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LNG

PROCESSING

AUSTRALIA: BG and Santos receive approval for CSG to LNG projects – CNR/49/21/1

BG Group Plc and Santos Ltd. recently won Australian government approval to build the first projects in the world that will convert natural gas taken from coal seams into liquid for shipment to overseas customers. The companies must comply with more than 300 conditions to protect the environment and prevent gas extraction from contaminating water, Environment Minister Tony Burke said. (Bloomberg, October 22, 2010)

AUSTRALIA: APPEA wish new policy to ease future investment – CNR/49/21/2

The Australian Petroleum Production & Exploration Association (APPEA) recently released its State of the Industry 2010 report, advising that strong future investment in oil and gas production and exploration will require improved regulatory efficiency, an internationally competitive fiscal regime, and an appropriate national climate change policy. APPEA's report held a positive outlook for Australia's LNG industry, saying that "Australia's LNG production capacity is set to increase from 19.5 MMt/y in 2010 to 38.8 MMt/y from 2014". However, it warned that access to markets and finance "will be key determinants [of industry success], both of

which have become more difficult as a result of the GFC, slowdown in global economic growth and changes in some of the world's largest gas markets. Projects are also likely to face increasing cost pressures as skilled labour shortages again re-emerge and as construction activity in this and other industries increases". The report states that in Western Australia development costs have doubled over the past five years, meaning that gas prices need to remain undistorted in order to promote industry investment. Provided there is sufficient customer demand, states the report, Western Australia's gas supply capacity could increase by more than 50 per cent by 2015 and double within ten years. (Gas Today, October 20, 2010)

AUSTRALIA: Marubeni and Eastern Star Gas Company agree to conduct feasibility study on mid-scale LNG plant – CNR/49/21/3

Marubeni and Eastern Star Gas Company (ESG) recently signed a Memorandum of Understanding about the proposed electric-motor-driven Mid-Scale LNG plant in Newcastle in the state of New South Wales, Australia. ESG owns the largest CSG block in New South Wales, and plans to construct an LNG plant in Newcastle, to export LNG from 2014 onward with an initial production capacity of 1 million tons per annum and eventually increasing the capacity to 4 million tons per annum.

ESG agrees to conduct feasibility study with Marubeni, including the study of Marubeni's future equity participation in the development of the CSG block and the LNG project. Also, as for the pipeline project which connects the CSG block in New South Wales to Newcastle, ESG and Marubeni will conduct feasibility study together with APA group. In May 2010, ESG agreed to conduct the feasibility study for the electric-motor-driven Mid-Scale LNG plant jointly with Hitachi, which has strengths in electric-motor-driven technology, and TOYO which has strengths in project management and system integration. (Marubeni press release, October 15, 2010)

CAMEROON: GDF Suez to invest in LNG plant in Kribi – CNR/49/21/4

Cameroon will receive an investment of \$5 billion from GDF Suez to build a liquefied natural gas plant, the company's senior executive said recently. "Cameroon's government is conversant with our project here in the country, for which we'll be investing \$5 billion - not a negligible sum," said

the president and CEO of GDF Global LNG Philippe Olivier. In 2008, GDF Suez reached an agreement with the Cameroon government-owned National Hydrocarbons Corp. to explore for LNG in Kribi, located some 300 kilometers southwest of the capital, Yaounde. (Dow Jones, October 13, 2010)

EAST TIMOR: Woodside considers processing LNG on domestic shores – CNR/49/21/5

Woodside Petroleum changed recently its position and will consider processing gas from East Timor's Greater Sunrise natural gas fields on East Timor shores. East Timor's State Secretary for Natural Resources Alfredo Pires said that during recent negotiations, Woodside had retreated from its previous position and had presented all three locations as possibilities. "The three options are, building the pipelines to Darwin or Timor-Leste, and the third is the floating plant," he said. The East Timor government has said it wants the plant to be built in East Timor, where it can provide employment for the local population, and has resisted the possibility of building a plant on Australian shores. The Greater Sunrise fields, estimated to hold 5.13 trillion cubic feet of gas and 226 million barrels of condensate, straddle Australian and East Timorese waters but Australia has not declared a preference on the site of the processing plant. (Reuters, October 8, 2010)

RUSSIA: Construction of Yamal LNG plant may start in 2012 – CNR/49/21/6

According to a document of the Russian government Russia's, Novatek will start building its liquefied natural gas plant on the Yamal

peninsula in 2012. According to the Novatek's Yamal LNG development plan, the first LNG train will be completed in 2016, and the second and third trains in 2017 and 2018, respectively. (Reuters, October 18, 2010)

