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Main news

LNG: Processing

- Pertamina and PT Medco Energy International will invest in the Donggi-Senoro LNG project in Sulawesi and in the development of the Senoro gas field, and the Matindok field
- Yemen LNG venture is targeting the loading of 104 cargoes during 2011.

LNG: Supplies- Imports - Exports

- Kyushu Electric Power Co agreed with PT Donggi-Senoro LNG to buy 300,000 tonnes of LNG annually for about 13 years, starting in the second half of 2014.
- Sabine Pass Liquefaction and EDF Trading signed a memorandum of understanding under which EDF Trading intends to contract between 0.7 million tonnes per annum and 1.5 mtpa of processing capacity at the Sabine Pass LNG terminal in Louisiana. Another memorandum of understanding has been also signed with Sumitomo Corp. for about 1.5 million tonnes per annum of processing capacity.

LNG: Storage

- Pertamina said that it plans to convert the Arun LNG plant in Aceh province on Sumatra Island to be a regasification terminal to meet domestic demand.
- Fluxys LNG launched the binding phase of its market consultation to assess the level of demand for additional capacity at the Zeebrugge LNG terminal.

Natural Gas: Production

- Petrofac has been awarded an engineering, procurement and construction contract to develop southern fields in the Algerian In Salah development. The fields to be developed are Garet el Befinat, Hassi Moumene, In Salah and Gour Mohmoud
- Exxon Mobil Corp. said that natural gas and liquids production from the Kipper and Turrum developments, in Australia, will be pushed back to 2012 and 2013, respectively, from a previous target of 2011.
- The Plan of Development for the Alen field has been approved by the Ministry of Mines, Industry, and Energy of the Republic of Equatorial Guinea.
- Chevron Corp hopes to start gas production at the Platong 2 project in the Gulf of Thailand later in 2011.

Natural Gas: Reserves

- In Iraq, Heritage Oil estimates that the Miran West structure has P90-P50 gross in-place volumes of gas of between 6.8-9.1 trillion cubic feet with 42-71m barrels of condensate and 53-75m barrels of oil.

Natural Gas: Supplies- Imports - Exports

- Azerbaijan agreed to supply Greece with the amount of 700 million cubic meters of gas a year on the basis of the contract between the Turkish and Greek sides.
- According to the National Energy Administration, China's gas demand will rise 20 percent in 2011 to 130 billion cubic meters and production will increase 16 percent to 110 bcm.
- According to Bureau of Energy, Ministry of Economic Affairs, Taiwan's consumption of natural gas will increase to 14 million mt by 2020 and 16 million mt by 2025,

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LNG

PROCESSING

ANGOLA: Export – Ongoing project – CNR50/3/1

Petroleum Minister, José Maria Botelho de Vasconcelos announced that the **Liquefied**

Natural Gas Exploration Project (Angola LNG) is expected to **start exporting the product in the first semester of 2012**, according to the timing. (January 18, 2011)

CHINA: Liquefaction Technology – CNR50/3/2

Huanqiu Contracting & Engineering Corp, an engineering unit of CNPC, agreed recently to buy a **19.9 per cent stake in Liquefied Natural Gas Ltd**, a specialist in **mid-scale LNG projects**. Huanqiu will be the largest shareholder of Liquefied Natural Gas and have preferential rights in using the latter's patented liquefied natural gas technology OSMR.

Huanqiu, one of China's leading builders of receiving LNG terminals, is also actively expanding into the upstream segment of the business of gas liquefaction. Analysts said LNG Ltd makes an attractive acquisition in part due to its LNG technology, which CNPC may then use in other projects. Huanqiu is building the country's largest onshore liquefaction facility in northern Shaanxi province, with annual capacity of 500,000 tonnes. (January 27, 2011)

INDONESIA: Planned project – CNR50/3/3

Pertamina and PT Medco Energy International will spend a combined \$1.9 billion on the **Donggi-Senoro liquefied natural gas project** in Sulawesi, officials said recently. Pertamina will spend at least \$1.387 billion for the LNG plant, the development of the Senoro gas field, and for the development of the Matindok field, business and risk management director Ferederick Siahaan said. The two fields will supply gas to the LNG plant, he said. **The project aims to produce 2**

million tonnes of LNG a year from 2014. Mitsubishi will take a 45 percent stake in the joint venture, instead of 51 percent earlier planned, the company said. **Korea Gas Corp will have a 15 percent stake** in the venture, while Pertamina owns the rest. Kyushu Electric, Japan's fifth-biggest power firm, has agreed to buy 300,000 tonnes of LNG from Donggi-Senoro for about 13 years, while Chubu Electric will purchase 1 million tonnes a year. (January 25, 2011)

INDONESIA: Planned project – Engineering – CNR50/3/4

JGC Corporation and its subsidiary PT. JGC Indonesia have been selected by **Mitsubishi Corporation and joint investors** a lump-sum turnkey contract to provide **engineering, procurement, construction and commissioning services for the Donggi- Senoro LNG Project** in Indonesia. The project calls for the construction of a single train LNG processing plant and associated support facilities. The single train will have a capacity of approximately 2 million tons of LNG per year. The target for start-up is late 2014. The plant will be located at Luwuk, Central Sulawesi, in Indonesia and feed gas to the plant will be supplied by the gas fields of Senoro-Toili and Matindok in the region. (January 25, 2011)

IRAQ: Planned project – Talks – CNR50/3/5

Deputy Minister for Refining and Gas Processing, Ahmed Al-Shamma, disclosed recently that **Mitsubishi and Shell** are engaged in negotiations with the Government over a **possible floating liquefied natural gas plant**.

