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Main news

LNG: Processing

- **Itochu Corp** Japanese group said that it would conduct a feasibility study with **Gazprom** for a liquefied natural gas plant in Vladivostok with capacity of 10 million tonnes per annum.

LNG: Supplies- Imports - Exports

- **Sinopec** agreed to buy 4.3 million metric tonnes of liquefied natural gas annually from Australia Pacific LNG for 20 years, starting from 2015.
- **Qatargas** signed a 2.4 million tonnes per year three year contract to supply liquefied natural gas to Centrica.
- **Regulatory Commission of Alaska** wants to ask electric utilities to report on potential plans to import LNG to supply gas-fired power plants the companies are planning to build.

LNG: Storage

- **Reliance Industries'** plans to build a liquefied natural gas import facility at Rewas, in Maharashtra.

Natural Gas: Exploration – Discoveries

- The **Aquio field's deposits discovered by Total** will increase Bolivia's gas output by 6.5 million cubic meters a day when it begins operating in 2015.
- **Dana Gas** announced that the **Egyptian South Abu El Naga-2 well** produced 14.1 million standard cubic feet per day of gas with 718 barrels of condensate.

Natural Gas: Reserves

- **Sinopec** discovered 875.3 billion cubic metres of natural gas reserves in its Yuanba block in southwestern Sichuan province.

Natural Gas: Transportation-Distribution

- **Romania** is to start construction of a **new gas pipeline** that will connect the country with **Moldova**. The project is **set to start by the end of 2011**.
- **Russian Prime Minister** said that the **underwater section of the Nord Stream natural gas pipeline for Europe should be completed by the middle of May 2011**.

Natural Gas: Supplies- Imports - Exports

- The **Jordanian cabinet** adopted a package of measures that seek to **reduce the country's energy consumption** after supplies of natural gas from **Egypt were cut following a pipeline explosion**.
- **China agreed to extend to Turkmenistan an extra \$4.1 billion in credit**. Turkmengaz said the funds will be used to boost Turkmenistan's export potential and **develop the South Yolotan field**.
- The **Energy Information Administration** indicated that the **net import share of U.S. energy consumption will drop to 17% in 2035 from 24% in 2009**.

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LNG

PROCESSING

JAPAN: Liquefaction technology – CNR50/7/1

Nippon Kaiji Kyokai (ClassNK) announced recently the publication of its **new Guidelines for Floating Offshore Facilities for LNG/LPG Production, Storage and Offloading**. The new guidelines address the wide variety of construction and survey requirements for FLNG and FLPG facilities including LNG/LPG Floating Production, Storage and Offloading facilities (FPSO), Floating Production and Offloading facilities (FPO), and Floating Storage and Offloading facilities (FSO). “Ongoing environmental and logistical concerns related to onshore gas production have helped spur new interest in offshore LNG and LPG projects,” said

ClassNK Natural Resource and Energy Development Project Team Leader Hirofumi Takano. “With several of these projects entering the design phase, there has been a growing need for clear technical guidelines for the construction and survey of offshore gas facilities, and these new guidelines are an important step in that process”. Toshiyuki Shigemi, General Manager of the ClassNK Development Department said “LNG FPSOs fall under both the scope of our rules for FPSOs developed in 2009, as well as our rules for vessels carrying gas in bulk. With these new guidelines, however, we’ve created a single reference for all the rules that apply to floating gas facilities”. (April 29, 2011)

RUSSIA: Planned project – Partnership – CNR50/7/2

Itochu Corp Japanese group said recently that it would conduct a feasibility study with **Gazprom for a liquefied natural gas plant in Vladivostok with capacity of 10 million tonnes per annum**. The two sides will also consider producing compressed natural gas and gas petrochemical products. Itochu said the **study is to be completed by the end of 2011 and that the LNG plant might start operations as early as 2017**. The consortium, Japan Far East Gas Co, consists of the Itochu group (37.5 percent), Japan Petroleum Exploration (32.5 percent), Marubeni Corp (20 percent) and Inpex Corp (10 percent), the member companies said. (April 26, 2011)

SUPPLIES - IMPORTS - EXPORTS

AUSTRALIA to CHINA: Supply contract – CNR50/7/3

Sinopec agreed recently to **buy 4.3 million metric tonnes of liquefied natural gas annually from Australia Pacific LNG for 20 years**. Sinopec Group said the gas will be delivered from Queensland, Australia to a planned gas collection station in China's Guangxi Zhuang Autonomous Region and other terminals. **Besides the gas deal starting from 2015, Sinopec also will buy**

