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## *Main news*

### LNG: Processing

- Jordan is about to sign an agreement to build a terminal for LNG in the Port of Aqaba, with gas expected to flow from the projected facility in November next year.
- FERC announced a notice of intent to prepare an environmental assessment that will discuss the environmental impacts that could result from the construction and operation of the Golden Pass LNG Project and Golden Pass Export Pipeline Project.

### LNG: Supplies- Imports – Exports

- CNOOC expects to add five LNG receiving terminals by 2015, doubling its total capacity to 35-40 million tons per year.
- OAO Gazprom plans to sign contracts for at least 80% of the liquefied natural gas from its Vladivostok plant by mid-2014 before supplies from rival producers come to market.
- GDF SUEZ has announced that it has signed a 15-year BOOT contract with Gas Sayago S.A. 1 for LNG storage and regasification services.

### LNG: Use as marine fuel

- With LNG demand in Europe down, terminals are looking to LNG bunkering as a possible way to boost business.

### LNG: General Information

- Oil and gas investment, particularly in LNG, is set to play a major part in Australia's prosperity, LNG revenue expected to grow from $12 billion to $61bn during the next five years.

### Natural Gas: Exploration

- France's constitutional council rejected recently a challenge to a law banning hydraulic fracturing for exploration and production of the country's shale gas and oil.

### Natural Gas: Production

- The U.S. is overtaking Russia as the world's largest producer of oil and natural gas.

### Natural Gas: Transport – Distribution

- European Union officials and Russia have agreed a deal on the use of Germany's OPAL link to Gazprom's Nord Stream gas pipeline.

### Natural Gas: Supplies- Imports – Exports

- US natural gas exports to Mexico will more than double in 3 years, from an average of 2 Bcf/d in 2013 to 4.5 Bcf/d in 2016.

### Natural Gas: Storage

- WINGAS, a joint venture of Gazprom and Wintershall, has commissioned one of the highest performance and largest cavern storage facilities in Jemgum, Lower Saxony, Germany.
- In September 2013 the UK government confirmed its decision to rule out public subsidies to support gas storage.

# LNG

## *PROCESSING*

CANADA : Planned project – Investment - **CNR52/14/1**

**Petronas's potential B.C. investment pegged at $36 billion**

Malaysian Prime Minister Najib Razak says Petronas is making the "largest direct investment in Canada by any country." Pressing ahead with plans to invest $36 billion in B.C.'s natural gas sector.

Petronas plans to build both a liquefied natural gas plant ($9 to $11 billion) in northwest B.C. near Prince Rupert and fund TransCanada's building of a pipeline ($5 billion). The pipeline would transport gas from northeastern B.C. for export overseas to Asian markets. Last year, Petronas invested $6 billion to purchase Calgary-based Progress Energy.

There are also major upstream investments in gas wells and other facilities, said Greg Kist, president of Pacific Northwest LNG, the Petronas-owned company that will operate the LNG terminal.

A final investment decision on whether to move ahead with the terminal and pipeline project will be made at the end of 2014, Kist said. (October 6, 2013)

JORDAN : Planned project – Agreement - **CNR52/14/2**

**Jordan to build LNG terminal in the port of Aqaba**

Jordan is about to sign an agreement to build a terminal for liquefied natural gas (LNG) in the Port of Aqaba, with gas expected to flow from the projected facility in November next year, Jordan Times has reported. Construction of the terminal is expected to take around 15 months, energy minister Mohammad Hamed said, noting that tenders to export gas to the terminal are currently being examined.Jordan has been historically reliant on imported energy to satisfy its domestic needs. The kingdom received its natural gas supplies from Egypt through the Arab Gas Pipeline (approx.. 3 billion cubic meters – close to 80 percent of its domestic gas consumption – at a cost of nearly a quarter of its GDP). The disruption in the flow of natural gas from Egypt to Jordan in the aftermath of the Arab Spring that toppled President Mubarak forced Jordan to import expensive fuel products for electricity generation. Fuel from Saudi Arabia increased the kingdom's energy bill and by consequence electricity prices. The total bill increased by at least 60% totaling around USD 4.5 billion.Neighboring Israel is also eyeing to export its newly found natural gas to the thirsty kingdom. A final decision on gas exports has not yet been formulated in Israel but it is believed that it will attempt to sell its resources to its immediate neighbour, Jordan. The gas transported to Jordan will most probably come from the export quota and not the domestic allocation. This precision was clear in the Israeli Cabinet's June proposal to allocate 60% of the country's offshore gas reserves for the domestic market and 40% for export when it added that exports to neighbors including Jordan and the Palestinian Authority would come from the export quota (ie the 40%). (September 29, 2013)

MOZAMBIQUE : Planned project – Floating LNG **- CNR52/14/3**

**ENI of Italy considers large gas project in Mozambique**

Italy's ENI and its partners in Mozambique are strongly considering building a **floating liquefied natural gas platform to export** a portion of the gas they have discovered in the waters there. The companies will likely publish documents soon soliciting interest from international contractors in the project. Groups led by ENI and Anadarko Petroleum, have made major gas discoveries in two separate blocks in the waters off Mozambique in recent years. If the oil companies succeed in exporting the gas in the quantities they have discussed, Mozambique would become one of the world's gas powers. Much of the gas is likely to go to India and other Asian countries, which are easy sailing distance from Mozambique in East Africa.ENI and Anadarko are in the early stages of designing an onshore liquefied natural gas facility in a remote area called Afungi in Cabo Delgado Province in the northern part of Mozambique. The facility will use gas from the fields in their two blocks that are geologically connected.If things go smoothly, ENI and Anadarko expect gas tobegin flowing around the end of 2018. Total development costs for the drilling and onshore export facilities are estimated to be around $50 billion. ENI is considering a 2.5 million metric ton per year facility. ENI's partners include CNPC and GALP of Portugal. (October 3, 2013)