Iraq has proven gas reserves estimated at 112.6 trillion cubic feet according to the US Central Intelligence Agency's World Factbook. It produces 1.7 billion cubic feet per day of gas, of which about 700 million cubic feet is daily flared. (January 26, 2011)

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MALAYSIA: Planned project – Engineering – CNR50/3/6

Technip, in a consortium with Daewoo Shipbuilding & Marine Engineering Co. Ltd., has been recently awarded by **Petroliam Nasional Berhad and MISC Berhad** a front-end engineering and design contract for a **floating liquefied natural gas unit**. The FLNG, which will have a capacity of **one million-tonnes per annum**, will be located in Malaysia. The contract, which is scheduled to be completed by the second half of 2011. (February 1, 2011)

RUSSIA: Planned project – Agreement – CNR50/3/7

Gazprom signed recently an agreement with **Japan's Natural Resources and Energy Agency** on a liquefied natural gas development project near Vladivostok. The agreement calls for the two parties to conduct **research on a basic**

design of an LNG plant to be built by Russia. It also involves feasibility studies on the profitability of a plan to produce compressed natural gas as well as transport and sell natural gas from Vladivostok to Asia-Pacific countries. (January 18, 2011)

YEMEN: Ongoing project – CNR50/3/8

The **Yemen LNG** venture completed recently a **production test** of its two combined trains, confirming production capacity "well in excess of the design" capacity. The company also said that **YLNG is targeting the loading of 104 cargoes during 2011**, which corresponds fully to the normal delivery volumes under the sale and purchase agreements that the venture has signed. YLNG operates a two-train liquefaction facility at the south-eastern Yemeni Balhaf port, with a 6.7-million-t/y design capacity. YLNG would be able to produce a bit more than 7 million t/y at a push is probably realistic. (January 17, 2011)

TRANSPORTATION-DISTRIBUTION

NETHERLANDS: Carrier – Planned project – CNR50/3/9

The shipping company **ANTHONY VEDER** (Rotterdam) recently ordered a **new LNG carrier** from MEYER WERFT. The new tanker for the

transport of liquefied natural gas will have a length overall of abt. 156 m, a breadth of 22.70 m, and a **cargo capacity of 15,600 bcm**. The delivery of this new vessel having is scheduled for end 2012. (January 24, 2011)

SUPPLIES - IMPORTS - EXPORTS

AZERBAIJAN to UKRAINE: Supply contract – Agreement – CNR50/3/10

Ukraine and Azerbaijan signed recently an intergovernmental memorandum on future **deliveries of liquefied natural gas from Azerbaijan**. Ukraine's plans to diversify its energy supplies and reduce their cost include building a **terminal for LNG storage on the Black Sea coast by 2015**. Preliminary estimates suggest that the project to build the terminal with an annual capacity of 10 billion cubic meters. (January 28, 2011)

INDONESIA to JAPAN: Supply contract – Agreement – CNR50/3/11

Kyushu Electric Power Co recently agreed with **PT Donggi-Senoro LNG** to buy **300,000 tonnes of liquefied natural gas annually for about 13**

years, starting in the second half of 2014. Under the deal, Kyushu Electric would rely on the **Donggi-Senoro project** for about 10 percent of its annual LNG supply. (January 19, 2011)

PAKISTAN: Supply contact – Talks – CNR50/3/12

A petroleum ministry official said recently that Pakistan is to **invite fresh bids for the supply of around 3.5 million mt/year of LNG by mid-February 2011** after its law ministry told the government to scrap the deal with GDF-Suez.

Pakistan is facing an acute energy shortage and is suffering a shortfall in excess of 1 Bcf/day as consumption is around 5.2 Bcf/day against output of 4.2 Bcf/day. The deal awarded to GDF Suez was for a medium-term supply contract for 2.75 million mt/year over six years.

The contract price was 3.95% Brent plus 75% of the maximum of the US' Henry Hub and the UK's National Balancing Point, plus \$1.58/MMBtu. Later, the Economic Coordination Committee also approved a second contract with GDF Suez for another 1.5 million mt/year of LNG for long-term supplies at 15.2% of Brent plus \$0.50/MMBtu for a period of 20 years, subject to further price improvements through a final round of negotiations with GDF. **The long-term price formula would be fixed for 10 years and be renegotiable for the second 10-year term.** (January 31, 2011)

PHILIPPINES: Planned project – Talks – CNR50/3/13

DOE director Jesus Tamang said recently that the department has held discussions with gas distributor **Xiniao Gas** and **Chinese operator Synergy International Resources Group** about **supplying LNG and developing a pipeline.**

Xiniao has been in prior discussions with Philippine National Oil Company's exploration arm for the development of the Bataan-Manila gas pipeline. The DOE is also planning to build an integrated Bataan LNG terminal and several LNG-fired power plants. (January 14, 2011)

UNITED STATES: Supply contract – CNR50/3/14

Cheniere Energy Partners, L.P. announced recently that its subsidiary, Sabine Pass Liquefaction, LLC, has signed a memorandum of understanding with **EDF Trading**, a wholly-owned subsidiary of EDF S.A., under which EDF Trading intends **to contract between 0.7 million tonnes per annum and 1.5 mtpa, equivalent to approximately one to two billion cubic meters of processing capacity at the Sabine Pass LNG terminal** located in Cameron Parish, Louisiana.

Under the MOU, EDF Trading and Sabine have agreed to proceed with negotiations of definitive agreements for EDF Trading to contract bi-directional capacity, subject to certain conditions precedent, including but not limited to the receipt by each party of requisite internal approvals, Sabine's receipt of regulatory approvals and making a final investment decision to construct the liquefaction facilities. (January 20, 2011)

UNITED STATES to JAPAN: Supply contract – Agreement – CNR50/3/15

A **Cheniere Energy Partners** LP subsidiary signed recently a **memorandum of understanding** with **Sumitomo Corp.** for about **1.5 million tonnes per annum of processing capacity** at the **Sabine Pass** liquefied natural gas

terminal in Louisiana. "With this MOU we have up to 7.7 mtpa of LNG processing capacity reserved," Charif Souki, Cheniere chairman and CEO, said. "We have reached our targeted capacity for the first two trains". (January 27, 2011)

WORLD to KUWAIT: Import – Planned project – CNR50/3/16

Abdullatif Al-Houti, **Kuwait Petroleum Corporation** Managing Director of International Marketing said recently that Kuwait is expected to resume its **seasonal liquefied natural gas imports in mid-March 2011**. "One of the new milestones for this summer is that the Ministry of Electricity and Water seeks increased LNG imports for domestic electricity generating this season and the next three years," Al-Houti said.