15 percent of the Australian company's shares. Australia Pacific LNG is owned by Origin Energy Ltd. and ConocoPhillips, with each company holding 50 percent of its stakes. The Sinopec investment will reduce the two companies' stakes in Australia Pacific LNG to 42.5 percent each. The deals are subject to the final approval of both Chinese and Australian authorities. (April 22, 2011)

JAPAN: Import forecast – CNR50/7/4

Mitsunori Torihara, chairman said recently that the **Japan Gas Association sees sufficient spot LNG capacity to cover the country's requirements**, in spite of an expected surge in demand following the March 11 earthquake. Torihara, who is also chairman of the country's largest city gas supplier Tokyo Gas, said **there was 40 million-50 million mt/year of spot supply capacity globally**. He said gas utilities were not seeing any supply concerns, but he added that he was concerned over rising LNG prices. Asked whether gas utilities were considering diverting LNG supplies to the power facilities affected by the quake, Torihara said the gas utilities had not "immediate plans" to divert LNG. But, he added, they are thinking of prioritizing processed gas supplies to Tokyo Electric Power Co for use in its gas-fired power plants. Similarly, Tokyo Gas intends to supply Tepco with a total of 2 GW of power capacity from its gas-fired power plants in Sodegaura, Ogishima and Kawasaki during the peak summer season, Torihara said. (April 18, 2011)

QUATAR to UNITED KINGDOM: Supply contract – CNR50/7/5

Qatargas said recently it signed a **2.4 million tonnes per year three year contract** to supply liquefied natural gas to **Centrica**. "As per the agreement, Qatargas will deliver up to 2.4 million tonnes per annum of LNG from the Qatargas 4 project to the UK Isle of Grain Terminal for the next three years," it said in a statement. The sales and purchase agreement concludes an original agreement reached in February. (April 23, 2011)

THAILAND: Planned project – CNR50/7/6

The **Energy Ministry** recommended recently that the **National Energy Policy Committee postpone the construction of two planned 1,000-megawatt nuclear power plants** after the International Atomic Energy Agency (IAEA) said the country was not ready for the projects. Boonsong Kerdklang, secretary-general of the Energy Policy and Planning Office, said three 800-MW gas-fired power plants would be built to offer electricity instead of the delayed nuclear plants. PTT needs to find more gas from the Gulf

of Thailand, Burma and other overseas sources to feed these new gas-fired plants, said Mr Boonsong. Authorities have studied whether the new power plants will be built by the Electricity Generating Authority of Thailand or independent power producers. Mr Prasert said an additional 700 mmcf/d of gas would be enough to serve five power plants. **"We are planning to expand our LNG and liquefied petroleum gas terminals** as domestic demand has risen considerably," he said. "We are waiting for a clear decision from the government to import more gas." (April 27, 2011)

UNITED STATES: Last shipments – CNR50/7/7

ConocoPhillips and Marathon Oil Corp committed recently to **four additional shipments** from their liquefied natural gas **export plant in Kenai**, Alaska. One of the cargoes is destined for China and the other three are for Japan, said Natalie Lowman, spokeswoman for ConocoPhillips in Alaska.

The companies had announced in February 2011 that they plan to close the 42-year-old Kenai plant because of dwindling natural gas supplies in the Cook Inlet basin and the expiration of the LNG supply contract with long-term clients Tokyo Gas and Tokyo Electric. **The extra shipments do not change the plans for permanent closure**, Lowman said. ConocoPhillips, which owns 70 percent of the plant, is the operator. Marathon owns a 30 percent share. (April 20, 2011)

UNITED STATES: Import plans – CNR50/7/8

Robert Pickett, Chairman of the **Regulatory Commission of Alaska** said recently that there are plans to ask electric utilities in the state's south-central region to **report on potential plans to import LNG to supply gas-fired power plants the companies are planning to build**. Pickett said "We have been asked to approve several hundred millions of dollars of new gas-fired power generation being included in the utilities' rate base but we do not have information about where the utilities plan to get their gas". "We

understand that several utilities are working on plans to import LNG in case local sources are insufficient, and we need to know the status of that planning and what the possible costs might be," he said. There are concerns that regional utilities, including Enstar Natural Gas and electric utilities that generate power with gas, may be short of the fuel by 2014 or 2015. Enstar Natural Gas and ML&P managers have said they are working on LNG import plans, but have provided no details. (April 29, 2011)

STORAGE

CROATIA: Planned project – CNR50/7/9

Darko Horvat from the **economy ministry** said recently that Croatia plans to go alone to speed up building a **liquefied natural gas terminal** with possible EU backing. Plinacro and oil pipeline operator Janaf would be the main drivers for the terminal to supply international markets from **the northern Adriatic island of Krk**. In 2010, an international consortium of four energy firms pushed back until 2013 the final investment decision for building an LNG terminal on Krk amid a lower demand for gas on the European markets. Unhappy about the decision Croatian officials first started considering a temporary, smaller floating terminal off the coast of Krk while awaiting the final investment decision for the land-based terminal with a capacity of 15 billion cubic metres of gas per year.

