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Main news

LNG: Processing

- Chevron Corp signed agreements with Shell Development (Australia) to bring Shell into the Wheatstone LNG project as a natural gas supplier and equity participant. Shell will assume an 8% participating interest.

LNG: Supplies- Imports - Exports

- Santos and Origin Energy announced that Australia's liquefied natural gas exports are set to jump from around 20 million tonnes a year now to about 60mt by 2017 and, quite possibly, 100mt by 2020.
- Chief Executive of Santos Ltd said recently that Japanese utilities will boost demand of liquefied natural gas by about 10% in the coming years to fill a gap in their energy supply left by the closure of nuclear power plants.

LNG: Storage

- South Hook Gas has signed a new deal giving ConocoPhillips access to spare capacity at the South Hook liquefied natural gas import terminal.

Natural Gas: Production

- Technip received a contract from RWE Dea for the development of the Clipper South gas field in the North Sea.
- Eni said that the Perla discovery in the Gulf of Venezuela holds "significant amounts of gas reserves" that could enter production by 2013.

Natural Gas: Reserves

- Netherland Sewell & Associates said that the Leviathan prospect off Israel's coast could reach as much as 21.1 trillion cubic feet.

Natural Gas: Processing

- Samsung Engineering inked contract for the Shaybah NGL project. The complex will produce 750,000 barrels of oil per day, process gas of 2,400 Mnsf/d and recover 200,000 barrels of NGL per day.

Natural Gas: Supplies- Imports - Exports

- Sonatrach signed agreements to supply Cepsa, Endesa, Iberdrola and GDF Suez with a total of 8.0 billion cubic metres of natural gas a year with a term of 20 years.
- The Standing Committee of National Assembly on Petroleum and Natural Resources has been informed that the country is facing the shortfall of 2.09 billion cubic feet per day of gas which would be extended to 6 bcf by 2020.

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LNG

PROCESSING

AUSTRALIA: Planned project – Agreement – CNR50/6/1

Chevron Corp signed recently agreements with **Shell Development** (Australia) to bring Shell into the **Wheatstone LNG project** off the coast of Western Australia as a natural gas supplier and equity participant. **Shell will assume an 8% participating interest** in the Wheatstone and Iago natural gas fields in the Chevron-operated permits WA-253-P, WA-17-R and WA-16-R, located offshore northwest Australia.

The Wheatstone and Iago fields will supply Trains 1 and 2 of the Wheatstone project. Shell will also assume a 6.4% participating interest in the project facilities and Chevron will remain the operator of the project with 73.6% stake. Apache Corp will hold a 13% interest in the Wheatstone project, while Kuwait Foreign Petroleum Exploration Co will hold a 7% interest. The first phase of the Wheatstone project consists of two LNG processing trains with a combined capacity of 8.9 million tonnes per annum and a domestic gas plant. (April 11, 2011)

PAPUA NEW GUINEA: Planned project – Agreement – CNR50/6/2

FLEX LNG announced recently that agreements have been executed with **InterOil, Pacific LNG, LNGL and Samsung Heavy Industries** for an **FLNG project** that would liquefy natural gas from the onshore **Elk and Antelope gas fields** in the Gulf Province in PNG. Commencement of operations is targeted for 2014. FLEX LNG has already completed the generic Front-End Engineering and Design in 2009 and the project specific FEED is targeted to start in May 2011, with the parties to work towards reaching a final investment decision before the end of 2011. FLEX

LNG and Samsung Heavy Industries will be responsible for the design, engineering, construction and commissioning of the FLNG vessel. FLEX LNG will also be joint operator of the FLNG unit together with LNGL, which is a joint venture between InterOil and Pacific LNG. The FLNG vessel is expected to be moored alongside a jetty, which will be shared with LNGL's land-based LNG facilities, and have a nominal production capacity of close to 2 million tons of LNG per annum and to process an estimated 2.25 trillion cubic feet of gas over a firm 25-year period. (April 11, 2011)

TRANSPORTATION-DISTRIBUTION

SOUTH Korea: Engineering – Agreement – CNR50/6/3

Samsung Heavy Industries Co., received recently orders to **build six liquefied natural gas carriers**. Samsung Heavy will build four ships for Golar LNG Energy Ltd. (LNG) and two for a customer that wasn't identified, the company said. (April 11, 2011)

SUPPLIES - IMPORTS - EXPORTS

AUSTRALIA: Production – Forecast – CNR50/6/4

Santos CEO David Knox and Origin Energy CEO Grant King said recently that Australia's liquefied natural gas exports are set **to jump from around 20 million tonnes a year now to about 60mt by**

2017 and, quite possibly, 100mt by 2020. Mr Knox said Australia had significant advantages, although selling LNG globally was "very competitive". Mr Knox added: "We're selling to countries that don't have emissions schemes, so we can't pass on a carbon price". (April 7, 2011)