TRANSPORTATION-DISTRIBUTION

WORLD: Marubeni to jointly operate LNG carrier's fleet – CNR/49/21/7

Marubeni will spend about \$700 million to team up with a Singapore shipping firm to operate a fleet of liquefied natural gas tankers, the Nikkei business daily reported recently. Marubeni will hold a 49 percent stake in the venture, which is slated to hold eight LNG tankers and be established in November 2010, while Singapore's BW Gas will hold 51 percent, the newspaper said. The tankers included in the partnership have been contracted to carry LNG from Nigeria to Europe and the United States over the next several years. (Nikkei, October 14, 2010)

SUPPLIES - IMPORTS - EXPORTS

AUSTRALIA: Apache announces agreement with Chevron and Tokyo Electric on LNG supply – CNR/49/21/8

Apache Julimar Pty Ltd, an Apache subsidiary; KUFPEC Australia (Julimar) Pty Ltd, which is a subsidiary of Kuwait Foreign Petroleum Exploration Co. k.s.c. (KUFPEC), and Chevron Australia Pty Ltd, recently signed an agreement with Tokyo Electric Power Company (TEPCO) to market LNG produced from their respective fields on a commingled basis to TEPCO. Chevron and TEPCO announced in December 2009 a Heads of Agreement (HoA) to deliver 3.1 million tons per annum of LNG from Wheatstone for up to 20 years. The Apache and Kufpec subsidiaries will

provide about 25 percent of the LNG. Under a separate equity HoA also signed in December 2009, TEPCO intends to acquire equity interests in Chevron's Wheatstone field licenses and the Wheatstone natural gas processing facilities from which TEPCO intends to lift approximately 1 mtpa of LNG. The LNG facility's first phase will consist of two processing trains with a combined capacity of approximately 8.6 mtpa and a domestic gas plant. The onshore facilities will be located at Ashburton North near Onslow in Western Australia. A final investment decision on the first phase of the project is slated for the second half of 2011. (PRNewswire, October 11, 2010)

CHINA: LNG imports may more than quadruple by 2015 – CNR/49/21/9

Shen Ning, vice director of business and marketing at Hudong-Zhonghua Shipbuilding (Group) Co said recently that China may more than quadruple imports of liquefied natural gas in the six years through 2015. Imports may rise to 25 million metric tons a year as the nation's energy demand is climbing. The shipbuilding company, a unit of China State Shipbuilding Corp., has delivered five LNG vessels to transport the fuel to domestic terminals and is building another 145,000 cubic-meter LNG tanker, Shen said. The company is developing its third shipyard on Changxing Island in Shanghai, which will more than double its LNG vessel building capacity from three vessels a year currently, he said. The facility will be completed in 2012, he added. (Bloomberg, October 22, 2010)

CHINA: National Development and Reform Commission asks to boost LNG imports – CNR/49/21/10

China National Development and Reform Commission (NDRC) recently asked Chinese natural gas producers to boost spot LNG purchases to meet domestic demand in winter. Liu

Tienan, vice director of NDRC said that China's natural gas supplies this winter would be 20 percent more than 2009. PetroChina plans to import 610 million cubic meters of LNG this winter to meet robust demand. (Xinhua, October 20, 2010)

INDONESIA: Inpex and PT Nusantara Regas agree for the LNG supply to the West Java terminal – CNR/49/21/11

Inpex announced recently that INPEX and its partner Total E&P Indonesie, operator of the Mahakam PSC, signed a Heads of Agreement with PT Nusantara Regas pertaining to the supply of 11.75 million tons of Bontang LNG over the period of 2012-2022 to the West Java LNG terminal, the first LNG receiving terminal to be built in Indonesia (Floating Storage Regasification Unit).

PT Nusantara Regas is a joint venture between PT. Pertamina (Persero) and PT. PGN (Persero) Tbk. This Heads of Agreement will be followed by an LNG Sale and Purchase Agreement to be executed in 2011 prior to the start-up of deliveries. (Inpex press release, October 13, 2010)

STORAGE

CHINA: CNOOC starts first phase construction of LNG terminal at Zhuhai – CNR/49/21/12

China National Offshore Oil Corporation commenced recently the first phase construction of its Zhuhai LNG terminal project. A LNG receiving wharf, LNG station, a 291km long pipeline and three storage tanks are included in the LNG receiving terminal. The project is

designed with an annual LNG handling capacity of 3.5 billion metric tons for the first phase development, while the capacity will be expanded to some 12 million metric tons in the future. CNOOC Gas & Power Group, a wholly-owned subsidiary of CNOOC, holds 30% stakes in a joint venture Guangdong Zhuhai Jinwan LNG. (Energy Business Review, October 21, 2010)

COLOMBIA: Authorities to begin a feasibility study on LNG terminal – CNR/49/21/13

According to Mines and Energy minister Carlos Noriega, Colombia needs to look for new ways of securing natural gas supplies, in particular during high demand periods such as those experienced during low rainfall. "In this regard we will begin the feasibility studies of a regasification terminal," he added.