Horvat said that the EU, which Croatia hopes to join in 2013 or early 2014, could finance 50 percent of the Krk terminal which may become a part of one of the major EU gas transport corridors linking the Baltic Sea and the Adriatic. (April 26, 2011)

INDIA: Planned project – CNR50/7/10

Reliance Industries' (RIL) plan to build a **liquefied natural gas import facility at Rewas, in Maharashtra**, has been currently put on hold, said recently Niraj Ambani, president, logistics,

Reliance Industries. "The Rewas port is a part of the Maha Mumbai SEZ project that is awaiting regulatory clearances for land acquisition. So for now the Rewas Port project is on hold," Ambani said. (April 26, 2011)

UNITED STATES: Ongoing project – CNR50/7/11

According to El Paso Corp., a 50 percent partner in the project with GE Energy Financial Services and Sonangol, an **LNG terminal capable of pumping more than 1 billion cubic feet of natural gas a day** to markets in Mississippi and the Southeastern region **is on track to come online in October 2011**. El Paso spokesman, Bill Baerg, said that the facility expects to receive its first shipment of liquefied natural gas this summer. The total storage capacity is 6.6. billion cubic feet, Baerg said, and the send-out capacity is 1.3 billion cubic feet a day. Most of the LNG is expected to come from the west coast of Africa, through Angola LNG. (April 25, 2011)

LPG

PROCESSING

TURKMENISTAN: Production forecast – CNR50/7/12

The Oil and Gas Industry Ministry said recently that since early 2011 the **gas-processing plant in the Nayip region in the east of the country has processed more than 750 million cubic meters of natural gas, over three thousand tons of liquefied petroleum gas and about one and a half thousand tons of hydrocarbon condensate**. In accordance with the program of

development of domestic fuel and energy complex **by 2030, liquefied petroleum gas production volumes are planned to increase to three million tons**. A number of large investment projects, including construction of new petrochemical plants, gas processing complexes on the fields on the right bank of Amu Darya and the Caspian region, as well as the modernization of Kiyanlı seaport are intended for this. (April 16, 2011)

NATURAL GAS

EXPLORATION – DISCOVERY

BOLIVIA: Discovery – CNR50/7/13

President Evo Morales announced recently the **discovery by Total** of natural gas deposits that he said would boost Bolivia's reserves by 30 percent. The **Aquio field's deposits** will increase Bolivia's gas output by **6.5 million cubic meters a day when it begins operating in 2015**, and reach 18 million cubic meters by 2020 with additional drilling, YPF energy company said. The Aquio field is located in Chaco region some 620 kilometers southeast of La Paz. Evo Morales said the discovery brings Bolivia's total gas reserves to 13 trillion cubic meters. The president of YPF, said the companies would need to invest an additional \$800 million in a pipeline and processing plant to bring the field into production. (April 27, 2011)

EGYPT: Discovery – CNR50/7/14

Dana Gas said recently that it has made a new gas discovery in Egypt. "A preliminary estimate of the discovered reserves in the new pool (El Wastani formation) is in excess of 60 Bcf of gas, with a possible upside still under evaluation," the company said in a statement. The company will

prepare a separate development plan for this new pool and is still evaluating a possible upside in reserves. In the test, **the South Abu El Naga-2 well produced 14.1 million standard cubic feet per day of gas with 718 barrels of condensate** from the Abu Madi Formation, the company said. (May 3, 2011)

GHANA: Discovery – CNR50/7/15

The **Tweneboa-4 appraisal well** in the Deepwater Tano license offshore Ghana has recently encountered gas condensate in good quality sandstone reservoirs. Results of drilling, wireline logs and samples of reservoir fluids have **confirmed the western extent of the Tweneboa gas condensate accumulation**. The well encountered 18 meters of net gas condensate pay. Tullow (49.95%) operates the Deepwater Tano license and is partnered by Kosmos Energy Ghana (18%), Anadarko Petroleum (18%), Sabre Oil & Gas (4.05%) and the Ghana National Petroleum Corporation (GNPC) (10% carried interest). (April 15, 2011)