KPC will need to purchase additional 10-14 LNG cargoes for power generation during summer, said Al-Houti, adding that Kuwait, in 2010, imported 550 million cubic feet per day of gas in some 33 cargoes. He added "We are currently reviewing whether to buy additional LNG from our present contracts or from the spot market, depends on the price they offer". KPC signed a four-year LNG supply contract in 2010 with Royal Dutch Shell and energy trader Vitol from April through October till 2013. (January 25, 2010)

STORAGE

ARGENTINA: Planned project – Agreement – CNR50/3/17

Argentina signed recently **an agreement with Qatar** to look into building a **third liquefied natural-gas terminal** in the country, the Argentine planning ministry said. The terminal would facilitate the import of up to 20 million cubic meters of gas from Qatar each day, the ministry said. (January 24, 2011)

BAHRAIN: Planned project – talks – CNR50/3/18

Oil and Gas Affairs Minister and **National Oil and Gas Authority** (Noga) chairman, Dr Abdulhussain Mirza said recently that **talks with Gazprom** for set up a gas hub are at an advanced stage. "Though the deal covers supply of liquefied natural gas to Bahrain either directly from Russia by container ships or through other means, the company has expressed a desire to set up the

Bahrain hub,' Dr Mirza said. "This hub then could be used to supply gas to neighbouring GCC countries or even as far away as India and Pakistan" he said. **A tender to build a LNG terminal in Bahrain, near the Khalifa bin Salman Port, is expected to be awarded soon.** This terminal is expected to be up and running by the end of 2014, by which time Bahrain will also be ready to receive LNG supplies. (February 1, 2011)

INDONESIA: Planned project – CNR50/3/19

Pertamina's corporate secretary Hari Karyuliarto said recently that the company has **plans to convert the Arun LNG plant** in Aceh province on Sumatra Island **to be a regasification terminal** to meet domestic demand. "Using the current capacity, we can build the regasification unit **with capacity of 800 million cubic feet per day**. But we estimate the surrounding market will only need 200 MMcfd to 300 MMcfd," he said. Hari said the plant conversion would cost under \$100 million and take 16 to 20 months. Shipments of LNG from the Arun LNG plant were expected to drop from 36 cargoes in 2010 to 31 in 2011, and the plant was estimated to stop operations by 2014 due to declining gas supply. (January 28, 2011)

NETHERLANDS: Planned project – Open season – CNR50/3/20

Fluxys LNG launched recently the **binding phase of its market consultation** to assess the level of demand for **additional capacity at the Zeebrugge LNG terminal**. Starting from this spectrum of demand Fluxys LNG established the outline of the 2nd capacity enhancement of the Zeebrugge LNG Terminal: Construction of a second jetty for berthing of LNG ships with a capacity from approximately 3 500 m³ LNG up to

217 000 m³ LNG, to be made available in 2014 (indicative timing), Construction of an additional storage tank with a capacity of 160 000 m³ LNG to be made available in 2016 (indicative timing), Construction of additional send-out capacity of 450 000 m³(n)/h to be made available in 2016 (indicative timing). Fluxys LNG launches the binding phase of the market consultation with a concrete offer of services interested companies can secure on a long-term basis. (February 3, 2011)

POLAND: Planned project – CNR50/3/21

The construction of the liquefied natural gas terminal in **Świnoujście** is to start in March 2011. The investment should be completed in mid-2014. The terminal should be joined with the transportation system in 2013. **The LNG terminal should start operating before 30 June 2014.** The terminal will allow Poland to off-take up to 5 billion cubic meters of natural gas annually with the possible expansion up to 7.7 billion cubic meters. (January 25, 2011)

SINGAPORE: Planned project – Engineering – CNR50/3/22

Singapore LNG Corporation awarded recently the **contract** for the **third liquefied natural gas storage tank to Samsung C&T**. In a joint statement, both companies said the contract is for the engineering, procurement and construction of the storage tank. With the addition of the third 188,000 cubic metre LNG tank, the terminal will be able to handle up to six million tonnes per year. The third tank is expected to be completed by early 2014. (January 21, 2011)

WORLD to THAILAND: Ongoing project – CNR50/3/23

It has been reported that **Thailand is set to complete its LNG Terminal by summer 2011**. Thailand is to purchase approximately 1m tons of LNG for a period of two to three years. Kurujit Nakornthap, Deputy Permanent Secretary at the

Energy Ministry said that Thailand's gas demand is growing at a rate of 7% each year. He added, "We will use the terminal for security of supply and meet peak demand for electricity. **We may buy spot LNG in the market as it is cheap**". (January 19, 2011)

NATURAL GAS

EXPLORATION – DISCOVERY

CANADA: Exploration – Regulation – CNR50/3/24

Alberta plans to set up one regulatory body that will make all decisions about land, water licences and environmental assessments. The move will streamline the application process, which currently requires companies to go through the Energy Resources Conservation Board, followed by Alberta Environment, Sustainable Resource Development and Alberta Energy. The province says the change will make the process for approvals faster, making Alberta's oil and gas industry more competitive. The caucus of the governing Conservatives has approved the recommendations, which will be introduced in the spring sitting of the legislature. (January 29, 2011)

CHINA: Discovery – CNR50/3/25

Ivanhoe Energy subsidiary Sunwing Energy discovered recently natural gas at its **Zitong** exploration block in the Sichuan Province, China. The Zitong-1 well, drilled in Xu-4 formation, had shown an initial flow rate of **750,000 cft per day**

on a three millimetre choke during testing. Ivanhoe Energy president and COO David Dyck said the company looks forward to production and cash flow in 2011 and further development activity in the area soon. (January 18, 2011)