"We are looking to continue to provide private sector incentives along the entire production chain, with transparent and stable laws. We are also looking to establish the right mechanisms and term structure to promote the exploration of unconventional gas". (Business News Americas, October 22, 2010)

CROATIA: Floating terminal may be used as temporary solution before Adria LNG construction – CNR/49/21/14

Plinacro said recently that it plans to install a floating terminal for liquefied natural gas as a temporary replacement for a much bigger but delayed Adria LNG project. "We are now waiting for a formal approval from the government to kick off preparations for such a terminal," Plinacro

spokeswoman Neda Erdeljic said. "This project is neither a competition nor a replacement for the land-based terminal project. It is rather seen as a forerunner project. Of course, if the Adria LNG project is abandoned, this could serve for a long-term supply of Croatia and neighbouring countries" Plinacro said. (Reuters, October 18, 2010)

GREECE: Qatari companies cancel plans to build a LNG terminal in Astakos – CNR/49/21/15

Qatar recently cancelled plans for building a private terminal for liquefied natural gas and an electricity production station in Astakos, in western Greece. The two countries signed in May 2010 a non-binding memorandum to explore the possibility of building a complex of LNG terminals and a power station to export electricity to Italy but the group failed to reach an agreement with Italian consumers over pricing, according to sources.

"The two Qatari companies involved, Qatar Petroleum and the Qatar Investment Authority could not agree with their Greek partners on the viability of the project," deputy foreign minister Spyros Kouvelis said. (Business Intelligence Middle East, October 20, 2010)

INDONESIA: Small LNG receiving terminals considered – CNR/49/21/16

A mines and energy ministry official said recently that Indonesia is considering building small and medium capacity liquefied natural gas receiving terminals to meet future energy demand. "The prospects of it are quite big for various areas, because we are an island country," said the ministry Kardaya Warnika, adding that some of

the terminals being considered were located in Sulawesi, Bali and other islands. Warnika said the capacity for such plants would be less than 160 million cubic feet per day of gas. The country's first LNG receiving terminal, a 3 million tonnes a year joint venture near Jakarta between Pertamina and PT Perusahaan Gas Negara is expected to be commissioned by the end of 2011. (Reuters, October 15, 2010)

LIQUEFIED PETROLEUM GAS

STORAGE

KUWAIT: KNPC to build two LPG storage facilities at Mina Al Ahmadi refinery – CNR/49/21/17

Kuwait National Petroleum Co. recently begun preparations for the construction of two gas units at Mina Al Ahmadi refinery. The projects include the construction of propane and butane storage facilities. The project, which is expected to be completed by 2014/2015, aims to expand liquefied petroleum gas storage capacity of the fourth and fifth plants in order meet expected growth in gas production in Kuwait. (World Construction Industry Network, October 15, 2010)

NATURAL GAS

EXPLORATION – DISCOVERY

AZERBAIJAN: New well drilled at Gunashli field – CNR/49/21/18

"Bayil Limany" Offshore Drilling Office of the Complex Drilling Works Trust recently completed the drilling of the well No 70 from the platform No 6 at "Gunashli" field. The daily production of the well makes 172 thousand cubic meters of gas and 20 tons of condensate. (Socar press release, October 11, 2010)

BRUNEI: Total discovers gas and condensate in Block B – CNR/49/21/19

Total announced recently that its affiliate Total E&P Borneo and its partners made a significant new gas and condensate discovery in Block B offshore Brunei. Well ML-5, located in a water depth of 65 metres and around 50 kilometres from the coastline, was drilled 8 kilometres to the south

of the Maharaja Lela/Jamalulalam field. It discovered gas with condensate in High Pressure / High Temperature formations. 10 million cubic feet of gas and 220 barrels per day of condensate were produced during the test from a limited zone situated at 5,350 metres depth. (Total press release, October 13, 2010)

CHILE: Enap tests gas in the Arenal block – CNR/49/21/20

Enap announced recently that it has completed the successful testing of its Manantiales Oeste-1 well on the Arenal block in the Manantiales sector of southern region XII. Production tests averaged 180,000m³/d of natural gas from the well's Springhill formation. Enap now plans to conduct long-term tests to better understand well flows. Enap plans to drill three more wells as part of its 2010 work plan. (Business News Americas, October 6, 2010)