INDIA: Discovery – CNR50/7/16

Reliance Industries Limited (RIL) announced recently a rich gas and condensate discovery in the well drilled in the block CY-PR-DWN-2001/3(CYPR-D6) located in **deepwater Cauvery-Palar basin**. RIL currently holds 100% participating interest in this block. The presence of rich Gas and condensate has been confirmed by

several tests including Modular Dynamic Testing (MDT) and Drill Stem Testing (DST). During DST **the well produced 37 million standard cubic feet of gas and 1100 barrels of condensate** per day through a 56/64" choke size. This discovery namely 'Dhirubhai-53' has been notified to Government of India and Directorate General of Hydrocarbons. (April 22, 2011)

IRAQ: Planned exploration licences – CNR50/7/17

Oil Minister Abdelkarim al-Luaybi said recently that **Iraq will auction 12 oil and gas exploration blocks to foreign firms in January 2012**. The oil ministry said the bidding will be "for 12 exploration blocs, seven for gas and five for oil". He said the blocs on offer were in the provinces of Babil, Basra, Dhi Qar, Muthanna, Najaf, Diwaniyah and Wasit in the south, Diyala and Nineveh in the north, and Anbar in the west. (April 26, 2011)

PRODUCTION

IRAN: Planned project – Engineering – CNR50/7/18

A consortium connected to **Revolutionary Guard** has been recently awarded two giant gas development projects. The Mehr news agency

quotes Mahdi Fakoor, a senior Oil Ministry official, saying that Khatam-ol-Anbia will develop **Halgan and Sefid Baghoon gas fields** in southern Iran. (April 30, 2011)

IRAN: Planned project – Agreement – CNR50/7/19

MAPNA Company of Iran signed recently a contract with **Iranian Offshore Oil Company** to develop **Forooz B gas field** located in the Persian Gulf, reported Mehr News Agency. The gas field holds approximately 29 trillion cubic feet of natural gas. It is estimated that the contract to be finalized by the next 6 months. **The produced gas is planned to be used for generating electricity**, National Iranian Oil Company's managing director, Ahmad Qalebani, said. Iranian Oil Minister Masoud Mir Kazemi earlier reported that Iran's natural gas reserves increased to 33 trillion cubic meters, the Mehr News Agency reported. (April 21, 2011)

THAILAND: Planned project – Agreement – CNR50/7/20

Petronas said recently that it has signed an **unitisation agreement with the Malaysia-Thailand Joint Authority for the Bumi field** in Block PM 301 and the Bumi South field in Block A-18 that firms up an earlier agreement inked in

2008. "The unitisation agreement gives Petronas rights to the reserves in the unitised area, which has an estimated ultimate recovery of 1.252 trillion standard cubic feet of gas," Petronas said in a statement. The Malaysia-Thailand Joint Development Area covers 7,250 square kilometres in Gulf of Thailand. (April 21, 2011)

UNITED KINGDOM: Production cost – CNR50/7/21

Centrica recently warned it could **keep its Morecambe Bay gas fields shut** after planned maintenance as the controversy over the recent tax rise on UK oil and gas production goes on.

The Morecambe Bay fields have been operating at the margins of profitability and may not be restarted, according to the group. Announcing its shutdown plans at the weekend, the firm said: "Centrica is committed to procuring the cheapest available gas for our customers. "Following the increase in supplementary corporation tax in the Budget, **UK oil and gas producing fields are now subject to some of the highest levels of tax in the world.** Our south Morecambe field is now taxed at 81% (of profits)." It added: "At these higher tax rates, Morecambe's profitability can be marginal". The fields usually produce about 318million cubic feet of gas per day. (May 2, 2011)

UNITED KINGDOM: Planned project – Agreement – CNR50/7/22

Endeavour International signed recently an agreement of commercial terms for the processing and transportation of **East Rochelle production on the Scott Platform**, in the Central North Sea. Endeavour plans to award contracts and begin the

construction of the production facilities immediately. **The plan calls for the subsea development to be linked by a 30km pipeline to production facilities on the Scott platform.** First production from East Rochelle is planned for the second half of 2012. (April 18, 2011)

UNITED STATES: Planned project – Expansion – CNR50/7/23

Enbridge Energy Partners, L.P. announced recently that it plans to invest an additional \$175 million to expand its East Texas system. The **Partnership has signed long-term agreements** with several major natural gas producers on the Texas side of the Haynesville shale **to provide gathering, treating and transmission services** in Shelby, Sabine, San Augustine and Nacogdoches counties. The projects involve construction of gathering and related market outlet pipelines and related treating facilities in the Texas Haynesville shale. (April 28, 2011)