AUSTRALIA to JAPAN: Gas supply – Forecast – CNR50/6/5

David Knox, Chief Executive of **Santos Ltd** said recently that **Japanese utilities will boost demand of liquefied natural gas by about 10% in the coming years** to fill a gap in their energy supply left by the closure of nuclear power plants. Big Japanese LNG buyers are "approaching us and others, the sellers, to fill that gap" in their energy supply" he said. "And we would envisage that gap would go for a number of years, three or four years anyway. And effectively they're going to be asking for 10% more LNG supply for the next

few years," said Knox. The long-term impact of events in Japan could be very significant for the LNG industry if some nuclear power plants aren't built around the world, Knox said. (April 7, 2011)

VIETNAM: Gas demand – Forecast – CNR50/6/6

Vietnam's **2016-2025 gas development plan**, recently approved by the government, gives priority to LNG imports and cutting LPG imports eyeing higher domestic output instead. The country will "speed up negotiations with foreign suppliers and infrastructure construction to import LNG for domestic demand," the government said in a document. Under the plan, the first LNG import terminal will be built in the southern Vietnam, followed by a second terminal in the north and a third one in the central part of the country. PetroVietnam Gas General Director Do Khang Ninh said the company would submit a proposal on the location for the first LNG import terminal to the government in May 2011. It will

have an annual capacity of about 3 billion-5 billion cubic meters in the first phase, which is expected to be complete by 2015, and be expanded to 7-10 Bcm in the second phase from 2016-2025, the document showed. **Vietnam is also eyeing a hike in natural gas output to 14 Bcm/year by 2015 and 15-19 Bcm/year by 2025.** Vietnam produced nearly 9.4 Bcm of gas in 2010. The 10-year plan envisages the development of offshore and onshore gas pipeline systems especially in the south, where demand is the highest. The domestic gas market is expected to grow to 17-21 Bcm/year by 2015 and 22-29 Bcm/year by 2025. The power sector will continue to be the main consumer, accounting for around 70-85% of the total gas output, the document showed. (April 8, 2011)

STORAGE

CHINA: Planned project – Agreement – CNR50/6/7

China National Offshore Oil Corporation inked recently an **agreement with Tianjin municipal government** on jointly building a liquefied natural gas terminal. Yu Rumin, chairman of Tianjin Port Co. said that the project would include a LNG receiving wharf and a processing station with an annual **handling capacity of 3 million metric tons of LNG** imported from the Middle East. China's LNG output hit 9 million metric tons in 2010, and is expected to reach 19 million tonnes in 2011, according to estimation made by the Research Institute of Economics and Technology of CNPC. (April 6, 2011)

INDIA: Planned project – CNR50/6/8

According to a report, **Hiranandani Group** is planning to set up an **8 million tonne liquefied natural gas terminal at Dighi port in Maharashtra** for captive use at its upcoming power plants. Darshan Hiranandani, director, Hindustan Electricity Generation said that of the 8 million tonne, the company will keep 40% for our captive use. (April 11, 2011)

INDIA: Planned project – CNR50/6/9

Paradip Port, one of the major ports in Orissa, recently embarked upon an ambitious **plan to expand its cargo handling capacity** from the existing 76 million tons to 237 million tons by the end of 2020. The proposed addition in capacity included 22 Million tons for Oil by Indian Oil

Corporation through single point moorings, 75 million tons for iron ore and coal in Western dock, 20 million tons for BOT coal and iron ore berths, **20 million tons for LNG terminal** and POL and 15 million tons in one oil jetty and multipurpose berth. (April 4, 2011)

INDIA: Planned project – Partnership – CNR50/6/10

Amitava Sengupta, director (finance) of Petronet said recently that **Petronet LNG** is looking at the possibility of **setting up a LNG terminal in a partnership with GAIL (India) Ltd.** "We have commissioned a study on the probability of an east coast terminal. The report is expected by the end of May" he said. He added "the initial plan was to go alone for the east coast terminal, but now GAIL has expressed its interest to become our partner. We have not decided as yet ... much would depend on the feasibility study".