CHILE: ENAP strikes gas deposit in Tierra del Fuego – CNR/49/21/21

Empresa Nacional del Petroleo SA discovered recently a new natural-gas well on the Arenal exploration block on the Tierra del Fuego Island in the extreme south Magallanes region. Initial production tests carried out in the Springhill formation flowed of 180,000 cubic meter per day

of natural gas and 150 barrels per day of condensate. Production tests of longer duration are planned for the immediate future, to determine volumes under stabilized conditions that provide additional information on the reserves and thus the size of the deposit. (Mercopress, October 6, 2010)

NORWAY: Total confirms discovery on the David prospect – CNR/49/21/22

Total, operator of production licence 102C, made recently a small gas-condensate discovery in well 25/5-7 on the David prospect. Det Norske holds 10 percent in the discovery. The well is located approximately 20 kilometres north-east of the Heimdal field.

The discovery is estimated to be between 15 and 20 million barrels of oil equivalent recoverable resources. Extensive data acquisition and sampling was performed. No production test was carried out. The licensees will consider infrastructure solution for processing of gas-condensate from David at the Heimdal field and further export. (Total press release, October 18, 2010)

PRODUCTION

AUSTRALIA: Apache plans Balnaves field development – CNR/49/21/23

Apache Corporation said recently that three successful wells appraising the Balnaves-1 discovery in License WA-356-P offshore Western Australia will trigger development planning by subsidiary Apache Julimar Ltd Pty. Balnaves is an

oil accumulation in the Mungaroo formation in a separate reservoir beneath the large gas reservoirs of the Brunello gas field. The recent Balnaves-3 appraisal well test-flowed 9,076 barrels of oil and 13 million cubic feet of natural gas, confirming good reservoir deliverability. (PRNewswire, October 14, 2010)

AZERBAIJAN: BP and Socar sign development contract for the Shafag-Asiman field – CNR/49/21/24

A new agreement between BP and SOCAR was recently signed for the exploration and development of an offshore gas field in the Azerbaijani sector of the Caspian Sea. It is estimated that the Shafag-Asiman field contains between 300 billion and 500 billion cubic meters of natural gas plus gas condensate. A production sharing agreement between the two partners sets up a joint venture on a parity basis with a time horizon of 30 years. BP will handle the exploration phase of the development, and then the partners will operate it jointly after production begins. (Asia Times, October 15, 2010)

INDIA: ONGC to invest in Mumbai High redevelopment – CNR/49/21/25

Oil and Natural Gas Corp has recently kicked off redevelopment of the southern part of its Mumbai High fields. "ONGC has decisively initiated schemes to maintain production from this field", a company official said, adding the complex reservoir has thin oil bearing zones, as slim as 3 metres, with a highly heterogeneous flow capacity of rock, varying in thickness. The present scheme

envisages incremental gain of 18.31 million tonnes of oil and 2.70 billion cubic meters of gas through drilling of 75 new wells and intervention in existing wells. The work includes enhancement of oil and gas processing capacity through installation of one process platform bridge connected to the existing ICP platform and installation of four new well head platforms. (Times of India, October 17, 2010)

RAS AL KHAIMAH: RAK Petroleum wants to redevelop Saleh field – CNR/49/21/26

RAK Petroleum PCL signed recently an agreement with Ras Al Khaimah Gas Commission to take a 100% stake and operatorship of Saleh field in the Persian Gulf off Ras Al Khaimah.

The field produced 109 bcf of gas and 14.4 million bbl of condensate in 1984-88 and small volumes intermittently since then. A 45-km, 18-in. pipeline connects the field with Rakgas gas and liquids processing facilities on the RAK coast. RAK Petroleum, which already held 40% interest in the non producing field, expects to begin redevelopment in the first half of 2011 by deepening an existing well. The original field had seven producing wells on five platforms. (Oil and Gas Journal, October 8, 2010)

VENEZUELA: Foster Wheeler wins Pre-FEED and FEED for Perla early production – CNR/49/21/27

Foster Wheeler AG, announced recently that its Global Engineering and Construction Group has been awarded a pre-front-end engineering design and front-end engineering design contract by Cardon IV, S.A., for new production facilities at the Perla field, located in the Gulf of Venezuela, Caribbean Sea. Cardon IV S.A. is a joint venture company owned by Eni Venezuela B.V and Repsol YPF Venezuela Gas, S.A. for developing non-associated natural gas exploration and exploitation activities in Cardon IV area, in Venezuela. (Foster Wheeler press release, October 12, 2010)