EGYPT: Exploration – Regulation – CNR50/3/26

Minister of Petroleum and Mineral Resources Sameh Fahmi said recently that the Egyptian government is "**studying the precise coordinates of the maritime borders in order to determine our share of the reserves**". The U.S. Geological Survey reported in 2010 that the Levant Basin, stretching from the Jordan River into the eastern Mediterranean, the West Bank, the Gaza Strip, Lebanon and Syria, could contain up to 122 trillion cubic feet of natural gas. (January 26, 2011)

EGYPT: Exploration – Tender – CNR50/3/27

Mahmoud Latif, the head of the **Egyptian Natural Gas Holding Company** said recently that the company will **offer up 19 areas for exploration in 2011** in international tenders. "It is planned to offer 17 areas to search for gas in the

Mediterranean Sea and two land areas in the Nile Delta" he was cited as saying. The company expects a 7 percent increase in domestic consumption of gas in the 2010/2011 fiscal year. (January 19, 2011)

MOROCCO: Discovery – CNR50/3/28

Circle Oil tested recently the ADD-1 exploration well in the **Sebou Permit of the Rharr Basin**, Morocco. The well first tested gas at a sustained rate of **3.57mmscf/d** on a 24/64" choke from the Main Hoot zone. The Guebbas zone was then perforated and flowed gas at a sustained rate of **1.89mmscf/d** on a 16/64" choke. According to the company, the well is being completed as a potential producer. (January 24, 2011)



Dear Madams and Sirs,

The International gas exhibition of Turkmenistan and the 2nd Gas congress TGC 2011 - the relevant event in the Central Asia, presenting wide range of equipment, technologies and services for gas industry, **will take place on 25-27 of May, 2011** in the “Sergi Koshgi“ exhibition palace, Ashgabat.

Organizers: **The State concern «Turkmengas», the Chamber of Commerce and Industry of Turkmenistan with full support of the Turkmenistan Cabinet of Ministers**

Gas industry in Turkmenistan

- Turkmenistan gas reserves: the 4th place in the world after Russia, Iran and Qatar.
- Natural gas resources – 15-20 trillion m³.
- Group of fields such as Southern Yoloten-Osman and Yashlar were discovered. According to Gaffney, Cline & Associates, these fields are the 4th largest gas resources in the world – from 4 to 14 billion m³ of gas.
- Energy resources are exported to a number of European countries via gas pipeline Middle East-Centre, as well as to Iran and China.
- Construction of West-East gas transport system has already started.
- The agreement for Turkmenistan-Afganistan-Pakistan-India (TAPI) gas pipeline construction was signed.
- The President set the leaders of the country's oil and gas complex a task of building LNG and gas processing plants, and wherefore demanded to improve the “National Program of Oil and Gas industry development in Turkmenistan till 2030” promptly.
- 60 billion dollars are going to be invested to the accomplishment of oil and gas industry projects in the nearest 10 years.

This is a unique opportunity to demonstrate the latest achievements and technologies to Turkmenistan specialists, establish direct contacts to representatives of Turkmenistan government, meet challenges of the region development.

<http://turkmenexpo.com/tgc/>

Exhibition operator: **Negus Messe Service GmBH (Germany).**

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PRODUCTION

ABU DHABI: Planned Project – Engineering – CNR50/3/29

Abu Dhabi National Oil Company selected recently **Occidental Petroleum Corporation** as its partner to move ahead with the **development of Shah Sour Gas Fields**. Under the

arrangement, “Adnoc will retain a majority share of 60 per cent while Occidental will take a 40 per cent participating interest”. The project involves the development of gas reservoirs, located on-shore approximately 180 km south-west of the city of Abu Dhabi. (January 21, 2011)

ALBANIA: Planned project – Agreement – CNR50/3/30

Stream Oil & Gas Ltd. announced recently on that the **Ministry of Economy, Trade and Energy of Albania** has given its **formal approval** for the execution of the **Plan of Development for the Delvina gas field**. The formal approval was the final ratification of the PoD that was submitted in early 2010. The approval of the PoD allows Stream to enhance production and sell petroleum products under Albpetrol's existing license for a period of 25 years with an option to extend, at the Company's election, in five year increments thereafter. Delvina is one of the largest onshore gas fields in south east Europe and the only major producing gas field in Albania.

Current production from the two existing wells in the field is 700 mcf/d of natural gas and 47 bbl/mmcf of natural gas liquids. In October 2010, Stream kicked off Phase II of Delvina block's Plan of Exploration previously submitted to the Albanian authorities. Phase I was completed mid 2010; Phase II includes the drilling of a vertical exploration well in the first quarter of 2013. (January 24, 2011)

ALGERIA: Planned project – Engineering – CNR50/3/31

Petrofac has been recently awarded an engineering, procurement and construction contract by In Salah Gas, an association between **Sonatrach, BP and Statoil**, to develop southern fields in the In Salah development. **The fields to be developed are Garet el Befinat, Hassi Moumene, In Salah and Gour Mohmoud**. Petrofac's scope of work includes a new central production and gas gathering facility at In Salah comprising two dehydration trains, with the capacity to produce approximately 16.8 million cubic metres of gas per day, associated

permanent camps, and approximately 300km of pipelines for gas collection from the in-field wells and export to the existing Krechba facility. Brownfield modifications will also be undertaken at the existing Reg facilities with an additional dehydration train plus modifications for future operation of the compression facilities. The existing Teg and Krechba compression facilities will also be upgraded for future operations. The 50-month project, to be completed in phases, will support the maintenance of plateau gas production rates of 9 billion cubic metres per annum beyond 2013. (January 21, 2011)