The terminal may be floating or onland. The terminal may have an initial capacity of 5 million tonnes, sources said. Petronet is also in the process of expanding its Dahej (Gujarat) terminal to 13 million tonnes through a second jetty and may raise the capacity to 18 million tonnes by 2014-15, Sengupta said. (April 3, 2011)

PHILIPPINES: Planned project – Partnership – CNR50/6/11

InterOil Corporation announced recently that **InterOil and Pacific LNG Operations Ltd.**, have signed a **nonbinding memorandum with Energy World Corporation Ltd.** which has a permit to construct an LNG Hub Terminal and a 300MW combined cycle gas turbine (CCGT) power plant located on Pagbilao Grande Island, Philippines, **to negotiate taking an ownership interest and establish an associated downstream gas sale, purchase, transmission and distribution services company.** The LNG Hub Terminal is designed to be located adjacent

to an existing power plant and consist of facilities for unloading, storage, regasification, and processing of LNG and/or regasified LNG of 1 bcf per day. The CCGT power plant is being designed to consist of 2 x 150MW modules and planned to be built in two phases. A key basis for exploring the partnership is that the CCGT power plant could be the anchor buyer of the proposed PNG EWC Joint Venture LNG facility, sourcing up to 500,000 tonnes per annum. The gas distribution services company would be established to purchase, transmit, distribute and sell LNG and/or regasified LNG on a wholesale or retail basis to the Philippine gas market. (March 23, 2011)

UNITED KINGDOM: Capacity – Agreement – CNR50/6/12

South Hook Gas said recently that it has signed a new deal giving **ConocoPhillips access to spare capacity at the South Hook liquefied natural gas import terminal.** "It's a master framework agreement that has been signed, whereby ConocoPhillips can utilise South Hook LNG terminal for regasification services when capacity is available" said a South Hook Gas spokesperson. "The nature of the agreement is totally flexible, so there are no set values or amounts". (April 7, 2011)

WORLD: Engineering: Agreement – CNR50/6/13

Höegh LNG said recently that it has entered into a Letter of Intent with **Hyundai Heavy Industries** for the delivery of **up to six Floating Storage and Regasification Units (FSRUs).** Höegh said the FSRUs are based on the shipping line's in-house design, providing 170,000 m³ storage capacity as well as flexible regasification capacity. (April 7, 2011)

NGL

TRANSPORTATION-DISTRIBUTION

UNITED STATES: Planned project – Open season – CNR50/6/14

Enterprise Products Partners L.P. affiliate, Mid-America Pipeline Company, LLC announced recently the **start of a binding open season** to seek shipper support for a proposed expansion of the **Rocky Mountain portion of its natural gas liquids pipeline system.** Originating in the Rocky Mountain Overthrust and San Juan Basin oil and gas production areas, the 2,793-mile pipeline extends to Enterprise's Hobbs fractionator in Gaines County, Texas. At the Hobbs facility, the

MAPL system links to the Seminole Pipeline. Depending on shipper response to the open season, the expansion project can be designed to add 45,000 BPD to 85,000 BPD of incremental annual average capacity to the system to accommodate growing production in the region. The Rocky Mountain portion of the MAPL system currently has a capacity of 275,000 BPD. Provided there is sufficient shipper commitment, the additional capacity could be available as soon as the third quarter of 2014. (March 29, 2011)

STORAGE

UNITED STATES: Planned project – Expansion – CNR50/6/15

Enterprise Products Partners L.P. announced recently that it will **expand** the partnership's **natural gas liquids import/export terminal on the Houston Ship Channel**. The expansion project is expected to nearly double the fully refrigerated export loading capacity for propane and other NGLs at the facility to more than 10,000 barrels per hour, while enhancing its ability to load multiple vessels simultaneously. The expansion is expected to be completed in the second half of 2012. The expansion of the partnership's NGL fractionation facilities at Mont Belvieu complements the terminal's export capabilities. Among the critical services demanded by Enterprise customers is the ability to handle propane containing less than 2.5 percent ethane. (March 29, 2011)

GTL

PROCESSING

QATAR: Ongoing project – Gas supply – CNR50/6/16

Qatar Petroleum and Shell announced recently the **first flow** of dedicated **offshore gas** into the **Pearl GTL** plant located in Ras Laffan Industrial City. Sections of the Pearl GTL plant will be started up progressively over the coming months. (March 24, 2011)

UNITED STATES: Regulation – CNR50/6/17

A recent bill introduced in the **Alaska State Legislature** would grant \$475 million in state investment tax credits toward development of plants converting natural gas, coal or biomass to liquid products. The \$475 million **credit against state corporate income tax liability** would be for each plant built in Alaska, although the credit

cannot exceed 60 percent of the total cost of the facility. The legislators are interested in encouraging gas to liquids or similar projects as an alternative to a large-diameter natural gas pipeline being pursued by TransCanada Corp. and the three North Slope gas owners. (March 25, 2011)

NATURAL GAS

EXPLORATION – DISCOVERY

CHINA: Production test – CNR50/6/18

Ivanhoe reported recently that positive gas flows have been recorded during testing operations on the Xu-5 formation of the **Zitong-1 natural gas discovery** well in China's Sichuan Province. The test results indicated Xu-5 reservoir pressure of 10,500 psi which is considered to be very over pressured and an encouraging indicator of reservoir quality and performance. Subsequent testing recorded flow rates of **750,000 to 2,000,000 cubic feet a day** through a three to four-millimeter choke at pressures up to 3,000 psi.