RESERVES

PERU: Government confirms a large gas discovery at Camisea – CNR/49/21/28

The Peruvian government confirmed recently reports of a new large-scale discovery at the massive Camisea natural gas field, located in the country's southern jungles. Energy and Mines Minister Pedro Sanchez said that the new find, announced Petrobras, will enable the country to meet the needs of a growing economy. According to preliminary estimates, the potential gas volume from Petrobras' first two exploratory wells in Lot 58 may total 48 billion cubic meters. Sanchez said that the find would enable current output from

Camisea, which currently totals 350 million cubic feet per day, to nearly double. In May 2010, the Peruvian government released a report prepared by the Netherland, Sewell & Associates international oil and gas consulting firm indicating that Camisea has 11.2 trillion cubic feet of proven gas reserves, enough to meet domestic demand and also allow for exports. That report differed from an earlier study that was drawn up by the Gaffney, Cline & Associates energy consulting firm for Pluspetrol and which put the field's proven reserves at 8.8 trillion cubic feet. (Latin American Herald Tribune, October 18, 2010)

PROCESSING

ALGERIA: Altra Energy wins tender for In Amenas gas facility – CNR/49/21/29

Altra Energy recently won an open tender for a capacity trial of the In Amenas Gas plant in Algeria. The contract is for JV Gas, which is made up of BP, Sonatrach and Statoil and is expected to last eight months. Altra will provide process and mechanical support for the preparation, execution and reporting of the live capacity trial to allow an increase in processing capacity above the design capacity. The In Amenas LPG wet gas processing facility is located in southern eastern Algeria and currently produces an annual rate of 28.2MMSm³ of wet gas. An internal study by BP revealed the facility has the potential of increasing the gas throughput by over 10%. (Oilvoice, October 07, 2010)

BRAZIL: Petrobras increases gas processing capacities – CNR/49/21/30

Petrobras announced recently the launch of three industrial gas undertakings in Espirito Santo state: the second module of the Cacimbas gas treatment plant (UTGC); the pre-operation of the Sul Capixaba gas treatment plant (UTG Sul); and the Canapu gas field, on the state's Northern coast. The undertakings are part of the Plangas national gas operations plan. The two new treatment plants will increase Espirito Santo's nominal gas processing capacity to 12 million cubic meters a day, whilst the Canapu gas field, whose production potential can reach up to two million cubic meters a day, will raise the state's production to 12 million cubic meters a day from current 10 million cubic meters. UTGC's second

module, located in Linhares, is integrated to a natural gas processing plant and a natural condensed gas processing plant. After some operating adjustments, the condensed gas plant's nominal processing capacity will be raised to 9 million cubic meters a day. After the conclusion of module 3, scheduled for the beginning of 2011, the plant's daily condensed gas processing capacity will be raised to 16 million cubic meters - 2,700 tons of liquefied petroleum gas and 5,300 cubic meters of condensed gas. The Sul Capixaba Gas Treatment Plant is in the municipality of Anchieta, and has an initial processing capacity of 2.5 million cubic meters a day. The gas is produced at the Baleias Park, on the Southern coast of Espirito Santo. (Investnews, October 11, 2010)

RUSSIA: Novatek increases productive capacity at the Yurkharovskoye field – CNR/49/21/31

Novatek announced recently the commencement of the final stage of Phase Two development at its wholly-owned Yurkharovskoye field. As part of the Company's capital investment program, two additional processing trains for separating natural gas were launched at the field, thus increasing the Yurkharovskoye

field's annual productive capacity to approximately 33 billion cubic meters of natural gas and approximately three million tons of unstable gas condensate. The Yurkharovskoye field is located within the Polar Circle southeast of the Tazovsky peninsula. The field is licensed to OOO NOVATEK-YURKHAROVNEFTEGAS. The field's proven (SEC) reserves at 31 December 2009 amount to 443.6 bcm of natural gas and 22.4 million tons of liquid hydrocarbons. In the first nine months of 2010, the field produced 17.5 bcm of natural gas and 1.5 million tons of unstable gas condensate. (Novatek press release, October 12, 2010)

UNITED STATES: Hydrogen Sulfide Treatment System to be Installed in the Haynesville Shale Gas Play – CNR/49/21/32

Merichem Company entered recently into a licensing and equipment supply contract for a LO-CAT Hydrogen Sulfide treatment system to be installed at the Haynesville Shale Gas Play. The LO-CAT unit will be integrated into the overall

processing facility with a proposed start-up date during the first quarter of 2011. This application will be the first LO-CAT unit to be installed in the Haynesville Shale Gas Play, which is characterized by large amine acid gas volumes, very dilute hydrogen sulfide concentrations and required sulfide removal efficiencies exceeding 99.8%. (Merichem press release, October 2010)

TRANSPORTATION-DISTRIBUTION

CENTRAL EUROPE: Eustream and FGSZ launch second open season for Slovakian-Hungarian gas interconnector – CNR/49/21/33