RESERVES

CHINA: Discovery – CNR50/7/24

Sinopec discovered recently **875.3 billion cubic metres** of geological natural gas reserves in its **Yuanba block** in southwestern Sichuan province. It did not disclose the quantity of proven gas

reserves in the findings. Sinopec Corp started exploring the 3,251-kilometre Yuanba block in 2006. Sinopec plans to build 6 billion cubic metres of annual natural gas production capacity in Yuanba by end-2015. (April 26, 2011)

PROCESSING

IRAN: Production forecast – CNR50/7/25

Mehdi Jamshidi Dana, a manager for production control at **National Iranian Gas Company (NIGC)** highlighted the increase in production of processed gas, saying that **"last year 146 billion cubic meters of processed gas were injected to the gas pipelines of the country and the figure will surge by six percent in 2011.** Commenting on the production of gas derivatives at the South Pars gas field, the Iranian official noted that 22 million litres of gas condensate, 920,000 tons of sulfur and 525,000 metric tons of liquefied petroleum gas were produced in 2010. South Pars holds an estimated 50.97 trillion cubic meters of gas and some 50 billion barrels of condensates. (April 28, 2011)

UNITED STATES: Planned project – Expansion – CNR50/7/26

Copano Energy is planning to expand gas processing capacity at its Houston Central complex in Texas to meet producer demand in the rapidly developing Eagle Ford Shale play. The expansion project will consist of a **new**

400,000mcf per day cryogenic processing plant, which is expected to be in service by early 2013. The expansion project will bring the company's total processing capacity at the Houston Central facility to 1.1bcf per day. (April 19, 2011)

UNITED STATES: Planned project – Expansion – CNR50/7/27

Energy Transfer Partners, L.P. announced recently that it has entered into long-term fee-based agreements with multiple producers, including Rosetta Resources Operating LP, SM Energy Co., and a subsidiary of Anadarko Petroleum Corp., to provide natural gas gathering, processing, and liquids services from the prolific Eagle Ford Shale. **ETP will significantly expand the previously announced Rich Eagle Ford Mainline (REM) pipeline in South Texas and will construct a new processing facility in Jackson County, Texas.**

The REM pipeline expansion will add roughly 70 miles of 36-inch pipe to the initial 160-mile, 30-inch REM pipeline that was announced in February 2011. When fully constructed, the Partnership's REM pipeline will consist of approximately 230 miles of 30-inch and 36-inch pipe with a capacity of at least 600 million cubic feet per day. Completion of the initial phase of REM remains scheduled for the fourth quarter of 2011 and completion of the REM expansion is scheduled for the first quarter of 2013. The Jackson County gas processing plant will have approximately 600 MMcf/d of capacity and can be expanded to 800 MMcf/d. The plant is scheduled for completion in the first quarter of 2013. (April 21, 2011)

UNITED STATES: Planned project – Expansion – CNR50/7/28

Eagle Rock Energy plans to expand its high efficiency **Phoenix cryogenic processing plant** located in Hemphill County in the US state of Texas by **an incremental 30mmcf/d**. According to the company, the plant capacity will total 80mmcf/d once the expansion is completed. The

plant's expansion, coupled with additional expansions of related gathering systems, will increase Eagle Rock's total processing and gathering capacity and accommodate volume growth from the Granite Wash play. The expansion project is expected to be completed in the fourth quarter of 2011 at a cost of approximately \$20m. (April 28, 2011)

TRANSPORTATION-DISTRIBUTION

IRAN to SYRIA: Planned project – CNR50/7/29

The minister of oil and mineral resources of **Syria**, Sufian Alao announced recently that Iran will connect to the Arab Gas Pipeline via Syria and Iraq. Tehran, Baghdad and Damascus have held talks on the **establishment of a 2000-kilometer gas pipeline from Iran to Syria** said Sufian Alao. The length of this pipeline in Iranian territories will be 700 Km, its length in Iraq will be 900 km and in Syria 400 km. (May 1, 2011)

ROMANIA to MOLDOVA: Ongoing project – CNR50/7/30

Romania is to start construction of a **new gas pipeline** that will connect the country with **Moldova**. The construction of a new pipeline, which is to connect the city of Iasi, in eastern Romania, with Ungheni in Moldova, is **set to start by the end of 2011**. The plan for the new pipeline

was agreed during an official visit of Moldovan interim president Marian Lupu to Bucharest. Furthermore, Romania is to allot 15 million euro to Chisinau over the next three years for a variety of energy projects, including efforts to combat climate change and cut costs by reducing gas consumption. (May 2, 2011)