Ivanhoe's President and Chief Operating Officer David Dyck said "The Zitong Block consists of deep, high-pressure reservoirs that are classified as "tight gas". The permeability and porosity of the sandstones encountered in the Zitong-1 and Yixin-2 gas discoveries fall within the parameters of current, highly productive, commercial tight-gas projects in North America. The key difference and positive indicator is that we are obtaining significant flow rates from these wells prior to fracture stimulation. (April 5, 2011)

COLOMBIA: Discovery - Production testing – CNR50/6/19

PetroLatina announced recently that extended production testing has now commenced on the **Serafin-1 gas well** and will continue for a period of 6 months. The Serafin gas field is located in the Company's Tisquirama licence block in the Middle Magdalena Valley, Colombia. The discovery was made by Texaco in 1991 and was not developed at that time due to a lack of markets for such gas.

Based on an assessment by Ryder Scott Company, L.P., the independent petroleum consultants, in their reserves report of November 2009, gas initially in place was estimated to be **5.37 billion cubic feet with 1P Reserves of 3.13 Bcf**, and the well was expected to be capable of initially producing up to 7 MMscf/d. The Serafin-1 gas well is currently jointly owned by PetroLatina (50%) and PetroSantander Corporation (50%). Initial production rates from the first few days of continuous testing started with a flow of **5.5 MMscf/d of gas**, a well pressure of 1,850 pounds per square inch and minimal pressure decline.

Simultaneously with commencement of the extended test, PetroLatina has entered into an interruptible sales contract for all the gas produced during the 6 month extended test period with Ecopetrol S.A., at 90% of the regulated price for Texaco for Barranca-Ballena's gas (as regulated by CREG, the Regulatory Commission of Energy and Gas of Colombia). The regulated price is currently \$4.2562/million British thermal unit ("BTU"). (March 23, 2011)

GHANA: Discovery – CNR50/6/20

Anadarko Petroleum Corporation announced recently a deepwater discovery at the Teak-2 prospect, located in the West Cape Three Points Block offshore Ghana. **The Teak-2** exploration well encountered approximately 90 net feet of high-quality oil, condensate and natural gas pay in stacked Campanian and Turonian age reservoirs. Anadarko owns a 30.875-percent working interest

in the West Cape Three Points Block, which is operated by Kosmos Energy (30.875-percent working interest). Other co-owners in the block include Tullow Oil plc (22.896- percent working interest), the E.O. Group (3.5-percent working interest), Sabre Oil & Gas Holdings Ltd (1.854-percent working interest) and the Ghana National Petroleum Corporation (10-percent carried interest). (March 28, 2011)

NORWAY: Discovery – CNR50/6/21

Eni made recently an important hydrocarbon discovery in the **Norwegian Barents Sea**, approximately 150 kilometres northwest of Goliat oil field. The discovery, called Skrugard, has been made through the 7220/8-1 exploration well. The well proved columns of 33 metres of gas and 90 metres of oil. Proven recoverable resources are preliminarily estimated between **150 and 250 million barrels of oil equivalent**. Further appraisal drilling on the structure will be evaluated shortly. The licenses in PL532 are Statoil Petroleum AS (50%, operator), Eni (30%) and Petoro AS (20%). (April 1, 2011)

TANZANIA: Discovery – CNR50/6/22

BG Group announced recently its third Tanzanian gas discovery with the **Chaza-1 well**, located in Block 1 approximately 18 kilometres offshore southern Tanzania in a water depth of around 950 metres. The three successful wells so far drilled by the joint venture of BG Group (60%) and Ophir Energy plc (40% operator) form part of an initial work programme planned for Blocks 1, 3 and 4 offshore Tanzania. (April 4, 2011)

PRODUCTION

ABU DHABI: Planned project – Agreement – CNR50/6/23

The **Abu Dhabi National Oil Company** (ADNOC) and **Occidental Petroleum Corporation** signed recently a **partnership agreement to participate in the development of "Shah Gas Field"** in the Emirate of Abu Dhabi. Under the agreement, ADNOC and Occidental will bear all the costs of the project of developing the Shah Gas Field. The

project will involve development of several gas gathering systems, construction of new gas and liquid pipelines and processing trains to process one billion cubic feet of high-sulphur content gas. This is anticipated to produce approximately 500 million cubic feet per day of network gas and a significant amount of condensate and natural gas liquids. Production from the field is scheduled to begin in 2014. (March 31, 2011)