AUSTRALIA: Planned project – Delay – CNR50/3/32

Exxon Mobil Corp. said recently that natural gas and liquids production from the **Kipper and Turrum developments offshore Victoria state will be pushed back to 2012 and 2013**, respectively, from a previous target of 2011. Costs for the projects, including the smaller Tuna venture, have increased to a total US\$4.4 billion, from an initial estimate of US\$2.7 billion. BHP said production at Kipper has been hampered by the **discovery of mercury in the reservoir**. Both companies confirmed that the new Kipper completion target is contingent on removal of the mercury, to be managed through a separate project. The Exxon spokeswoman said **additional design requirements** at Turrum, as well as **cost pressures** in Australia's booming resource industry, were also behind the cost blowouts. Exxon and BHP jointly own Turrum and each have a 32.5% stake in Kipper, of which Australia's Santos Ltd. owns the remaining 35%. (January 19, 2011)

EQUATORIAL GUINEA: Planned project – Approval – CNR50/3/33

PA Resources AB announced that the Plan of Development for the **Alen field** has been recently **approved by the Ministry of Mines, Industry, and Energy** of the Republic of Equatorial Guinea. Formerly known as Belinda, Alen is a liquid-rich gas-condensate* discovery in the Douala Basin offshore Equatorial Guinea. The Alen Field will utilise condensate storage capacity and certain facilities on the Aseng FPSO on a cost-shared

basis, with Alen assuming 33% - 50% of the relevant costs. Initial development of the Alen Field will include three production wells and three subsea natural gas injection wells tied to a processing platform. Produced condensate will be separated and piped to the Aseng floating production, storage, and offloading vessel on Block I, approximately 15 miles to the south, where it will be held until sold. **Gas produced will be reinjected back into the reservoir to maintain pressure and maximize liquid recoveries.** First production is estimated to commence by the end of 2013 at a total rate of 37,500 barrels per day gross. (January 12, 2011)

ISRAEL: Production – Regulation – CNR50/3/34

The **Israeli government** approved recently a **near doubling of the profit tax on gas and oil extracted** from its territory. The cabinet voted to accept the recommendations of a government committee to tax energy profits between 52 and 62 percent and to set aside a special fund from the income aimed at a range of public needs. (January 24, 2011)

MALAYSIA: Planned project – Engineering – CNR50/3/35

Petrofac announced recently that it has signed a **Risk Service Contract (RSC) to lead the development of the Berantai field, offshore Peninsular Malaysia, for Petroliam Nasional Berhad.** Petrofac has a 50% interest in the RSC, alongside local partners Kencana Energy Sdn Bhd and Sapura Energy Ventures Sdn Bhd, both of which hold a 25% interest. The Berantai partners will develop the field and will subsequently operate the field for a period of seven years after first gas production. As part of the fast-track development, a wellhead platform

will be installed to support the drilling of eighteen wells, with a second wellhead platform expected to be installed in a subsequent phase. Both platforms will be connected to a Floating Production Storage and Offloading (FPSO) vessel which will be jointly owned by the Berantai partners. The FPSO will undergo modification to ensure suitability for the Berantai development. **Produced gas will be exported by subsea pipeline via the Angsi Field,** while oil will be offloaded via shuttle tanker. The project is targeting first gas by end of December 2011 with the first phase wells expected to be completed during 2012. (January 26, 2011)

RUSSIA: Planned project – Engineering – CNR50/3/36

Gazprom selected recently **Lanner Group** as its **simulation software** partner to develop a detailed simulation of proposed operations for the **Shtokman gas field.** The complexities presented by Shtokman's location, harsh weather conditions and remote location meant that Gazprom and its Phase 1 partners needed to plan extremely carefully for the future operation of the field. Key objectives for the project were to use the model to find answers to questions such as what fleet configuration would be most logistically effective for various marketing scenarios.

The model would also be used to test the reliability of the supply chain and to gauge potential risks. The model logs a number of key performance measures as it runs, including the ability of ships to meet delivery windows assigned by the program and manually defined supply commitments; and various parameters for utilisation of the shipping fleet. More detailed results are available on top of these, including delays, time on berth, cause of delays, slots not delivered, slots arrived at late, and early arrivals and can help to isolate particular bottlenecks in the chain for further analysis. (January 26, 2011)

RUSSIA: Ongoing project – CNR50/3/37

Gazprom's experts visited recently the **Bovanenkovo field** which will serve as the basis for establishing a new large gas production centre on the Yamal Peninsula. Much work has already been done at the comprehensive gas treatment unit (CGTU) module 1 and the booster compressor station. Equipment installation at the CGTU module 2 has been initiated. Flowlines and access roads to gas well clusters are being constructed. Gas production wells are being successfully drilled – 67 wells were drilled in 2010 with borehole equipment installed in 29 wells. Construction of the Obskaya–Bovanenkovo railroad, being another key element in the transmission infrastructure, is almost complete.

The Bovanenkovo field is the most significant one on the Yamal Peninsula as its ABC1+C2 gas reserves amount to 4.9 trillion cubic meters. **Commissioning of the first start up complexes for the Cenomanian-Aptian deposits pre-development in the field and the gas trunkline system construction are**

scheduled for the third quarter of 2012. Projected gas production in the Bovanenkovo field is estimated at **115 billion cubic meters per annum** to be increased to 140 billion cubic meters in the long term. (February 2, 2011)

THAILAND: Ongoing project – CNR50/3/38

Chevron Corp said recently that it hopes to start gas production at the **Platong 2 project in the Gulf of Thailand later in 2011.** "With gas demand in Thailand growing by 13 percent in 2010, we are working to accelerate Platong 2's progress towards first gas," Jim Blackwell, president of Chevron Asia Pacific Exploration and Production Co, said. Gas from the project will be supplied to Thailand. The company expects production to eventually reach **330 million cubic**

feet per day. Gas production was earlier targeted for 2012. The Platong Gas 2 development, located in shallow water, is designed to add natural gas processing capacity of 420 million cubic feet per day and to produce an estimated 330 million cfd of natural gas as well as 18,000 barrels per day of natural gas liquids. Chevron is the operator with a 69.8 percent stake while Mitsui Oil Exploration Co Ltd holds 27.4 percent and PTT Exploration and Production Public Co Ltd has 2.8 percent. (January 19, 2011)