RUSSIA: Ongoing project – CNR50/7/31

Russian Prime Minister Vladimir Putin said recently that the **underwater section of the Nord Stream natural gas pipeline for Europe should be completed by the middle of May 2011**. He said gas deliveries

to European consumers are due to begin in October 2011. "For the first time, we will begin to deliver Russian gas to the Dutch market, with supplies of about two billion cubic meters and the possibility to increase them in future" he said. He added that all contracts have been signed and prices agreed. The pipeline consortium said the first line, which is 92% complete, should begin delivering gas to European customers in 2011. **The second line becomes operational in late 2012.** Apart from Gazprom, the project involves Wintershall Holding and EON Ruhrgas, each holding a 15.5% stake in Nord Stream AG, NV Nederlandse Gasunie and GdF Suez with a 9% stake each. (May 1, 2011)

TURKEY to EUROPE: Transit rights – Agreement – CNR50/7/32

EGL signed recently a **memorandum of understanding with Botas** defining framework conditions for the planned transport of natural gas through Turkey to Europe. Under this agreement, **the two companies can now directly negotiate concrete transit rights for the transport** of natural gas from the Caspian region and the

Middle East through Turkey to Europe. EGL seeks to further diversify its natural gas procurement portfolio through the Azerbaijani gas. Based on the document, EGL and Botas also want to evaluate cooperation on the TAP project, as well as exploring possibilities for joint marketing of natural gas, and for cooperation in the area of liquefied natural gas. (April 26, 2011)

UKRAINE: Planned project – CNR50/7/33

The energy minister, Yury Boiko, said recently "The **South Stream project is a real threat to our national interests, and we will always be against it**". The Stream pipeline project is designed to cut Russia's dependence on the Ukrainian transit system. The Ukrainian authorities have repeatedly called on Russia to abandon the South Stream project and cooperate with Ukraine in modernizing its gas pipeline network. Boiko said "The more we modernize our gas transportation system, the more we will be open and show our reliability, the less chances South Stream, which is designed to drain our gas transportation system, will have to be implemented". (May 2, 2011)

UKRAINE: Gas transit capacity – CNR50/7/34

Yevgeny Bakulin, head of Naftogaz, said recently that **Ukraine is able to increase the capacity of its gas transit network by an additional 50 billion cubic metres/year without investing in upgrading the grid.** Bakulin said that the pipeline's throughput capacity is 142 bcm/year,

while actual flows amount to only 95 bcm/year. Ukraine's grid is badly in need of repair and is currently the property of Ukraine's government. Naftogaz is prepared to get Russian and European companies involved in upgrading the network, adding that grid modernisation projects are in preparation. (April 21, 2011)

UNITED KINGDOM: Planned project – CNR50/7/35

Construction work started recently on a **pipeline to pump gas from fields off the west coast of Shetland to the mainland.** The investment, by Total, is expected to bring the first commercial gas ashore in 2014. (April 30, 2011)

UZBEKISTAN to CHINA: Planned project – Agreement – CNR50/7/36

Uzbekistan and China signed recently **investment deals** worth more than \$5 billion and agreed to expand natural gas supplies. Leading Chinese banks agreed to open credit lines worth \$1.5 billion to four Uzbek banks to help implement various investment projects. **The two countries also agreed to construct the Uzbek spur of the**

Central Asia-China natural gas pipeline, which will allow Uzbekistan to supply an extra 25 billion cubic metres annually to China. The spur will connect to the Central Asia-China pipeline, which began pumping gas from Turkmenistan in late 2009 and snakes nearly 2,000 km through Uzbekistan and Kazakhstan to reach China's northwestern Xinjiang region. (April 21, 2011)

SUPPLIES - IMPORTS - EXPORTS

DUBAI: Planned project – Gas hub – CNR50/7/37

Paul Mason, manager of **Dubai Supply Authority**, said recently that the DUSUP is considering the possibility of establishing a natural gas trading hub in the Emirate. **"We are talking about looking at the creation of a gas hub,"** said. "We have the ability to import LNG, but not really the ability to export. It may be the logical next step," he said. "We need to put together the assets that we have," said Mason, who noted that Dubai is connected by pipelines to Abu Dhabi, the other emirates, and Qatar.