GHANA: Planned project – CNR50/6/24

Trinidad and Tobago's Energy Minister Carolyn Seepersad-Bachan said recently the **National Gas Company (NGC)** was selected by the Ghana National Petroleum Corporation in a competitive bid for a project to **supply energy to power plants in Ghana**. Ghanaian officials say there is an estimated 800 billion

cubic feet of associated gas from the Jubilee field that can be gathered, processed and delivered to meet strong demand in Ghana for natural gas liquids and natural gas for electricity generation. (March 17, 2011)

IRAN: Planned project – CNR50/6/25

It has been recently reported that Iran's Oil Ministry plans to invest more than 16 billion U.S. dollars in South Pars gas field to develop its remaining phases in the current Iranian calendar year. Managing Director of Iran's Pars Special

Economic Energy Zone Pirouz Mousavi said that **the ministry plans to start production of gas in phases 15-18 of South Pars field.** The production of more than 700 million cubic meters in the giant gas field is the goal of the ministry, Mousavi said. (April 11, 2011)

UNITED KINGDOM: Planned project – Engineering – CNR50/6/26

Technip recently secured a contract from **RWE Dea** for the **development of the Clipper South** gas field in the North Sea. The field is located 70 km north-east of the Bacton gas terminal in 25 meters of water. The contract covers full project management, detailed pipeline design, installation and tie-in of a 15.5-kilometer 12" production line and 3" methanol piggyback line from the new Clipper South platform to the existing Lincolnshire offshore gas gathering system platform. The contract is scheduled to be completed in the fourth quarter of 2011. (April 6, 2011)

UNITED STATES: Ongoing project – Approval – CNR50/6/27

The **Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE)** recently provided the **final approval** necessary for Petrobras America, Inc. to begin oil and natural gas production at its **Cascade-Chinook project using a Floating Production Storage Offloading (FPSO)** facility. This will be the first

time this technology is used in the U.S. Gulf of Mexico. The FPSO has a production capacity of 80,000 barrels of oil per day and 16 million cubic feet of natural gas per day. The Cascade-Chinook oil and natural gas project is located in the Walker Ridge area of the Gulf, approximately 165 miles offshore Louisiana in 8,200 feet of water, will use an FPSO, the B.W. Pioneer. (March 17, 2011)

VENEZUELA: Planned project – First gas – CNR50/6/28

Eni, in a recent note to the U.S. Securities and Exchange Commission said that the **Perla discovery** in the Gulf of Venezuela holds "significant amounts of gas reserves" that **could enter production by 2013.** Eni said in November 2010 that it made a gas discovery at the Perla field, which the company said holds an estimated 14 trillion cubic feet of gas. (April 8, 2011)

RESERVES

ISRAEL: Reserves estimates – CNR50/6/29

Netherland Sewell & Associates said recently, after assessing the site, that the **Leviathan** prospect off Israel's coast could reach **as much as 21.1 trillion cubic feet.** Its best estimate for gross gas reserves at Leviathan was 15.9 tcf – in between a low estimate of 11.4 tcf and its high

estimate of 21.1 tcf. "The probability that the quantities of contingent resources actually recovered will equal or exceed the estimated amounts is 90 percent for the low estimate, 50 percent for the best estimate, and 10 percent for the high estimate," the firm said. (March 29, 2011)

PROCESSING

AUSTRALIA: Planned project – CNR50/6/30

Traditional owners on the **Tiwi Islands** north of Darwin are being asked **to consider a gas processing plant.** The council has been asked by a gas company to put its proposal for a condensate gas processing plant on Melville Island. The condensate plant would be used to separate the heaviest gases from raw natural gas, before most of the product was taken for processing into liquid natural gas. (March 18, 2011)

NIGERIA: Planned project – Engineering – CNR50/6/31

Nigeria awarded contract to **Eni SpA's Agip and Oando Plc** to build a natural **gas processing facility** at **Obiafu** in the southern Rivers state. The plant will process wet gas from fields operated by Chevron Corp. and Royal Dutch Shell Plc (RDSA) to supply petrochemical and fertilizer plants to be built in the Delta and Lagos states. (March 24, 2011)

OMAN: Planned project – Engineering – CNR50/6/32

Oman Oil Company Exploration & Production recently awarded Korea's **Hyundai Engineering** contracts for a **gas processing plant in Musandam**. The engineering, procurement and construction contract is for a gas separation and oil treatment plant. The production is expected from West Bukha field which is offshore Musandam peninsula after the scheduled

implementation period of 36 months. Mr Salim Al Sibani chief executive of OCEP said that "The Musandam gas plant is part of a major integrated development comprising West Bukha field development, interlink offshore pipeline, crude storage export facilities and a gas field power plant. The project will act as the foundation for additional oil and gas developments" (April 1, 2011)