Eustream and FGSZ Földgázszállító recently called a second, binding phase of an open season capacity tender for a planned gas interconnector between the two countries. Eustream and FGSZ will assess the situation at the end of December 2010, said Eustream spokesperson Danica Beharkova. FGSZ wanted to shelve the planned gas line after the first phase of the open season capacity tender, according to press reports. FGSZ said that the construction of the pipeline had not been halted as the investment had not even begun. The construction of the pipeline continues to be important as it allows Hungary access to liquefied natural gas terminals in Poland as well as other sources of supply, the company added. The 20km of the pipeline in Slovakia would cost about €20 million to build. The 95km on the Hungarian side would cost about €100 million. The European Union has already promised €30 million in support for the interconnector. (Budapest Business Journal, October 18, 2010)

INDIA: GSPL to build pipeline from Mallavaram to Bhilwara – CNR/49/21/34

A consortium led by Gujarat State Petronet Ltd, a subsidiary of Gujarat State Petroleum Corp. Ltd, won recently a bid for laying down a 1,585km pipeline from Mallavaram to Bhilwara via Vijapur, said a senior official of GSPL. GSPL holds a 52% stake in the winning entity, which is yet to be named, while Indian Oil Corp. Ltd holds 26%.

Hindustan Petroleum Corp. Ltd and Bharat Petroleum Corp. Ltd hold 11% each. This pipeline project, the first inter-state project for GSPL, will eventually be integrated with other pipelines such as the Hazira-Vijapur-Jagdishpur (HVJ) pipeline, and the proposed Mehsana-Bhatinda pipeline (1,670km) and Surat-Paradip pipeline (1,680km) projects. (Downstream Today, October 19, 2010)

INDIA: GAIL to start construction of Dabhol-Bangalore pipeline – CNR/49/21/35

GAIL (India) Limited placed recently orders for laying of pipelines for Dabhol- Bangalore Pipeline Project. GAIL Chairman and Managing Director, Shri B.C. Tripathi said, "The placement of construction contract marks a significant step towards execution of the pipeline project and is a testimony of GAIL's commitment to bring gas supplies to Karnataka by 2012". The construction work will start by November 2010 and the pipeline will be ready by March 2012.

The commissioning activities would take further couple of months and the gas supplies are expected to begin by June 2012. The 1400 km Dabhol - Bangalore pipeline project was approved by GAIL Board in June 2009 with a capacity of 16 MMSCMD of natural gas transmission. The complete work of pipeline from Dabhol (Ratnagiri District, Maharashtra) to Bidadi (Ramnagar district, Karnataka) and two additional spur lines (from Gokak in Belgaum District, Karnataka to Goa and from Sulivara in South Bangalore District, Karnataka to Bangalore) have been divided into ten spreads. Of the ten spreads, 7 spreads have been awarded to Punj Lloyd Limited, 2 spreads have been awarded to KSS-KSSIPL Consortium and 1 spread has been awarded to Advance Stimul Consortium. (GAIL (India) Limited press release, October 06, 2010)

JAPAN: Inpex starts feasibility study on Toyama Line – CNR/49/21/36

Inpex announced recently that it commenced the feasibility study on the construction of natural gas pipeline (“Toyama Line”), which is planned to be constructed from Itoigawa City, Niigata Prefecture to Toyama City, Toyama Prefecture, Japan. This feasibility study includes surveying, geological study and environmental assessment.

The final investment decision is expected in June 2011. “Toyama Line” will supply the LNG sourced natural gas to Nihonkai Gas Co, Ltd. and other customers starting by the end of 2014. Such LNG will be imported to Inpex’s Naoetsu LNG Receiving Terminal in Joetsu City, Niigata Prefecture, which is now under construction. (Inpex press release, October 12, 2010)

LEBANON: Energy Ministry to launch tender for a pipeline linked to LNG project – CNR/49/21/37

The Ministry of Energy & Water indicated that it will offer tenders in November 2010 for the construction of the first pipeline for liquefied natural gas. The ministry said it is completing preparations to invite companies to bid for work on the pipeline, which would link power stations along the country's coast. It added that it will offer other tenders later for related facilities, including a terminal for receiving shipments of imported LNG. It expected have a working LNG terminal by 2012.