NIGERIA : Partnership agreement - **CNR52/14/4**

**Conoco bought out in Nigerian LNG project**

Nigerian energy group Oanda PLC said in a statement  it would take on Conoco's 17 percent stake in the Brass liquefied natural gas project by acquiring the U.S.-based energy company's local affiliate Phillips (Brass) Ltd. (for nearly $ 105 million).Italian energy company Eni and France's Total are working to develop the Brass LNG project in Bayelsa state in southern Nigeria. Total said the project should have a production capacity of more than 10 million tons of LNG per year. Approximately 70 percent of the LNG from the facility would head to western European markets with the remaining slated for Asian exports. Nigerian National Petroleum Corp. holds a 49 percent stake in the Brass LNG project. Early engineering work is still under way and no timeline was offered for project development. (September 18, 2013)

RUSSIA : Planned project - Engineering**- CNR52/14/5**

**GE to provide turbo machinery equipment for Yamal LNG project in Russia**

GE has secured a contract to provide key turbomachinery equipment for the Yamal liquefied natural gas (LNG) megaproject that is being developed on the Yamal Peninsula in Russia's northern Siberia region. Upon completion of the project, the LNG produced at the site will be used to help meet the energy needs, primarily of Asia and Pacific Region countries.The project is owned by JSC Yamal LNG, a joint venture between Russia-based OAO Novatek and France's Total. OAO Novatek holds 80% stake in the project while Total has the remaining 20% interest and a consortium of Technip and Japan's JGC is the EPC contractor for the plant.The joint venture is constructing a gas liquefaction facility, which is estimated to have a production capacity of 16.5 million tons per year, based on the feedstock resources of the South Tambeyskoye gas condensate field.  Proved and probable reserves of natural gas (PRMS) of the South Tambeyskoye field exceed 900 BCM (32 tcf).Under the deal, GE Oil & Gas will supply critical turbo machinery equipment for three production lines, each with the capacity to produce about 5.5 million tonnes of LNG per year. Each train will feature two main refrigeration units which will turn natural gas into a liquid form for transportation.GE will supply six Frame 7E gas turbines, 18 centrifugal compressors, six variable speed drives and six WHRUs and apart from equipment supplies, the company will also provide installation supervision services.GE anticipates delivering its equipment to Russia in the second half of 2015 and the first natural gas liquefaction train is planned to reach its full capacity in 2017, followed by the second and third trains in 2018 and 2019, respectively. (October 4, 2013)

RUSSIA : Planned project - Engineering**- CNR52/14/6**

**Initial contracts awarded for Russian far east LNG project**

Rosneft and ExxonMobil Corp. have selected CB&I UK and Foster Wheeler Energy as contractors for initial phase front-end engineering and design (FEED) for a proposed Russian Far East LNG project.Rosneft and ExxonMobil intend to finalize project design by yearend 2014, including FEED for plant, associated facilities and gas pipeline, as well as engineering studies and environmental impact assessment. CB&I UK and Foster Wheeler will be awarded separate contracts. Plant design capacity is to be 5 million tonnes/year with possible expansion. The liquefaction plant will receive natural gas from Rosneft's Far East and Sakhalin gas reserves. (September 27, 2013)

RUSSIA : Planned Project - Expansion- **CNR52/14/7**

**Shell warns Gazprom of price risks as LNG expansion delayed**

Urged Gazprom to expand a plant they jointly own or risk missing out during a peak in gas prices, an executive of Shell's operations in Russia told Reuters. Shell and Gazprom have been in talks for years about expanding their plant on the Pacific island of Sakhalin, where Japan's Mitsui and Mitsubishi are also shareholders. The plant, known as Sakhalin-2, is Russia's only existing LNG project. But Gazprom has been slow to expand the 10-million-tonnes-a-year plant due to a number of issues, including difficulty in finding an adequate resource base for the production growth. Olivier Lazare, who has headed Shell's operation in Russia since January 1, said the partners may miss the opportunity to capitalize on high gas prices if they fail to take a decision to expand the plant.

Gazprom has so far failed to secure a deal to buy gas from the neighboring Sakhalin-1 project, operated by ExxonMobil. Sources say the partners failed to agree on pricing.

Lazare said the LNG project may find sources of gas from some other areas, such as Gazprom's Sakhalin-3 project, where the Kirinskoye field is set to start producing gas in October. Gazprom has said it wants to use the deposit for projects other than Sakhalin-2's needs, making Shell's offer also difficult to accept. (September 30, 2013)

UNITES STATES : Planned project – Environmental assessment - **CNR52/14/8**

**FERC to prepare an environmental assessment for Golden Pass LNG Project**

The Federal Energy Regulatory Commission (FERC) announced a notice of intent to prepare an environmental assessment (EA) that will discuss the environmental impacts that could result from the construction and operation of the Golden Pass LNG Project and Golden Pass Export Pipeline Project called the Golden Pass LNG Export Project in Texas and Louisiana. The EA will be used by the commission in its decision-making process to determine whether construction and operation of the project is in the public convenience and necessity.The Golden Pass LNG Export Project would include construction and operation of the following facilities:

- three liquefaction trains;
- a 200-250 megawatt self-generation power plant;
- modifications to marine and truck loading facilities;
- approximately 8 miles of 30- to 36-inch-diameter pipeline in two non-contiguous loops, connecting to existing pipelines in Jefferson County, Texas and Calcasieu Parish, Louisiana;
- up to four compressor stations providing 100,000 total horsepower to provide bi-directional flow capability to the existing Golden Pass Pipeline in Jefferson and Orange Counties, Texas and Calcasieu Parish, Louisiana; and
- support facilities, such as buildings for maintenance and storage.