"We can start to form an ability to provide services for the wider region," he said. "Within 500 km lies 30% of the world's gas reserve," Mason observed. "By installing this LNG facility, we are opening up a world market which was previously constrained to pipelines," he said. "Prior to the arrival of the LNG facility, most of our supplies came from Abu Dhabi and Qatar. Beyond this, there is a lot of potential gas around and we have to work very closely with our neighbors," Mason added. (April 21, 2011)

INDIA: Gas Demand – CNR50/7/38

The oil ministry recently ordered **Reliance Industries to immediately stop natural gas supplies to non-core users** such as Essar Steel to meet the full demand of fertiliser and power plants. Reliance is producing **less than 50 million metric standard cubic metres a day of gas from its eastern offshore KG-D6 gas block**, just enough to meet contracted demand of priority sectors — fertiliser units, power plants, LPG extraction plants and city gas distribution companies. RIL had refused to abide by the ministry's previous order that wanted the fuel to

go to sectors such as steel, refineries and petrochemicals only if there was any gas left after meeting priority demand. The ministry order, officials say, is based on the rationale that it does not want fertiliser production or power generation during peak summer months to suffer because of a fall in KG-D6 gas output. RIL in its plan to the upstream regulator has projected that gas production from its KG basin field would be 43 mmscmd in 2011-2012 and was estimated to slide to 38 mmscmd in 2012-2013. These are figures significantly lower than the field development plan approved by the regulator. (April 25, 2011)

ISRAEL: Supply contract – Agreement – CNR50/7/39

After saboteurs **blew up the pipeline supplying Egyptian natural gas** to Israel again, gas customers locked in an alternative source: the **Tethys Sea group**, owned by Noble Energy and Israel's Delek Group. The first to move was the **Israel Electric Corporation**. The national power utility already buys 55% of its natural gas from the Tethys Sea group, under two contracts assuring it 2.5 billion cubic meters of gas a year to run its power stations. Agrochemicals maker Makhteshim-Agan Industries also activated an emergency backup contract it had with Tethys Sea. (April 28, 2011)

JORDAN: Consumption – CNR50/7/40

The **Jordanian cabinet** adopted recently a package of measures that seek **to reduce the country's energy consumption** after supplies of natural gas from Egypt were cut following a **pipeline explosion**. Energy Minister Khalid Touqan told an emergency cabinet session that Jordan would have to resort to heavy fuel for power generation to make up for the loss. The

cabinet discussed steps "to address the additional burdens on the Treasury as well as moving swiftly to find alternative resources for boosting the country's reserves of fuel and oil derivatives" a statement from the premier's office said. Under an agreement concluded in 2001, Egypt pledged to supply Jordan with natural gas supplies for 15 years at fixed prices. (April 28, 2011)

RUSSIA to UKRAINE: Supply negotiation – CNR50/7/41

Russian and Ukrainian officials started recently **negotiations on possible revisions to a scrutinized natural gas deal**, the Ukrainian energy minister said. Ukraine during the first quarter of 2011 paid \$264 per 1,000 cubic meters of natural gas it received from Russia, up from \$253 paid in the fourth quarter of 2010. Ukrainian Prime Minister Mykola Azarov said the price was unfair and suggested a more realistic price would be \$200 per 1,000 cubic meters. (April 29, 2011)

TURKMENISTAN to CHINA: Supply contract – CNR50/7/42

China agreed recently to extend to Turkmenistan an extra \$4.1 billion in credit. Turkmenistan said the funds will be used to boost Turkmenistan's export potential and **develop the South Yolotan field** in the east of the country. Under the agreement signed, the latest loan is

repayable over 10 years with a three-year grace period. China is also expected to sign a new agreement with Turkmenistan to eventually **boost annual natural gas purchases by a further 20 billion cubic meters**. That would take Turkmen annual gas sales to China to 60 billion cubic meters. (April 26, 2011)

UNITED STATES: Gas market – Forecast – CNR50/7/43

The **Energy Information Administration** indicated recently that the **net import share of U.S. energy consumption will drop to 17% in 2035 from 24% in 2009**, cut by increased use of biofuels and growing domestic natural gas production. U.S. output of shale gas, which grew at a 17% annual rate between 2000 and 2006, has registered annual growth of 48% between 2006 and 2010. Shale gas output is projected to grow almost fourfold between 2009 and 2035, the EIA said. **Total domestic natural gas output is expected to hit 26.3 trillion cubic feet in 2035**, up from 21 trillion cubic feet in 2009. **Shale gas output is expected to reach 12.2 trillion cubic feet in 2035**, accounting for 47% of total U.S. output, compared with a 19% share in 2009.