UNITED STATES: Ongoing project – CNR50/3/39

Apache Corporation announced recently that hydrocarbon production has begun at its **Balboa Field**, located on East Breaks Block 597. Initial gross flow rates have stabilized at **approximately 30 million cubic feet of natural gas and 1,400 barrels of oil per day.** Apache's subsidiary is the operator of the field and holds a 50 percent working interest. Balboa is located in estimated water depths of 3,350 feet approximately **130 miles south of Galveston, Texas.** The field is a one-well development with a six-mile tieback to the Anadarko-operated Boomvang spar on East Breaks 643. (January 6, 2011)

RESERVES

IRAQ: Reserves in place – CNR50/3/40

Heritage Oil made recently a major gas discovery on its 75%-held Miran block. Heritage's 1,000 sq km Miran block contains two large structures, Miran East and Miran West. Following completion of the deepening and testing of the Miran West-2 well, **management estimates that the Miran West structure has P90-P50 gross in-place volumes of gas of between 6.8-9.1 trillion cubic feet with 42-71m barrels of condensate and 53-75m barrels of oil.** The well was initially designed as an appraisal well for the Cretaceous section and was later modified to assess the exploration potential of the deeper formations.

The Miran West-2 well also now has been suspended as a future producer. Tony Buckingham, the chief executive of Heritage, said: "The discovery of a major gas field of up to 12.3 TCF in-place with exceptional flow rates makes this one of the largest gas fields to be discovered in Iraq. This well has substantially de-risked the field so we have the confidence to accelerate the work programme on Miran. We are considering various development options including a tie-in to planned infrastructure that will achieve first production for both oil and gas in 2015. (January 26, 2011)

TANZANIA: Proven reserves – CNR50/3/41

Regional trade bloc East African Community (EAC) said recently that Tanzania's **proven natural gas reserves** have more than doubled to **now stand at 7.5 trillion cubic feet** following more discoveries off its coast. Tanzania's government previously put the proven natural gas deposits at about 3.3 trillion cubic feet. The east African economy has found gas deposits in four areas: Songo Songo island off the eastern coast, in nearby West Songo Songo, Mnazi Bay in southeastern Tanzania and Mkuranga near the commercial capital of Dar es Salaam. EAC has plans to build a pipeline to distribute the gas to the rest of the region. (January 21, 2011)

PROCESSING

PAKISTAN: Planned project – CNR50/3/42

The **Uch Gas Field Development Project** was recently awarded to **Petrosin Group of Companies**, a Singapore based multinational company. This project was firstly tendered in

2009, and resulted in all bidders been disqualified other than one company. The board of directors of OGDCL decided to retender the project. (January 28, 2011)

SAUDI ARAMCO: Planned project – Engineering – CNR50/3/43

Saudi Aramco said recently that it had selected South Korea's **SK Engineering and Samsung Engineering Ltd.** to develop a massive onshore natural gas project. **The Wasit onshore gas program includes a facility to treat 2.5 million cubic feet of non-associated natural gas per day**, Saudi Aramco said in a statement.

The gas would come from the Arabiyah-Hasbah offshore field, with production slated to begin in 2014. SK Engineering won a contract that includes performing the engineering, procurement and construction work for the inlet and gas facilities. It includes building four gas treatment trains, flare and burn pit facilities and other related projects. SK also secured a contract for the engineering and construction of sulfur recovery units. Samsung won a contract for the engineering and construction of the project's co-generation and steam generation facilities. (January 25, 2011)

UNITED STATES: Planned project – Expansion – CNR50/3/44

Enbridge Inc said recently that it will spend \$150 million on **an expansion of a Venice, Louisiana, processing plant to handle more natural-gas liquids**. Enbridge said the plant requires additional condensate processing capacity to

handle gas from Royal Dutch Shell's Olympus platform in the Mars field, 210 kilometers south of New Orleans. **The expansion will double the capacity of the facility, letting it handle 12,000 barrels of condensate per day** and is expected to be complete in late 2013. (January 31, 2011)

TRANSPORTATION-DISTRIBUTION

ALGERIA to SPAIN: Ongoing project – CNR50/3/45

It has been reported that the **Medgaz pipeline** which runs for 210 km under the sea from Algeria to Almería **will be providing Spain with gas in February 2011**. The Algerian newspaper, "Algérie Soir", said that testing of the installations in Algeria is now complete, with just a few finishing touches to be carried out before the pipeline becomes operational. (January 27, 2011)

CANADA: Planned project – Approval – CNR50/3/46

The **National Energy Board** recently **approved Nova Gas Transmission's (NGTL's) Horn River project**. The project will transport sweet natural gas from the Horn river basin in northeast

British Columbia to NGTL's Alberta System and provide customers direct access to the Nova Inventory Transfer market. The new facilities include the Cabin Section (72km of new pipeline) and the Komie East Extension (2.2km of new pipeline). (January 28, 2011)

GEORGIA: Ongoing project – CNR50/3/47

Georgian President Mikhail Saakashvili attended recently the opening ceremony of the first section of the pipeline, built by **SOCAR Georgia Gas**, subsidiary of the State Oil Company of Azerbaijan, in the Georgian city of Poti. In general, **150 km gas pipeline is designed to be constructed in Poti city**. According to SOCAR's 3-year investment program, more than 500 km pipeline in Samergelo region, 1500 km pipeline in Georgia are planned to be constructed. (January 24, 2011)

GERMANY: Planned project – Approval – CNR50/3/48

The federal state's authorities approved recently the **North European Gas Pipeline section in Mecklenburg-West Pomerania**. The NEL project is headed by the natural gas companies WINGAS and E.ON Ruhrgas and Gasunie. Commissioning of the second link of the Nord Stream Baltic Sea Pipeline is scheduled for the fall of 2012.