Golden Pass plans to begin Project construction in mid-2015 if all required permits, certificates, and authorizations are obtained. (September 20, 2013)

## SUPPLIES - IMPORTS – EXPORTS

AUSTRALIA : Planned project – Agreement - **CNR52/14/9**

**Chevron and Tohoku Electric sign 20-year Wheatstone LNG Deal**

Chevron announced that its Australian subsidiaries have signed long-term sales and purchase agreements with Tohoku Electric Power to supply LNG from the Wheatstone project in Western Australia. Under the agreements, Chevron subsidiaries, with subsidiaries of Apache Energy and Kuwait Foreign Petroleum Exploration Company, will supply Tohoku with 0.9 million tonnes per annum of LNG for up to 20 years.

The Wheatstone Project is located at Ashburton North, 7.5 miles (12 kilometers) west of Onslow in Western Australia. The project will consist of two LNG trains with a combined capacity of 8.9 million tonnes per annum and a domestic gas plant. The Wheatstone Project is a joint venture between Australian subsidiaries of Chevron (64.14 percent), Apache Energy (13 percent), Kuwait Foreign Petroleum Exploration Company (7 percent), Shell (6.4 per cent), and Kyushu Electric Power Company, Inc. (1.46 percent), together with PE Wheatstone Pty Ltd. (8 percent).

Chevron also holds an 80.17 percent equity interest in the Wheatstone and Iago fields that provide 80 percent of the feed gas to the Wheatstone Project. The participants in the fields are PE Wheatstone Pty Ltd. (10 percent) as well as Australian subsidiaries of Shell (8 percent) and Kyushu Electric Power Company, Inc. (1.83 percent). (October 1, 2013)

CHINA : Import forecasts - **CNR52/14/10**

**CNOOC plans to double LNG import capacity by 2015**

China National Offshore Oil Corp (CNOOC) expects to add five liquefied natural gas receiving terminals by 2015, doubling its total capacity to 35-40 million tonnes per year (tpy), a senior company official said.

The expansion from four terminals currently, with a receiving capacity of 18.7 million tpy, will enable China's top offshore oil explorer to import more LNG to meet strong demand growth in the country. China, the world's top energy consumer, aims to raise the share of natural gas in its energy mix to 8 percent by 2015 from 5 percent now to cut emissions from coal and lessen dependence on oil imports.

CNOOC will commission a Floating Storage Regasification Unit (FSRU) in the city of Tianjin and a conventional terminal in Zhuhai by year-end, the official said. The firm has another three terminals that are already being built, said Zheng Hongtao, a vice president in the trading and marketing branch of CNOOC Gas and Power Ltd. CNOOC imported nearly 11 million tonnes of LNG last year, he added. (September 25, 2013)

INDIA : Ongoing project – update - **CNR52/14/11**

**Gail may supply more LNG to fuel Pakistan power plants**

India and Pakistan are exploring the option of negotiating a gas supply deal after Pakistan's private energy companies told Gail that they need more liquefied gas than the previously-decided 5 million standard cubic metres per day (mmscmd), which wasn't enough. Gail officials recently met representatives of Pakistan's energy companies that are planning new power plants in Pakistan, and they said that they need more supply from across the border. This comes soon after both the countries reached a preliminary agreement to enter into a contract where Gail can export natural gas to Pakistan through a pipeline from Punjab.

"We plan to import the LNG either at Petronet's LNG terminal in Dahej or at our Dabhol facility after regassifying it. We will transport this gas through our Dadri-Bawana-Nangal pipeline network to Jalandhar. From Jalandhar, we plan to lay a 110-km pipeline to transport the gas near Lahore for delivery into Pakistan," Singh added.

"We are seeking a price of around $22 mmBtu, but the Pakistanis are negotiating for a lower price of around $18 mmBtu. They are also seeking some tax exemptions," said Singh. Pakistan's energy mix is highly skewed towards gas as it accounts for about 32% of the total pie. This deal with Gail gives Pakistan a cheaper import option when compared with current gas imports at $28/mmBtu, said Singh. (September 17, 2013)

JAPAN : Cooperation agreement - **CNR52/14/12**

**Japan agrees to boost cooperation with Canada on natural gas**

Prime Minister Shinzo Abe said Japan and Canada have agreed to **cooperate more closely on shipments of natural gas** as the country seeks new energy supplies after the Fukushima nuclear disaster. He said Canada is a stable source of energy and can provide gas at competitive prices. Abe said the two countries will hold “ministerial level consultations,” without providing details.

Japan, which relied on nuclear power for about a quarter of its energy needs before the Fukushima disaster, is without atomic power again after the nation’s last operating reactor shut on Sept. 15 for regular maintenance. To compensate, the nation’s utilities have increased purchases of traditional fossil fuels. Japan paid an average price of $15.74 per million British thermal units for liquefied natural gas in July, according to data from LNG Japan Corp. That compares with an average of about $3.64 for U.S. natural gas futures traded in New York.

Royal Dutch Shell (RDSA) Plc, Chevron Corp., BG Group Plc and CNOOC Ltd. are among the other international energy companies proposing or considering LNG export projects in western Canada, including pipelines across British Columbia's mountains to link gas supplies in shale formations to Pacific Coast facilities.

Four proposed terminals are targeted to start operations before 2020, including three for which the Canadian government has already awarded export licenses. Canada will probably only see one terminal built by 2020 and another two by 2025, according to Calgary-based investment bank Peters & Co. (September 24, 2013)

POLAND : Planned project – Delay - **CNR52/14/13**

**LNG terminal delayed again**

Both the treasury minister and PGNiG claim it won't affect other deals connected with the terminal. The new LNG terminal in Świnoujście will be completed by the end of 2014, six months later than previously planned, Treasury Minister Włodzimierz Karpiński said in a statement. "I am not happy with the delay, however, clinging to an unrealistic schedule is a riskier and costlier solution than accepting that it must be pushed back," Mr Karpiƒski explained. He also added that postponing the delivery of the gas terminal will "give us time to complete all necessary projects, such as the north-south pipeline, allowing us to transport gas to our southern neighbors and to Balkan states, as well as finalize the contract with Qatargas."