SAUDI ARABIA: Planned project – Engineering – CNR50/6/33

Samsung Engineering recently inked contract for the **Shaybah NGL project**. This NGL facility will be located 800 km south east of Dhahran in Shaybah. The complex will produce 750,000 barrels of oil per day, **process gas of 2,400 MMSCFD and recover 200,000 barrels of NGL per day**. Samsung Engineering will provide engineering, procurement and construction for all four units in this plant complex on a lump-sum turn-key basis. Package 1 is the inlet & gas treatment facility, to remove impurities such as sulfur from the gas. Package 2 is the NGL recovery and utility facilities which will recover NGL from the gas. Package 3 is the cogeneration plant to produce power for the facility. Package 4 is the increased gas handling facilities, which are oil and gas separation plants (GOSP). Samsung Engineering is scheduled to achieve mechanical completion by June 2014. (March 24, 2011)

TRANSPORTATION-DISTRIBUTION

ALBANIA: Planned project – Route – CNR50/6/34

The **Trans Adriatic Pipeline (TAP)** announced recently that it has begun the formal **Environmental and Social Impact Assessment (ESIA)** process, with the submission of the **Scoping Report**. The document was presented to the Albanian national and regional authorities. The report includes a detailed description of the preferred route for the TAP pipeline, identified

during extensive refinement studies in Albania in 2009-2010. As a direct result, TAP will bypass the Hotova National Park and the Vjosa river valley. Entering from Greece at Miras in the Korça region, the Albanian section of the route stretches a total of 209km to the coast, north-west of Fier. The offshore section will be 60km in length, crossing the Adriatic Sea entering southern Italy. (April 11, 2011)

BULGARIA: Planned project – Distribution – CNR50/6/35

Bulgarian gas distributor **RilaGas**, a unit of Italian utility Acegas, will invest in the **construction of a gas distribution network in southwestern Bulgaria** within the next three years, Acegas head Cesare Pillon said. The funds will be channelled into the development of 372 kilometres of gas mains and grid extensions, or about 120 kilometres a year. The investment is part of RilaGas' strategy for the gasification of western Bulgaria by 2015. (March 31, 2011)

GREECE: Planned project – Route – CNR50/6/36

The **Trans Adriatic Pipeline (TAP)** AG recently finalized its route refinement study of the pipeline section **between Thessaloniki (Greece) and the Greek-Albanian border**, TAP said. More than 50 national and international experts conducted comprehensive and detailed studies of a 50 km wide corridor, TAP's

statement said. As a result, **TAP identified a preferred 2 km wide corridor that has the least impact on the environment, local communities and cultural heritage sites**, the statement said. TAP is a proposed pipeline project. The 520km-long pipeline will start in Greece near Thessaloniki, cross Albania and the Adriatic Sea and come ashore in Italy near Brindisi. The project is designed to expand transportation capacity from 10 to 20 bcm per year depending on throughput. The TAP project also envisages physical reverse flow of up to 8 bcm and the development of natural gas storage facilities in Albania. TAP's shareholders are Swiss EGL (42.5%), Norwegian Statoil (42.5%) and German E.ON Ruhrgas (15%). (March 29, 2011)

INDIA: Transportation – Agreement – CNR50/6/37

GAIL (India) Limited recently set a **target of transmitting 118.2 Mmscm/d of natural gas** from domestic sources and through LNG route

during fiscal year 2011-2012 under the Annual Memorandum of Understanding signed with Ministry of Petroleum & Natural Gas. (March 24, 2011)

RUSSIA: Planned project – Distribution – CNR50/6/38

Gazprom said recently it was looking to **overhaul significant parts of its natural gas transmission system to St. Petersburg and Leningrad Oblast**. Gazprom in 2010 said it overhauled 275 miles of gas trunklines, 83 miles of gas laterals and more than 5 miles of compressor station flowlines. Gazprom Deputy Chairman Alexander Ananenkov said a reliable supply of gas was a top priority for his company, especially in heavily populated areas like Moscow and St. Petersburg. (March 28, 2011)

SPAIN: Planned project – Distribution – CNR50/6/39

Gas Natural Fenosa unveiled recently plans to invest in **developing the gas and electricity distribution network** in Castilla y Leon, Spain. The company through its affiliates Gas Natural Castilla y Leon and Union Fenosa Distribucion, will undertake the work which will involve maintenance and improvement of the current

distribution networks and extending the natural gas network to new municipalities. **The company forecasts to supply natural gas service to more than 400,000 customers in 2011**, about 200,000 new customers more than in 2010. The company said it will build 150km of gas distribution pipelines extend services to supply gas to towns and service in other new localities. (March 30, 2011)