The EIA said estimated technically recoverable unproved shale gas resources stand at 827 trillion cubic feet, in its reference scenario. "Over the past decade, as more shale formations have gone into commercial production, the estimate of technically and economically recoverable shale gas resources has skyrocketed," the EIA said. "However, the increases in recoverable shale gas resources embody many assumptions that might prove to be incorrect over the long term". The outlook examines several scenarios, with Henry Hub spot prices for natural gas ranging from \$5.35 per thousand cubic feet in 2035 (in 2009 dollars) to as much as \$9.26 per thousand cubic feet, with a reference case estimate at \$7.07 per thousand cubic feet. (April 26, 2011)

STORAGE

UNITED STATES: Ongoing project – Start up – CNR50/7/44

Southern Star Central Gas Pipeline, Inc. announced recently that its **Elk City Firm Storage Expansion became operational** on April 1, 2011. This expansion increased Southern Star's daily deliverability by 40,000 dekatherms

per day and **increased its storage capacity by 4,000,000 dekatherms**. Southern Star filed an application to construct facilities at its Elk City storage field to provide this storage service at market-based rates and was granted authority by the Federal Energy Regulatory Commission. (April 26, 2011)

UNITED STATES: Ongoing project – CNR50/7/45

Central Valley Gas Storage, a subsidiary of Nicor, started recently **construction of a new natural gas storage facility in Colusa County in California**. Construction activities include installing compressor units and constructing approximately 15 miles of 24-inch pipeline connecting the storage field to PG&E's transmission system. The facility, which is expected to be completed by the end of 2011, will have a **storage capacity of 11 billion cubic feet** and an injection and withdrawal capacity of 300 million standard cubic feet per day. The company said that the gas storage project is a high deliverability depleted reservoir that will provide multi-turn services tailored to customers' requirements. (April 29, 2011)

USE FOR POWER GENERATION

CANADA: Planned project – Engineering – CNR50/7/46

Enmax Energy Corp recently awarded a contract for the completion of the **Shepard Energy Centre, a 800MW natural gas-fired power generation facility in Calgary**. A joint venture between Kiewit Energy Canada and Black&Veatch Canada will complete final design and construct the power plant. The project is comprised of two 240MW gas-fired turbine generators and one 320MW steam turbine generator. The construction is expected to commence in July 2011 and the facility is expected to begin commercial operation in August 2015. (April 12, 2011)

BANGLADESH: Planned project – Engineering – CNR50/7/47

Mitsubishi Heavy Industries secured recently an order to supply an M701F **gas turbine and generator for a 410MW gas-fired combined-cycle power plant** in Bangladesh. The facility is

being built by state-owned power producer Electricity Generation Company of Bangladesh in **Haripur** near Dhaka. The new power plant will be built adjacent to an existing power plant. (April 26, 2011)

FRANCE: Start up – CNR50/7/48

GDF Suez inaugurated recently a new **435MW combined-cycle gas-fired power plant at Montoir-de-Bretagne** in the Loire Atlantique region of western France. The power plant will generate 2.2TWh of electricity per year. (April 12, 2011)

GREECE: Engineering – CNR50/7/49

GE said recently it has **shipped advanced gas turbine combined-cycle equipment for the Megalopolis power plant in Central Peloponnesus**, Greece. The combined-cycle

package will replace four lignite-fired units, which are scheduled to be shut down due to their environmental impact. Commercial operation of the new power project is expected to begin in the fourth quarter of 2012. (April 25, 2011)

NEW ZEALAND: Ongoing project – CNR50/7/50

L&M Energy is a step closer to producing electricity from gas production, with its **Ohai pilot** project site scheduled to begin soon generation. At present it is installing surface and subsurface production equipment, including a **1MW gas-fired generator**. L&M has an agreement to sell electricity output from the **Ohai coal seam gas project** to the Rio Tinto Alcan-owned New Zealand Aluminium Smelter (NZAS). (April 29, 2011)

SINGAPORE: Planned project – Engineering – CNR50/7/51

Following a contract signed with **Keppel Merlimau Cogen Pte Ltd** to build a 2 x 400 MW power plant in Singapore in October 2010, **Alstom started work on the second 400 MW unit**. The Engineering, Procurement and

Construction contract includes the construction of two 400 MW gas fired combined-cycle units and the associated long-term service agreements (LTSA). When completed, the new power plant will increase the KMC's production capacity to 1300 MW. (April 28, 2011)

UNITED STATES: Planned project – CNR50/7/52

TransAlta Corp. said recently it plans to build a **new natural gas facility in Lewis County, Wash.**, as it prepares to shut down the Northwest's largest coal-fired power plant. The company will gradually close its Centralia facility by 2025. TransAlta spokeswoman Angela Mallow said the company would get expedited permitting to build a natural gas **facility to come online by 2020**. (April 29, 2011)



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