That last issue is probably the most controversial. The Qatari LNG supplier will deliver 1 million tons of LNG per year starting from 2014. It's practically impossible that the terminal will be completed on time to process next year's delivery.

Citing an anonymous source close to the deal, Reuters reported that Qatargas is calling on PGNiG to pay a rate of 16 percent of crude oil prices or higher, plus a fixed component of around $0.50 per million British thermal units (mmBtu). At current prices, that would put the cost of the Qatari gas at $20.50/mmBtu, while gas imported from Russia costs around $13.50/mmBtu. Altogether, for the 10 percent of Polish demand that the Qatari delivery would satisfy, PGNiG could end up paying an extra $325 million annually.

With PGNiG not having technical capabilities to receive the deliveries, it could be forced to pay just partially for the gas it was supposed to receive. Under the contract's "take or pay" rules, PGNiG will have to pay for at least some of the gas, whether it has the technical capabilities to receive it or not. If it can't take the gas, PGNiG will have to pay between 50 and 70 percent of the agreed price. However, earlier in September, Mr Karpiński said that Poland is unlikely to pay for supplies if the LNG terminal is delayed. (September 16, 2013)

RUSSIA : Planned project – Investment opportunities - **CNR52/14/14**

**Gazprom racing to sign LNG contracts before competition arrives**

OAO Gazprom plans to sign contracts for at least 80 percent of the liquefied natural gas from its Vladivostok plant by mid-2014 before supplies from rival producers come to market. New LNG projects, including from Gazprom and other Russian producers, will lead to the cancellation of some higher-cost projects in the U.S. and Australia, Deputy Chief Executive Officer Alexander Medvedev said. Gazprom is gearing up to more than double LNG output by the end of the decade as the government prepares to strip it of its export monopoly.

About 138 billion cubic meters a year of LNG production was under construction worldwide as of mid-2013, bringing global capacity to at least 500 billion cubic meters by 2018, the IEA said in its Medium-Term Gas Report in June. Of the new supply, almost 86 billion cubic meters will be sold to Asia and more than 80 percent has been contracted on a long-term basis, according to the report.

Gazprom, which provides about a quarter of Europe's gas, is planning to add a third 5 million metric ton LNG train at Sakhalin and at least 10 million tons of production at its Vladivostok facility by 2020.

Russia aims to produce over 11 percent of the world's LNG by 2020 from about 5 percent currently, Deputy Energy Minister Kirill Molodtsov said at the conference. The country is targeting a 20 percent global market share by 2030, pushing back the goal from 2020. (September 25, 2013)

RUSSIA : LNG demand – Forecast -**CNR52/14/15**

**Gazprom plans LNG import terminal in Baltic enclave**

Russia's Gazprom is looking into building a LNG import terminal on the Baltic Sea to supply the country's Kaliningrad enclave, **amid a spat with neighbouring Lithuania over gas prices and distribution**. Gazprom supplies around 2 billion cubic meters of gas per year to Kaliningrad via Lithuania, paying transit fees. However, Lithuania also buys its gas from Gazprom and, according to European Commission, pays more for the gas than any other EU state, leading to a dispute.

Lithuania plans to start importing LNG itself in 2015 to reduce its dependence on Russian gas supplies, which totaled over 3 billion cubic meters in 2012 - small compared with Gazprom's total exports to Europe, but still a blow to the Russian company's revenues if that demand dried up.

Work on the terminal at the Baltic port of Klaipeda, which slowed earlier this year due to legal challenges by companies involved in tenders, is now proceeding apace, Prime Minister Algirdas Butkevicius said. Financing is also assured with an 87 million euro ($117 million) loan that state-run terminal operator Klaipedos Nafta got from the European Investment Bank in July, he said. The EIB valued the project at 180 million euros. “Given the importance it will play in gas supply diversification, we have to complete it by the end of 2014 at any price,” Butkevicius said. “We see big support for this project from the European Commission, which could finance up to 85 percent of the cost,” he said. “It would end the isolation of the Baltic states and Finland from the rest of the EU gas market.”

Gazprom, which supplies a quarter of Europe's gas needs, is facing growing pressure from cash-strapped Western clients seeking to cut bills and to revise long-term oil-linked contracts. (September 24, 2013)

UNITED KINGDOM : LNG supply – Agreement - **CNR52/14/16**

**Qatargas signs 5-yr deal to supply LNG to UK**

Qatargas has signed a five-year deal to supply **1.14 million tonnes a year (mtpa) of LNG to Petronas** in Britain, the world's largest LNG exporter said. Britain's falling domestic gas production has made it heavily reliant on imports of LNG, especially from Qatar, over the last few years, with rising competition for supplies raising fears over UK winter gas supplies. Under the deal, which comes into effect when UK gas demand often peaks in January, Qatargas will deliver fuel to the Dragon LNG Terminal.

Qatargas and its Qatargas 2 project partner ExxonMobil are already the biggest gas suppliers to the nearby South Hook import terminal at Milford Haven in Wales. Now Petronas, which shares Dragon with BG Group, will be supplied from the Qatargas 4 (Train 7) LNG export plant in Qatar, a joint venture between Qatar Petroleum and Royal Dutch Shell. Petronas' 50 percent stake in the Dragon import terminal gives it the capacity to import around 2.7 mtpa of LNG into the UK, Europe's biggest gas market. (September 17, 2013)

UNITED STATES : Planned project – Agreement - **CNR52/14/17**

**Lake Charles LNG export project update**

BG Group and Energy Transfer recently provided an update for the Lake Charles LNG export project. The companies announced they have entered into a project development agreement for the existing Trunkline LNG import terminal in Lake Charles, Louisiana with a planned commercial start-up set for 2019. The proposed project will include the **construction of three liquefaction trains and will use the existing LNG storage and marine berthing facilitie**s owned by Trunkline LNG Company, a wholly-owned subsidiary of Energy Transfer.