UNITED STATES: Planned project – Open season – CNR50/6/40

Millennium Pipeline started recently a binding open season to gauge customer interest in shipping natural gas on its **New York pipeline system**. The open season seeks firm transportation capacity starting July 1, 2011 to support mainline expansions, the company said. The 182-mile (293-km), 30-inch (76-cm) pipeline has the capacity to deliver more than 525 dekatherms per day of supply to customers in New York's Southern Tier and lower Hudson Valley as well as major utility customers in New York City and New England through interconnecting pipelines. (April 1, 2011)

UNITED STATES: Ongoing project – Start up – CNR50/6/41

Southern Union Company placed recently the Florida Gas Transmission Company (**FGT**) **Phase VIII Expansion project** in service. The expansion increases the capacity of FGT's mainline facilities

from the Mobile Bay, Ala. area to southern Florida. The FGT Phase VIII Expansion project included the construction of approximately 483 miles of pipeline and 213,600 horsepower of additional mainline compression in Alabama and Florida. (April 4, 2011)

SUPPLIES - IMPORTS - EXPORTS

ALGERIA to EUROPE: Gas supply – Agreement – CNR50/6/42

Sonatrach signed recently **agreements to supply Cepsa, Endesa, Iberdrola and GDF Suez with a total of 8.0 billion cubic metres of natural gas a year with a term of 20 years**. Under the agreements signed, the gas will be delivered through the newly commissioned Medgaz pipeline. Sonatrach owns a 36 per cent equity stake in the company which built and operates the pipeline, while Cepsa and Iberdrola have 20 per cent each, and Endesa and GDF 12 per cent each. (April 1, 2011)

CAMEROON: Gas supply – Agreement – CNR50/6/43

Perenco SA plans to **supply gas to a GDF Suez SA-led liquefied natural-gas project in Cameroon**. The company is in talks with the authorities in Cameroon and GDF Suez about the price of the fuel, said Didier Lechartier, deputy head of business development at Perenco. **It will need to drill wells to prove about 2 trillion cubic meters of gas reserves** and plans to

complete the acquisition of Total SA assets, he said. Perenco will develop an exploration program if it has "a clear positive signal as to what the gas price is going to be". GDF Suez and Cameroon state-owned Societe Nationale des Hydrocarbures are in talks with explorers including Royal Dutch Shell Plc, China Petroleum & Chemical Corp. and Noble Energy Inc. to secure gas supplies for LNG production, said Kevin Hart, the chief executive officer at BowLeven Plc. (April 7, 2011)

CHINA: Gas supply – Agreement – CNR50/6/44

Fortune Oil recently agreed a deal that should boost the **amount of gas it supplies in Liaoning Province**. The company is set to acquire a 51% stake in Liaoning Jingrun Natural Gas Ltd, which owns a 30 year concession to build and operate a spur pipeline supplying natural gas to serve the ceramics industrial park in the county of Jianping. Natural gas consumption is expected to reach 200 million cubic metres per year. The new branch pipeline is expected to be completed in 2012 and reach its 200 million cubic metre capacity in 2013. The company said it had secured contracts for the supply of up to 200 million cubic meters of natural gas with China National Petroleum Corporation. (March 28, 2011)

CHINA: Gas supply – Forecast – CNR50/6/45

Jiang Xinmin, a researcher with **National Development and Reform Commission** Energy Research Institute said recently that China gas market will have **240 billion cubic meters of natural gas supplies annually by 2015**. He also said that China is expected to produce more than 150 billion cubic meters of natural gas annually by

2015 while importing more than 50 billion cubic meters of natural gas annually via pipelines from Central Asia, Myanmar and Russia. **The country will also import 30 billion cubic meters of liquefied natural gas per annum by 2015**. Mr Jiang said to increase market gas supplies and transmission capacity China will build 24,000 kilometers of gas pipeline and four LNG terminals in the next five years. (March 20, 2011)

EGYPT to ISRAEL: Gas supply – Price – CNR50/6/46

Egyptian Minister of Petroleum Abdallah Ghorab said recently that Egypt exports gas to Israel at a higher price than the export price of US gas. To complaints raised by experts in Egypt recently that the country was losing \$13 million a day due to lower-priced gas exports to Israel, the Egyptian minister replied: "I cannot understand on what basis they estimate the loss, if there is a loss at all - there is no global gas price". **The petroleum minister said Egyptian gas sells for over \$3 per million btu** - nearly double the price at which the US sells gas, which is close to \$1.5. The price is still lower than prices in Europe. The minister said that Egypt was not negotiating to change gas prices with Israel only, but with all the other countries to which it exported. (April 10, 2011)

GABON: Gas supply – Agreement – CNR50/6/47

OLAM International said recently that it has finalised the natural **gas supply agreement with Gabon** that will provide its planned fertiliser complex in the country with a total of **0.75 trillion cubic feet of natural gas feedstock** for the fertiliser plant at a 'competitive fixed price' over 25

years. It also said that the gas pipeline network is already in place, and gas would be supplied to the plant from July 2014, when the plant's commissioning is scheduled to take place. The group is now looking to complete due diligence for the gas reserves by end-April 2011. (March 29, 2011)