The ministry is also planning separate tenders for supplies of LNG and a terminal to receive gas imports. In July 2010, the Lebanese Cabinet endorsed a five-year plan to reform the electricity sector. The plan expects power production to reach 4,000 megawatts by 2014 and 5,000 megawatts starting in 2015. The plan stressed the need to amend exiting laws as a prerequisite to establish a clear regulatory framework, called for the corporatization of Electricité du Liban, and for the adoption of a public-private partnerships (PPP) law. (LTW Byblos Bank, October 20, 20120)

MEXICO: Gasline planned between Tlaxcala and Morelos states – CNR/49/21/38

CFE plans to launch a tender for a natural gas pipeline that will run from Tlaxcala state to Morelos state. The pipeline will initially move 120Mcf/d to supply the 600MW Centro I power plant scheduled to start operations in 2012. A second stage would bump capacity up by another 120Mcf/d for the 600MW Centro II plant due to come online in 2015. The project could eventually ramp up to 337Mcf/d transport capacity.

The pipeline will have a 30-inch diameter and run 150-170km from its interconnection point with the existing 48-inch diameter Cempoala-Santa Ana pipeline in Tlaxcala. CFE plans to receive bids in February 2010 and sign the contract in April. The pipeline would begin commercial operations in August 2012. (Business News Americas, October 20, 2010)

NORWAY: First gas flows in the Gjøa gasline – CNR/49/21/39

First gas began to flow in October 2010 through the Gjøa Gas Pipe (GGP) tying this Norwegian North Sea field and its Vega satellite to Britain’s Far North Liquids and Associated Gas System (Flags). The 28-inch line runs for 130 kilometres from Gjøa to the tie-in point with the Shell-operated Flags-pipeline, which will carry its rich

gas to the receiving terminal at St Fergus in Scotland. The pipeline will initially be used to import gas from Flags for completion of the Gjøa platform, with exports from the latter starting when the platform is operational. Overall gas production capacity for Gjøa, which lies about 40 kilometres north of the Fram field, will be 17 million cubic metres per day. (Statoil press release, October 11, 2010)

TURKMENISTAN: New gas pipeline launched in the Central Karakum desert – CNR/49/21/40

Turkmenistan recently launched a new gas pipeline that will boost its gas exports to Russia from reserves in the Central Karakum desert. The 198.2-km-long pipeline, with a pipe diameter of 720 millimeters, would pump gas from the desert outside Darvaza town in the Akhal region into the main export gas arteries of Turkmenistan.

President Gurbanguly Berdimuhamedow authorized construction of the pipeline on Feb. 20, 2009, in accordance with a contract between Turkmengaz and Russian company MRK-Inzeniring. The pipeline's initial handling capacity is 3 billion cubic meters but could be upgraded to 5 billion cubic meters annually. (Xinhua, October 18, 2010)

UNITED STATES: Energy Transfer Partners to construct two Eagle Ford Shale pipelines – CNR/49/21/41

Energy Transfer Partners, L.P. announced recently that it has entered into multiple long-term agreements with shippers to provide transportation services from the prolific Eagle Ford Shale located in South Texas. To facilitate these agreements, ETP will construct two natural gas pipelines. The 50-mile, 24-inch Dos Hermanas Pipeline will have a capacity of approximately 400 million cubic feet per day. The pipeline will originate in northwest Webb County, Texas and extend to the Partnership's existing Houston Pipeline rich gas gathering system in eastern Webb County, Texas. The pipeline is expected to be completed by December 2010. The initial phase of the Chisholm Pipeline will

consist of approximately 83 miles of 20-inch pipeline extending from DeWitt County, Texas to the Partnership's LaGrange Processing Plant in Fayette County, Texas. The pipeline will have an initial capacity of 100 million cubic feet per day, with anticipated capacity expansion exceeding 300 million cubic feet per day. The project will utilize existing processing capacity at ETP's LaGrange Plant. After processing, the residue volumes will be transported on the Partnership's Oasis Gas Pipeline system. This phase of the pipeline is expected to be in service by the second quarter of 2011. These combined systems will consist of more than 130 miles of 20- and 24-inch pipe capable of transporting up to 700 million cubic feet of liquid-rich natural gas. (Business Wire, October 18, 2010)

SUPPLIES - IMPORTS - EXPORTS

RUSSIA: Domestic market is a top development priority for Gazprom – CNR/49/21/42

Alexey Miller, Chairman of Gazprom Management Committee said recently that the domestic market is becoming a top development priority for Gazprom. He noted that while the export market had been the source of investment for Gazprom previously, the Russian market was replacing it as the source of investment. At the same time, domestic gas prices were still several times lower if compared to those in Europe.