Energy Transfer will own and finance the proposed new liquefaction facility, and BG Group will have a long-term tolling agreement with Energy Transfer for the offtake, although BG Group may choose to assign some of its capacity or offtake to third parties. Trunkline Gas Company, LLC will provide pipeline transportation services to supply natural gas to the project.

BG Group will oversee the engineering and design and will manage construction of the facility, as well as operate the combined facility. The project’s front end engineering and design (FEED) study is currently being done by Technip. The project is in the Federal Energy Regulatory Commission’s (FERC) “pre-filing” environmental review process, with the parties currently expecting to file a formal application with the FERC by the end of the first quarter of 2014. Pending final investment decisions from both Energy Transfer and BG Group, construction is expected to start in 2015, with first LNG exports anticipated in 2019. (October 2, 2013)

URUGUAY : Planned project – Agreement - **CNR52/14/18**

**GDF SUEZ to develop Uruguay's first LNG import terminal**

GDF SUEZ has announced that it has signed a 15-year BOOT (Build, Own, Operate and Transfer) contract with Gas Sayago S.A. 1 for LNG storage and regasification services in Uruguay. Commercial operation of the new terminal is expected in 2015. Located in the Punta Sayago area, close to Montevideo, the offshore terminal, GNL del Plata, will comprise a Floating Storage and Regasification Unit (FSRU) and a jetty, protected by a 1.5 km breakwater. The entire capacity of the terminal, which will be capable of receiving LNG carriers up to 218,000m3, will be reserved by the off-taker Gas Sayago.

According to GDF SUEZ the LNG terminal will have a long-term storage capacity of 263,000 m3 and regasification capacity of 10 Msm3/day, expandable to 15 Msm3/day. The Shuttle Regasification Vessel GDF SUEZ Neptune will be used as a bridge solution before the delivery of the new-built FSRU contracted to Mitsui O.S.K. Lines. Tractebel Engineering will act as owner engineer during the construction phase. (October 2, 2013)

WORLD : LNG demand - **CNR52/14/19**

**Asia LNG price unlikely to fall for five years**

Asian liquefied natural gas prices won't fall below $13 to $14 per thousand cubic feet in the next five years as Europe will resume imports at that level, according to Sanford C. Bernstein. European buyers will stop diverting cargoes at that price band as LNG imports to the region would then be able to compete with pipeline gas from OAO Gazprom (GAZP), Bernstein analysts said. "Until 2020 at least, netbacks to the Gazprom price prevent Asian spot LNG falling meaningfully below $14," Bernstein said. "This argument also exposes Gazprom's European volumes to Asian LNG prices."

European gas demand will rise on average 0.4 percent annually to 2025, while domestic production is predicted to fall by 6 percent a year in that period, increasing the need for imports, according to the report. Gazprom will benefit in the next five years with its prices of $11 to $12 per thousand cubic feet, according to Bernstein. LNG imports will begin to rise "aggressively" after 2018 with the start of cheaper supplies from the U.S., it said.

LNG imports to Europe have fallen 28 percent year-to-date, compared with the same period a year earlier. Transportation costs for LNG from Europe to Asia are on average $2 to $3 per thousand cubic feet, meaning it will remain profitable for Europe to reexport LNG until 2017, according to Bernstein. (September 27, 2013)

## ***USE AS MARINE FUEL***

EUROPE : LNG demand – Forecast - **CNR52/14/20**

**Europe looks to LNG bunkering to boost demand**

With LNG demand in Europe down, terminals are looking to LNG bunkering as a possible way to boost business, Reuters reports. "European LNG deliveries will drop by 24 percent in 2013, which comes in addition to a 30 percent fall in 2012," said Thierry Bros, gas and LNG analyst at Société Générale.

The need for natural gas is relatively low in Europe, driving many sellers to Asia and Latin America, where high demand has driven prices up to more than $15 per million British thermal units (mmBtu), compared with around $10 per mmBtu in Europe. Falling imports are forcing some European operators to idle their import capacity, and, in some cases, to either accept deliveries or pay fines under take-or-pay contracts. As a result of such contractual obligations and slack demand, more than a tenth of Europe's LNG is currently loaded back onto tankers for onward transport to higher-paying markets in Latin America or Asia, tripling to 3.8 billion cubic metres (bcm) between 2011 and 2012. "Everything that brings **more flexibility to the LNG shipping chain** is vital," said Jean-Marc Guyau, who heads France's LNG terminal operator Elengy.

One option to deal with lower demand is simply to idle capacity, but this comes at a high price. Spanish imports nearly halved in the January-June period compared with two years ago, to just 5.6 million tonnes. The resulting strain from low utilization led Spanish grid operator Enagas to mothball its 7 bcm/year El Musel import terminal directly after the facility's completion last year. There are also problems in France, with utilisation at the Montoir LNG terminal standing at just 12 percent - leading to high maintenance costs for relatively few LNG cargos.

ALTERNATIVES SOUGHT

One alternative that some operators are eying but that is still in its infancy is ship-to-ship transfers of LNG, which would speed up re-exports and has been tested at Montoir. The French port of Dunkirk and Belgium's Zeebrugge have been shortlisted by Russia's Arctic Yamal LNG project to find a facility where its LNG can be transferred from ice-class tankers to conventional LNG vessels.