INDONESIA to SINGAPORE: Gas supply - Planned project – CNR50/6/48

R. Priyono, head of **BPMigas**, said recently that Indonesia may **increase sales of natural gas from West Natuna Sea to Singapore** starting in the fourth quarter of 2011 by diverting supply slated for the domestic market. The gas will come from West Natuna Sea's Gajah Baru field that's operated by Premier Oil Plc. The fuel was originally to be supplied to Indonesian utility PT Perusahaan Listrik Negara's power plant on Batam Island. "We may redirect supply of about 40 million standard cubic feet a day as the pipeline to Batam is not yet ready to be used" Priyono said. **The plan would increase supply from the field to Singapore to 100 million cubic feet a day**, he said. Indonesia supplies 325 million cubic feet a day to Singapore from West Natuna via pipeline and 350 million cubic feet a day from South Sumatra. (April 1, 2011)

IRAN to ABU DHABI: Gas supply – Agreement – CNR50/6/49

Tehran and Abu Dhabi officials recently inked an **agreement on export of Iran's gas reserves** to the United Arab Emirates, an official said. "Based

on the agreement, Iran's gas will be exported from the Salman field to the UAE at a price five times more than Qatar's exported gas," the official said. (April 10, 2011)

PAKISTAN: Gas demand – Forecast – CNR50/6/50

The **Standing Committee of National Assembly on Petroleum and Natural Resources** has been informed that **the country is facing the shortfall of 2.09 billion cubic feet per day** of gas which would be extended to 6 bcf by 2020 whereas on the other hand the gas reserves of the country are falling down constantly. The committee was also informed that current demand of gas in the country is almost 63 billion cubic feet per day, which would touch the figure of **116 bcf in 2022** if the country progress with 4.5 percent GDP growth rate. The committee was told that process regarding bidding of international tenders to import liquid natural gas LNG could take approximately two years further in completing all the legal requirements. (April 11, 2011)

RUSSIA to SLOVENIA: Gas supply – Talks – CNR50/6/51

Gazprom said recently it could prolong its **contract with Slovenia from 2017 to 2035 and increase exports from 500 million to 1.7 billion**

cubic meters a year. Gazprom is cooperating with Slovenia's Geoplin Plinovodi on imports and the distribution of Russian natural gas in the country. (March 22, 2011)

STORAGE

UNITED STATES: Ongoing project – Start up – CNR50/6/52

NGS Energy said recently that it had started operations at its **Leaf River Energy Center**, a natural gas storage facility northwest of Laurel, Miss. The company said that it is accepting gas in its first cavern, which holds **8 billion cubic feet**. NGS said a second cavern will open in 2012, and holds permits for a total of four domes with 32 billion cubic feet of capacity. NGS said it could eventually expand even beyond that. The complex connects with six pipelines. In 2009, Southern Co. said it would rent 3 billion cubic feet in the first dome and 3 billion feet in the second dome, each for 15 years. (April 2, 2011)

USE FOR POWER GENERATION

BANGLADESH: Planned project – Gas supply – CNR50/6/53

Energy Holdings International (EHII) received recently the confirmation for the **natural gas availability** from the Bangladesh Power Development Board (BPDB) **to develop the 450MW natural gas fired combined cycle plant.**

EHII has begun evaluating the power purchase agreement (PPA) and implementation agreement (IA) for the plant and anticipate breaking ground on the project in the second or third quarter of 2011. (March 16, 2011)

CZECH REPUBLIC: Ongoing project – CNR50/6/54

CEZ started recently construction of the **first large Czech natural gas-fired steam and gas power plant** in Pocerady, northern Bohemia, on 25 March. It is to be **completed in 2013**, CEZ said. The new 840 MW unit will be in operation mainly at peak times and is likely to be shut down during the night. The new facility is to be built by Skoda Praha, while turbines will be supplied by Siemens and Skoda Power. (April 1, 2011)

JAPAN: Planned project – CNR50/6/55

Hokkaido Electric Power Co said recently it plans to build its first **liquefied natural gas fired thermal plant** in the northern Japanese island.

The plant, with capacity of up to **590 megawatts**, will have a combined cycle generator and is set to start commercial operations after 2021, the company said. (March 30, 2011)

MALAYSIA: Planned project – Approval – CNR50/6/56

Electric utility **Tenaga Nasional** is planning to **construct a 300MW gas-fired power plant** in the Malaysian state of **Sabah**. The company has secured in-principle approval to set up the power plant. According the CEO of the company, the gas-fired plant will replace the coal based one that was being planned and the company is looking to do it either through piped gas or LNG. (March 24, 2011)



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