The 440 kilometer NEL will connect Nord Stream, as well as the Baltic Sea Pipeline Link (OPAL), with the existing European natural gas pipeline system. Whereas OPAL runs from where Nord

Stream emerges from the sea at Greifswald and on southward to the Czech Republic, the NEL's route extends from the coast of the Baltic, past Schwerin and Hamburg, to Rehden, Lower Saxony, just south of Bremen. The pipeline will be able to transport about 20 billion cubic meters a year. **The approval that has now been granted by Stralsund Mining Authority applies to a 240 kilometer section between Lubmin and Boizenburg/Elbe** (Ludwigslust district), where the pipeline will cross the Elbe and continue westward through the district of Lüneburg. (February 7, 2011)

INDIA: Planned project – Engineering – CNR50/3/49

A consortium of four state-run companies led by **Gujarat State Petronet Ltd.** received recently contracts for the **construction of three major pipeline projects** in the country, the company said. The consortium has received contracts for the 1,530 kilometer pipeline from Mallavaram in the southern state of Andhra Pradesh to Bhilwara in the northern state of Rajasthan. The Mallavaram-Bhilwara pipeline will have an initial capacity of 53 million metric standard cubic meters of gas a day. GSPL has also received contracts for the 1,650 km Mehsana-Bhatinda pipeline from western to northern India and the 750 km pipeline to Jammu & Kashmir from Bhatinda. The Mehsana-Bhatinda pipeline will have an initial capacity to transport 42 MMSCMD of gas, the publication said, while the Jammu-Bhatinda pipeline will have capacity for 15 MMSCMD of gas. (January 18, 2011)

MOROCCO: Planned project – CNR50/3/50

Circle Oil and ONHYM (Office National des Hydrocarbures et des Mines) will begin the construction of a **gas pipeline in 2011** to supply the domestic market, according to the official MAP

news agency. The pipeline, which will constitute an 8-inch diameter, **will interconnect Rharb basin to industrial firms in nearby Kenitra**, 40km north of Rabat. (January 27, 2011)

UNITED STATES: Planned project – Agreement – CNR50/3/51

DCP Midstream signed recently a **long-term gas gathering and processing agreements with Pioneer Natural Resources USA, Reliance Eagleford Upstream Holding and Newpek (Pioneer JV)**, under which DCP will provide midstream services in Texas. The midstream services will be provided for handling the liquid-rich natural gas from the Pioneer JV's acreage in the Eagle Ford shale play in south central Texas. **The agreement covers the gathering, processing, fractionation and marketing services of raw natural gas and gas liquids** by DCP Midstream for the Pioneer JV's Eagle Ford shale production. DCP Midstream will construct approximately **130 miles of 16-, 20- and 24-inch gathering pipelines** that will connect the Pioneer JV's and the privately held producer's central gathering points in south central Texas and other gas supply to DCP Midstream's existing area gathering and processing facilities. (January 21, 2011)

UNITED STATES: Planned project – Open Season – CNR50/3/52

Inergy, L.P. announced recently that its wholly-owned subsidiary, **Inergy Midstream, LLC**, is conducting a **non-binding open season for firm wheeling service on an extension of its Tres Palacios gas storage facility pipeline header system**.

The proposed pipeline extension will create a new point of interconnection at the tailgate of Copano Energy, LLC's Houston Central gas processing plant in Colorado County, Texas. The Tres Palacios header extension project is expected to include approximately 20 miles of newly constructed lateral piping, additional compression, and interconnect facilities (the "Tres Header Project"). Once complete, the Tres Header Project will allow shippers to move gas along 60 miles of header pipe with access to a combination of 10 interstate and intrastate pipelines and the Tres Palacios storage facility. Additionally, shippers will have access to the Tres Palacios Hub point. Copano's Houston Central Plant currently provides 700MMcf/d of processing capacity and 22,000 barrels per day of fractionation capacity and is being modified and expanded to handle rich natural gas from the Eagle Ford Shale play. (January 18, 2011)

SUPPLIES - IMPORTS - EXPORTS

AZERBAIJAN to GREECE: Supply contacts – Agreement – CNR50/3/53

Azerbaijani Minister of Industry and Energy Natig Aliyev said recently that Azerbaijan, Turkey and Greece agreed to sign a new agreement allowing transporting Azerbaijani gas to Greece without the mediation of Turkey. He said that at present, **Azerbaijani gas is supplied to Greece to the**

amount of 700 million cubic meters of gas a year on the basis of the contract between the Turkish and Greek sides. However, a decision was made to re-conclude the contract directly between Azerbaijan and Greece. The new contract will cover the already determined amount of 700 million cubic meters of gas a year.

CHINA: Gas Demand – Forecast – CNR50/3/54

According to a statement from the **National Energy Administration (NEA)**, China's natural **gas demand will rise 20 percent in 2011 to 130 billion cubic meters** and production will increase 16 percent to 110 bcm. According to the NEA, China's gas consumption in 2010 was 110 bcm, a rise of 20 percent year-on-year. Meanwhile, production was 94.48 bcm, a 12 percent increase from 2009. Lin Boqiang, director of the China Center for Energy Economics Research at Xiamen University said that the country's 2011 power demand may rise 9 percent to 4.5 trillion kilowatt-hours, and the power-generating capacity will increase by 80 gigawatts, bringing total capacity to 1,040 GW, according to the NEA. (January 30, 2011)

ISRAEL GERMANY: Ongoing project – CNR50/3/55

E.ON Gas Storage is now marketing the E.ON Hanse storage facilities in the Gaspool market area. E.ON Gas Storage is assuming responsibility for marketing the storage capacities of E.ON Hanse from the 2011/2012 storage year onwards. As a result of this additional offer of capacities in the **Kraak, Reitbrook and Rönne storage facilities**, E.ON Gas Storage can offer its customers not only the NCG market area but also substantial H-gas storage capacities in the Gaspool market area. E.ON Gas. The Kraak,

Reitbrook and Rönne storage capacities will be offered via the storage portal on a non-discriminatory and transparent basis. **The capacities in the Rönne (type A) and Reitbrook (type C) storage facilities can be booked for a maximum of 3 years.** In addition, customers interested in Kraak and Rönne storage capacity are being offered the flat product already available in the Etzel EGL, Epe H-gas and Epe L-gas facilities. The working gas capacity totalling approx. 7.6 TWh can be booked via the EGS storage portal from 21 February 2011. (January 28, 2011)

UNITED KINGDOM: Consumption – Residential – CNR50/3/56

According to the **British Gas Home Energy Report 2011**, published by the Centre for Economics and Business Research (Cebr), **British Gas homes have seen a 22 per cent decline in gas consumption, on average**, as more homes adopt energy efficiency measures. **The research is based on 40 million British Gas meter readings over a four year period.** All the figures are weather-adjusted to show underlying trends in consumption.