To address the problems, some operators are also seeking help from Qatar, the world's biggest LNG exporter, which is in talks with several European terminal operators to buy import capacity as an insurance policy in case demand in Asia drops.

Another alternative for terminals is LNG as ship fuel. The Gate terminal is spearheading efforts to become Europe's top ship-fuelling port in response to fading deliveries and maritime rules that will take effect from 2015 aimed at boosting the attractiveness of shifting from oil to cleaner natural gas as a shipping fuel.

Since July the terminal has received three shipments from Skangass's LNG plant in Norway, which will be reloaded into smaller vessels and used to power ferries, trucks, and industrial customers. "The shipping industry understands it will have to learn how to use LNG," said Thierry Chanteraud, of Total Marine Energy. The owners of the Gate terminal said in July that they are considering opening a third jetty with a focus on small ships in response to growing demand for LNG bunkers.

The Netherlands expects the business of LNG for transport to generate 2.7 billion euros ($3.7 billion) for the country by 2030. ($1 = 0.7384 euros). (September 24, 2013)

DUBAI : Partnership agreement - **CNR52/14/21**

**Dubai Maritime City and Shell sign MoU to explore future adoption of LNG as a fuel**

Dubai Maritime City announced they have signed a Memorandum of Understanding with Shell to explore options related to alternative sources of energy such as LNG. The primary focus would be to explore opportunities that would enable the adoption of LNG as a fuel including marine transportation, road transportation, power and industries in the UAE and the wider Middle East, North Africa and South Asia (MENASA) region.

According to Dubai Maritime City the team from Shell, met Khamis Juma Buamim, Chairman, Drydocks World and Maritime World, and discussed the possibility of future business opportunities as well as the ongoing cooperation between the two companies, including the building of the world's largest Turret Mooring system for the floating LNG facility at DDW's Dubai facility. (September 17, 2013)

## GENERAL INFORMATION

AUSTRALIA : Project financing - **CNR52/14/22**

**LNG revenue set to reach $61bn by 2018**

Oil and gas investment, particularly in liquefied natural gas, is set to play a major part in Australia's prosperity, LNG revenue expected to grow from $12 billion to $61bn during the next five years.

There are $188bn of LNG projects under construction in Western Australia, Queensland and the Northern Territory, accounting for just over three-quarters of the nation's total resources-related investment. These plants are expected to raise the nation's current export capacity of 25 million tonnes a year to 88 million tonnes. But there is **doubt over continued investment in new LNG plants** because of massive cost inflation driven by a higher dollar and the booming construction market, which has made it cheaper to build in North America and Africa. The nation's annual LNG investment spending, which is running at $24bn this year, falls off a cliff in the next couple of years to only about $2bn in 2017 if no new projects are approved.

Huge projects that each employ tens of thousands of workers are the $US53bn Gorgon project and $US29bn Wheatstone project being built by Chevron in Western Australia, Shell's $US13bn Prelude floating LNG project that will be anchored offshore WA, the Inpex-led $US34bn Ichthys project, where offshore gas will be processed at Darwin, and three LNG plants being built at Gladstone, by Santos, BG Group and an Origin Energy and Conoco Phillips joint venture, at a cost of $70bn to export onshore coal-seam gas.

Potential growth projects include expansion of the Gorgon and Gladstone projects, where there is also the possibility that the Arrow joint venture between Shell and PetroChina may start a fourth plant. They also include a $30bn-plus floating LNG project to develop Woodside Petroleum's controversial offshore Browse fields following a recent decision to abandon plans for an onshore plant near Broome, and a floating LNG plant at the big offshore Scarborough gasfield in WA owned by Exxon Mobil and BHP Billiton. (September 25, 2013)

# NATURAL GAS

## EXPLORATION – DISCOVERY

CYPRUS : Discovery - **CNR52/14/23**

**Noble declares gas find offshore Cyprus**

US-based Noble Energy announced it discovered a deposit of natural gas while drilling in the Levant basin off the coast of Cyprus. Noble said it encountered approximately 120 feet of net natural gas while drilling into its Cyprus A-2 well in the Levant basin in the Mediterranean Sea.

The company said evaluation of drilling data led it to believe there may be as much as **6 trillion cubic feet of natural gas** in the entire Cyprus A region, making Cyprus A the third largest field ever discovered in the Levant basin. The Mediterranean island nation is considered frontier energy territory. Its offshore area could hold nearly **12 trillion cubic feet of natural gas reserves**. (October 4, 2013)

FRANCE : Regulation - **CNR52/14/24**

**French Court rejects challenge to fracking law**

France's constitutional council rejected recently a challenge to a law banning hydraulic fracturing for exploration and production of the country's shale gas and oil. U.S-based firm Schuepbach Energy had challenged on four counts a ban introduced in 2011 due to potential risks to the environment, which led to two of its exploration permits being cancelled in southern France. "The constitutional council threw out these four complaints and ruled that the disputed components of the July 13, 2011 law comply with the constitution," the court said in a statement. The Constitutional Council, made up of judges and former French presidents, has the power to annul laws if they are deemed to be unconstitutional.

The International Energy Agency has named France as a European country with some of the most plentiful underground reserves of shale gas. However **"fracking" was banned in France** under former President Nicolas Sarkozy on concerns it could pollute groundwater and trigger earthquakes, bringing to a halt the nascent shale oil and gas industry in France.

After France put the ban in place, Schuepbach Energy said it had no alternative way to carry out the exploration, which led to the suspension of its two permits in the south of France. French oil major Total is still awaiting a ruling after it separately appealed at the end of 2011 the government's decision to ban its own exploration permit by the southeastern town of Montelimar. (October 11, 2013)

## PRODUCTION

RUSSIA : Regulation - **CNR52/14/25**

**Putin signs offshore hydrocarbons stimulus bill into law**

Russian President Vladimir Putin has signed a federal law granting tax and customs benefits for oil and gas production on the country's continental shelf, the Kremlin site said.

