrication is based on TEMA Standards and Shell DEP's.

2006

June 2006 - Morocco: Saipem, on behalf of Samir (Societe Anonyme Marocaine De L'industrie Du Raffinage), awards Siirtec Nigi the design, procurement and fabrication of the major equipment of two parallel Claus Units, defined as Train 1 and Train 2 of the Sulphur Recovery Unit (SRU) to be installed at the Mohammedia Refinery, Morocco. The SRU is part of the refinery upgrade project designed to enable the refinery to meet future domestic product demands for refined products and to manufacture products suitable for export to European and other markets. Each train consists of a reaction furnace combustion chamber, reaction furnace burner, waste heat boiler and steam drum including all relevant accessories and instrumentation. The purpose of the Sulphur Recovery Unit (SRU) is to convert the hydrogen sulphide contained in the acid gases from the Amine Regeneration Unit (ARU) and the Sour Water Stripper (SWS) into liquid sulphur. Train 1 and Train 2 are two 100% parallel Claus units, each designed to produce 253 t/d of liquid sulphur from the processing of the design acid gas feeds, at a minimum 98.2% sulphur recovery efficiency, SOR.

March 2006 - Iran: Eni Iran awards Siirtec Nigi the design, procurement, fabrication and technical assistance for commissioning and start up activities of three identical glycol regeneration packages. The packages will be installed at the Darquain oil field - Second Stage Development Project - located in Iran's Southern province of Khuzestan. According to the strategy agreed with the client, Siirtec Nigi will be responsible for packages fabrication using qualified local workshops. In the Darquain plant there are three production trains to treat oil and associated gas coming from production wells. In each train the produced gas is compressed, cooled and dehydrated by means of dehydration contactors before re-injection to disposal wells by re-injection gas compressors. Each regeneration package is

designed to operate with a glycol circulation flowrate of 4000 kg/h (including an over design of 20%) of produced lean TEG, with a turndown of 1600 kg/h to allow operation flexibility. The regeneration packages are designed to normally operate without using stripping gas to reach lean glycol concentration of 98.5% wt. However, stripping a stripping column is installed for each package for future operation flexibility when a lean glycol concentration of 99.9% wt will be required.

January 2006 - Kuwait: SK Engineering & Construction awards Siirtec Nigi the supply of ten skid-mounted desalter feed heaters. Each unit will be installed within the relevant gathering centre located in East Kuwait and will consist of a water bath heater fitted with vertical expansion drum, main oil heating coil inside the water bath, fuel gas heating coil and two desalter heater blowers with all relevant skid-mounted accessories. Purpose of the desalter feed heater is to feed the desalter unit with crude oil at a constant temperature of 76.7?C. The expected design oil flow rate is 321339 Kg/h at the minimum temperature of crude (61.7?C).

2005

September 2005 - Kazakhstan: Agip KCO awards Siirtec Nigi the design, procurement and fabrication of the Fuel Gas Treatment modular unit. The unit will be installed offshore on the Riser Island of the Kashagan Field Development - Experimental Programme, located in the North East Kazakhstan Sector of the Caspian Sea. The unit will treat sweet gas imported from the onshore process facilities via a trunk line to provide fuel gas for all the offshore facilities. Special features of the plant include equipment design life of 40 years and unit operation under arctic conditions with zero discharges.

May 2005 - Iran: Eni Iran awards Siirtec Nigi the oil separation skids and associated heat exchangers for the Darquain oil field - Second Stage Development Project, located in the Southern province of Khuzestan. In an agreed strategy with the client to maximise local content, Siirtec Nigi will be responsible for all the equipment fabrication and skid assembly in their entirety in Iran using qualified local workshops. The Second Stage Development Project will increase the production of oil from the present 55,000 bpd to 160,000 bpd. Eni operates the project on behalf of NIOC.

2003

July 2003 - Libya: Siirtec Nigi is awarded the supply of major equipment for the three sulphur recovery units on the Mellitah project. That followed the completion by Siirtec Nigi of the FEED packages for the identical trains based on its proprietary technology. The award for equipment is made by the winning JV comprising Snamprogetti, ABB Lummus and Hyundai. The major equipment include the Claus thermal reactor, the waste heat boiler fitted with the steam boiler and the thermal incinerator fitted with the combustion chamber and the related burners, the heat recovery ends and

the stack.

2001

August 2001 - Italy: IES refinery, located in Mantua, awards Siirtec Nigi the supply of a skid mounted hydrogen recovery unit based on membrane separation technology to a design provided by Air Products. The scope of the skid is the recovering of at least 95% of the hydrogen held in a stream coming from the refinery hydrodesulphurization unit. The recovered hydrogen is recycled to the HDS unit while the residue gas is routed to the fuel gas header.

May 2001 - Iran: Siirtec Nigi has completed the delivery of basic design package and critical equipment specifications to Sinopec Engineering Inc. of China for revamping the sulphur recovery units of Tehran and Tabriz refineries in Iran. The revamp is part of the Caspian Sea Republics' Oil Swap (CROS) project awarded on buy-back basis by the National Iranian Oil Company to the SVF Consortium (Sinopec Engineering Inc., Vitol SA and Federal Asia Co). The CROS project involves the provision of storage & blending facilities at the Caspian port of Neka, Iran and blending facilities at Rey terminal near Tehran. It also includes the construction of other process units and modifications of Tehran and Tabriz refineries. The refineries will be then able to process the crude oil coming from the Republics located around the Caspian Sea, such as Turkmenistan, Kazakhstan and Azerbaijan.

1999

March 1999 - Egypt: Petrobel has awarded Siirtec Nigi a contract for engineering, procurement and fabrication of two modular glycol regeneration systems for Baltim East Field Development. DEG is injected in the sealines carrying natural gas from the field to prevent hydrate formation. The plant supplied by Siirtec Nigi will regenerate the DEG so it can be reused.