The report finds that British Gas customers who adopted simple energy efficiency measures such as insulation and energy efficient boilers saved an average of £322 each year, and saw a 44 per cent fall in their gas use between 2006 and 2010. Jonathan Thurlwell, Director of Competition Economics at Cebr, who produced the report for British Gas said: "This report represents the largest independent analysis of domestic natural gas consumption representing nearly a fifth of the entire national market.

Using detailed modelling techniques we were able to determine that energy efficiency measures are the primary driver of the average annual decline in underlying gas consumption. The message is clear: in a global environment of rising commodity prices the most effective way for households to reduce costs is through basic energy efficiency measures". (February 2, 2011)

RUSSIA to BELGIUM: Supply talks – CNR50/3/57

Gazprom Chief Executive Alexei Miller welcomed recently **Belgian Prime Minister Yves Leterme** to Moscow to discuss bilateral cooperation in the energy sector. "The parties addressed the promising areas of Russian-Belgian cooperation in the energy sector placing an emphasis on **Russian natural gas supplies to**

Belgium and its transit to third countries," Gazprom said in a statement. Both sides also reviewed interaction between Gazprom and Belgian natural gas company Fluxys, including the potential use of Belgium's underground gas storage capacity. (January 27, 2010)

SAUDI ARABIA: Planned project – Petrochemistry – CNR50/3/58

Senior company officials said recently that Saudi Basic Industries Corporation is looking to develop crackers that can use a **range of feedstocks to produce olefins on increasing difficulty in getting allocations for its gas-based crackers.** "A few years ago no one would have imagined that we would face a shortage of gas. But today, we are facing a shortage. And therefore, we need new technology to replace gas as a feedstock,"

said Abdul Rahman Al Ubaid, executive vice president, technology and innovation at Sabic.

No new gas allocations to the petrochemical producers have been made in Saudi Arabia since 2006, according to industry sources. An official source involved in developing gas fields in Saudi Arabia said that since most of the gas is associated with oil, it has been difficult to increase production in the wake of OPEC's targets for oil output. (January 28, 2011)

TAIWAN: Gas demand – Forecast – CNR50/3/59

An official from Taiwan's **Bureau of Energy, Ministry of Economic Affairs** said that **Taiwan's consumption of natural gas will increase to 14 million mt by 2020 and 16 million mt by 2025,** up 55% and 77% respectively, from 9.02 million mt in 2009. In 2009, regasified natural gas from LNG imports provided 8.78 million mt of Taiwan's natural gas, while domestic supply provided the remaining 0.24 million mt, according to statistics from the bureau. The main consumers of Taiwan's natural gas are its eight power generators who account for a combined total of 78.4%, with the outstanding amount taken by energy (3.9%), industrial (7.5%), services (3%) and residential (7.2%) users. (January 26, 2011)

STORAGE

ARMENIA: Ongoing project – CNR50/3/60

According to **ArmRosgazprom's** press office, the amount of gas in the **Abovyan storage** increased to total 132,5mln cu m by 2011. (January 26, 2011)

NETHERLANDS: Ongoing project – CNR50/3/61

Gasunie recently opened its underground gas storage facility at **Zuidwending near Veendam.**

The Zuidwending natural gas buffer is the first gas storage facility in the Netherlands where natural gas is stored in salt layers. (January 27, 2011)

USE FOR POWER GENERATION

AUSTRALIA: Planned project – Approval – CNR50/3/62

TRUenergy recently welcomed the **New South Wales Government's planning approval** for a second gas-fired power station development on the existing power station site at **Tallawarra near Wollongong** in New South Wales. TRUenergy's existing 420MW combined cycle gas-fired power station on the Tallawarra site began commercial operation in January 2009. Construction commenced in November 2006. (January 17, 2011)

INDIA: Planned project – Engineering – CNR50/3/63

Sravanthi Energy selected recently **GE's flexible gas turbine technology** for a new power plant in the **Northern Indian city of Kashipur.** The plant is expected to generate approximately 450 megawatts of electricity in two combined-cycle blocks. The primary fuel for the new plant is expected to be supplied by a pipeline that Gas Authority of India is constructing to bring natural gas into this region. In addition to the power plant, the natural gas would be used to support petrochemical, automotive and other industrial

activities in the Kashipur and Rudrapur areas. GE will supply four Frame 6FA gas turbines and associated generators for the Sravanthi project, which is expected to be developed in **two 225-megawatt phases**. Sravanthi Energy expects the commercial operation of phase one to begin in the third quarter of 2011, with phase two in the first quarter of 2012. (January 31, 2011)

UNITED KINGDOM: Planned project – Approval – CNR50/3/64

ScottishPower, a subsidiary of Iberdrola, recently received approval from the British government to construct a **1,000MW** gas-fired power station

near **Hoo St Werburgh in Kent**. This Damhead Creek 2 power station will be built adjacent to the company's existing 800MW Damhead Creek gas-fired power plant. (January 26, 2011)

UNITED STATES: Ongoing project – CNR50/3/65

American Electric Power announced recently that it will **accelerate the construction process of a natural gas-fired power plant near Dresden, Ohio**. The partially constructed plant was purchased in 2007 by AEP through its AEP Generating Company subsidiary from Dresden Energy LLC, a subsidiary of Dominion. AEP expects the plant to be operational during the first quarter of 2012. When completed, the Dresden plant will be a nominal **580-megawatt** natural gas-fired combined-cycle plant. (January 20, 2011)



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