It sets out stimulus measures for companies involved in oil and gas production on Russia's continental shelf of in the Russian section of the Caspian Sea, such as zero VAT on the sale and transportation of hydrocarbon raw materials and derivatives. It was adopted by the State Duma, Russia's lower house of parliament, on Sept. 11, and approved by the Federation Council, the upper house, on Sept. 25. (September 30, 2013)

UNITED KINGDOM : Forecast – Domestic supply - **CNR52/14/26**

**U.K. seeks exemption from Iranian sanctions for BP gas field**

The U.K. government is in talks with the U.S. and the European Union over a possible exemption to Iranian sanctions that would allow BP PLC to restart a North Sea natural gas field partially owned by a Tehran-controlled company.

The move comes as the U.S. and its allies have welcomed the elevation of a new Iranian president earlier this year as a possible opportunity to re-engage Iran in talks about its nuclear program. But the effort also comes amid increasing worry in the U.K. over Britain's natural gas supplies. (September 16, 2013)

UNITED STATES : Production forecasts - **CNR52/14/27**

**U.S. is overtaking Russia as largest oil-and-gas producer**

The U.S. is overtaking Russia as the world's largest producer of oil and natural gas, a startling shift that is reshaping markets and eroding the clout of traditional energy-rich nations. U.S. energy output has been surging in recent years, a comeback fueled by shale-rock formations of Oil and natural gas that was unimaginable a decade ago. A Wall Street Journal analysis of global data hows that the U.S. is on track to pass Russia as the world's largest producer of oil and gas combined this year—if it hasn't already.

The U.S. ascendance comes as Russia has struggled to maintain its energy output and has yet to embrace technologies such as hydraulic fracturing that have boosted American reserves. The U.S. produced the equivalent of about 22 million barrels a day of oil, natural gas and related fuels in July, according to figures from the EIA and the International Energy Agency. Neither agency has data for Russia's gas output this year, but Moscow's forecast for 2013 oil-and-gas production works out to about 21.8 million barrels a day.

The U.S. last year tapped more natural gas than Russia for the first time since 1982, according to data from the International Energy Agency. Russia's exports have been crimped by rising competition and the economic slump in Europe. Russia forecasts that its gas production will increase slightly in coming years, but its forecast for this year is below current U.S. production.

And not everyone in Russia sees a threat from the U.S. The head of one the country's largest energy companies, OAO Gazprom, has called expanding U.S. shale output "a bubble that will soon burst." A similar view was expressed Tuesday by Abdallah Salem el-Badri, the head of the Organization of the Petroleum Exporting Countries, who said in an interview that the U.S. oil boom from shale will run out of steam by decade's end. (October 2, 2013)

## RESERVES

CYPRUS : Ongoing project – production forecast - **CNR52/14/28**

**Cyprus gas field smaller than initially estimated**

Cyprus said its plan to turn itself into a regional energy hub remains on track, despite new findings showing that an offshore gas field is noticeably smaller than initially estimated. The small Mediterranean island nation is aiming to build a multibillion euro facility by 2019-20 to liquefy excess gas supply for export to Europe and beyond. The facility is a key plank of the government's plan to restore the country to financial health and the field, will anchor that.

The country's energy minister, Yiorgos Lakkotrypis, said Aphrodite contains between 3.6 and 6 trillion cubic feet of natural gas. That's below a 2011 estimate that estimated the size of the field – being developed by American firm Noble Energy Inc. and its Israeli partners Delek and Avner – at 5 to 8 trillion cubic feet. The field lies around 150 kilometers off the island's southern coast.

Lakkotrypis said the prospects of additional gas finds inside Cypriot waters remained good, but a second appraisal well will be needed at Aphrodite for more exact estimates that may delay the facility's construction. (October 4, 2013)

# TRANSPORT - DISTRIBUTION

BULGARIA : Ongoing project – Update - **CNR52/14/29**

**EBRD to partially finance Bulgaria-Greece gas link**

The Bulgaria-Greece gas grid interconnection is to be completed in 2016, after which Bulgaria will be able to receive around 3-5 billion cubic meters of gas a year, according to Kiril Temelkov, CEO of state-owned gas transmission operator Bulgartransgaz. Temelkov made clear that the gas grid interconnection would allow Bulgaria to receive gas supplies from the Caspian region through the Trans-Adriatic Pipeline (TAP).

Zlatanov informed that the gas pipeline would start at Greece's Komotini, cross Kardzhali and Haskovo to reach Stara Zagora, where it would connect to the Bulgarian gas transmission network.

The gas pipeline is to be built with funding from the European Bank for Reconstruction and Development (EBRD). Apart from EBRD funding, the European Energy Programme for Recovery (EEPR) allocated EUR 45 M for the construction of the facility. According to initial estimates, the gas pipeline is to cost around EUR 160 M.

The Bulgarian contractor in the project is the ICGB company, in which the Bulgarian Energy Holding (BEH) controls a 50% stake, while the remaining 50% are owned by Greek DESFA and Italian Poseidon. (October 3, 2013)

GERMANY : Cooperation agreement - **CNR52/14/30**

**EU sources confirm outline deal**

European Union officials and Russia have agreed a deal on the use of Germany's OPAL link to Gazprom's Nord Stream gas pipeline, a Russian energy ministry said. No one from the European Commission, the EU executive, was available for immediate comment on the deal, which ends months of talks on OPAL that runs from the offshore section of Nord Stream through Germany to the Czech border. They aim to sign the deal by the end of October," the Russian spokeswoman said.

A deal could help to improve tense ties between Russia and the European Union, although the bigger issue of the European Commission's competition investigation into Gazprom is unresolved.