The Gazprom Management Committee Chairman also touched upon the expected growth in the Company's expenditures due to a higher severance tax and potential imposition of the gas trunkline property tax. According to his estimates, in the coming three years the respective expenditures may reach RUB 200 billion. In particular, the expected 61 per cent rise in the severance tax on natural gas in 2011 will boost the concern's expenditures by RUB 48 billion. The potential imposition of the gas trunkline property tax will trigger additional expenditures of RUB 29 billion in 2012 and RUB 57 billion in 2013. (Gazprom press release, October 11, 2010)

RUSSIA: Poland extends gas supply contract until 2022 – CNR/49/21/43

Poland decided recently not to prolong its contract on increased natural gas import from Russia until 2037, Polish Economics Minister Waldemar Pawlak said. So, the new agreement currently being discussed will be valid until 2022. Earlier, Russia and Poland reached a preliminary deal, which was agreed upon by the prime ministers and governments of both countries, on an increase in the annual deliveries of Russian gas to Poland by an average of 2 billion cubic meters

and on extending the agreement until 2037. In addition, Pawlak said that the Russian gas transit agreement, which came into force in 2007, would be valid until 2019, and not until 2045 as it was planned originally. "We will not insist on changing the terms, because the country feels no need for more long-term agreements," he said. According to Pawlak, the proposal for extending the terms of Russian gas transit via the Polish territory until 2045 looked reasonable. (Itar-Tass, October 14, 2010)

STORAGE

RUSSIA: Gazprom Management Committee checks Unified Gas Supply System readiness – CNR/49/21/44

The Gazprom Management Committee recently considered the readiness of the Unified Gas Supply System (UGSS) facilities for the period of peak loads during the autumn/winter period of 2010–2011. During preparation for the 2010–2011 winter period underground gas storage (UGS) facilities have been replenished with roughly the same gas volume as was withdrawn during the last autumn/winter period, marketable gas reserves in UGS will make up 64 billion cubic meters, identical to the amount of the same

period in 2009. The UGS facilities throughput capacity is at a required level: the maximum daily gas send out in the beginning of the withdrawal season will make up 620 million cubic meters, while the average daily gas send out from December through to February will make up 500 million cubic meters. As of October 1, 2010 all the selected gas treatment units at the gas production facilities undergone preventive maintenance and booster compressor shops were fully repaired. 404 wells were overhauled and 87 wells were commissioned including in the Zapolyarnoye field, the Zapadno-Pestssovaya area of the Urengoysoyke field and the Yareyskaya area of the Yamsoveyskoye field. (Gazprom press release, October 14, 2010)

UNITED STATES: Sawgrass Storage announces non-binding open season for US facility and hub in Louisiana – CNR/49/21/45

Sawgrass Storage L.L.C., which was formed between subsidiaries of Nicor, Inc. and Samson Contour Energy E&P, LLC announced recently that it will hold a non-binding open season for storage capacity with firm service projected to commence on June 1, 2012. The open season is part of Sawgrass' ongoing evaluation of a proposed underground natural gas storage and hub development project, strategically located just west of Perryville in Northeast Louisiana. The proposed project initially provides up to 25 Bcf of working gas capacity with the ability to expand to

40 Bcf as dictated by market demand. Firm injection and withdrawal capabilities of 250 MMcfd and 625 MMcfd respectively, provide capabilities to Sawgrass' customers to cycle their storage inventories up to three and a half (3.5) times per year. The high deliverability depleted gas reservoir project located in Lincoln and Union Parishes includes a storage and gas handling facility near Downs ville, a dual (high and low pressure) header system with compression in the heart of the Perryville region, and 27 miles of 30 inch pipeline connecting the storage complex to the header system. (Business Wire, October 12, 2010)

UNITED STATES: Central Valley receives approval for gas storage project – CNR/49/21/46

Central Valley Gas Storage, L.L.C., a subsidiary of Nicor Inc., announced recently that the California Public Utilities Commission has approved Central Valley's Certificate of Public Convenience and Necessity to construct and operate the designed facilities in Colusa County, Calif. The Central Valley natural gas storage project is a high deliverability depleted reservoir.

The field is strategically situated in northern California and will have an interconnection into Pacific Gas and Electric Company's (PG&E) gas transmission system. The interconnect point will be considered a PG&E city gate point similar to other independent storage facilities connected to the PG&E system. Nicor Enerchange, L.L.C., a subsidiary of Nicor Inc., will serve as marketing administrator for Central Valley. Central Valley's facilities include: An 11 Bcf working gas reservoir; 9 directional drilled injection & withdrawal wells; a gas handling facility with 10,650 hp of compression and dehydration facilities, a 14.7 mile, 24" lateral between the gas handling facilities and PG&E's transmission system.

Central Valley plans to initiate construction activity in late November, 2010 subject to receiving all of the requisite permits. Construction is planned to be completed during the fourth quarter of 2011, with firm storage services commencing on April 1, 2012. (Downstream Today, October 18, 2010)



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