Relations between Russia and the European Union have been soured by EU efforts to introduce more competition and reduce Russian dominance of the bloc's gas market.

Gazprom's access to the 470-kilometre OPAL pipeline has been limited because of the EU's 3rd Energy Package legislation, which aims to prevent firms that already dominate supply from also controlling transport networks. (September 16, 2013)

MEXICO : Planned project – Engineering - **CNR52/14/31**

**Pemex's major pipeline tender flops, receives one bid**

A consortium led by Spain's Enagás was the only firm to submit a bid for Mexican national oil company Pemex's US$2bn Los Ramones phase II natural gas pipeline. At the bid submission event in Mexico City, Enagás tabled an offer of 7.23 pesos/GJ (US$0.55/GJ) for the 740km line with capacity of 1.43Bcf/d (40.5Mm3/d).

The two other bidders to attend the event, Sempra unit IEnova and Transcanada's local unit, delivered letters to Pemex confirming their exit from the round. (September 27, 2013)

PAKISTAN : Investment opportunities - **CNR52/14/32**

**Russia keen to help build Iran-Pakistan gas pipeline**

Russia is keen to help Pakistan build its section of the multi-billion dollar Iran-Pakistan natural gas pipeline by providing financial and technical support despite US sanctions on Iran, an official with Pakistan's petroleum ministry said.

Pakistan has earlier intended to ask the Iranian government to arrange additional funding of $1 billion to complete construction of the Pakistani section of the IP gas pipeline. This is on top of the $500 million that

Iran has promised the previous Pakistani government that it would provide. The sanctions on Iran have meanwhile, prompted Pakistan's government and the petroleum ministry to ask Foreign Office to assess the impact of US curbs on gas supply from Iran and the viability of the project itself, the official said, noting that Turkey and Armenia are already receiving gas supplies from Iran.

Construction of the $1.5 billion Pakistani section of the Iran-Pakistan pipeline officially started February 20, but progress has since stalled following the election of the new government in Pakistan in May. Iran on the other hand, has already built almost all of its section of the estimated $7.7 billion, 2,775-km pipeline. Pakistan plans to buy between 750,000 Mcf/day and 1 Bcf/day of gas through the pipeline.

Other areas Russian companies are interested to invest in include exploring for oil and gas in Pakistan, exporting LNG to Pakistan, help set up a 600-MW coal-fired power plant at Gaddani in Balochistan province, as well as export electricity from Kyrgyzstan through Afghanistan. (September 23, 2013)

RUSSIA : Planned project – Investment opportunities - **CNR52/14/33**

**Russian Gazprom plans to build a gas pipeline to Baltic Ust-Luga port**

Russia's Gazprom is planning to build a **7 billion cubic meter/year gas pipeline** to the Baltic port of Ust-Luga, Leningrad regional governor Alexander Drozdenko said, according to a statement on the overnor's website. He added that 7 Bcm/year of gas will be shipped to Ust-Luga via the pipeline, of which over 1 Bcm will be directed to the initial stage of the Baltic Carbamide Plant.

The plant is expected to produce up to 1.240 million mt of granulated carbamide and up to 350,000 mt/year of ammonia, general director Alexei Alyoshin said, according to the statement. It is expected to launch production in the first quarter of 2018. Other volumes will go towards other projects in the chemicals cluster of the port's industrial zone, Drozdenko said.

VTB estimated total capital expenditure for the pipeline project at around $500 million. (October 2, 2013)

## ***SUPPLIES - IMPORTS – EXPORTS***

OMAN : Import forecasts - **CNR52/14/34**

**Oman looks forward to fuel deal with Iran**

Oman remains hopeful that talks between US and Iran will eventually lead to the much sought after natural gas supplies needed for the country to resume traffic through the Straight of Hormuz. Oman has been attempting to buy fuel from Iran since 2005 but western sanctions have prevented any progress.

The Oman energy minister, Mohammed bin Hamad al Rumhy commented on the issue just after signing the biggest trade deal for fuel between the two countries. While officials in Iran think gas exports could start as early as two years from now, it is unlikely that the physical pipeline to support such an exchange could even be started in that time.

Tehran has also made agreements with Iraq and Pakistan but Iran’s own personal use of fuel has created a need for import from Turkmenistan. (September 30, 2013)

POLAND : Import forecasts - **CNR52/14/35**

**Polish PGNiG, Gazprom to discuss gas supply, pipeline ownership**

Polish state controlled natural gas producer and distributor PGNiG said it will hold talks with Russia's Gazprom to discuss its gas supplies and buying out a minority shareholder of the Polish section of the Yamal pipeline that brings Russian gas to Poland and Germany. In a brief statement PGNiG said it would discuss the conditions of Gazprom's gas supplies to Poland during the meeting in Gdansk.

Under its take or pay contract with Gazprom PGNiG receives up to 11 billion cubic meters a year of gas via the Yamal pipeline which brings Russian gas to Poland and Germany. In November last year PGNiG won a 15% reduction in the price it pays for imports from Gazprom under their oil-indexed contract after the Polish company began arbitration proceedings against the Russian company. Both sides agreed a new pricing formula which also took into account spot market prices. PGNiG imports roughly two thirds of Poland's annual gas consumption of around 14 Bcm from Gazprom.

PGNiG and Gazprom each hold a 48% stake in EuRoPol GAZ, the company which owns the Polish section of the Yamal pipeline. Under a 2010 annex to their supply contract, Gazprom and PGNiG agreed to buy the remaining 4% of the shares in EuRoPol GAZ from owners Gas-Trading, co-owned by PGNiG and Polish businessman Aleksander Gudzowaty. (October 7, 2013)

MEXICO : Forecast - Domestic supply - **CNR52/14/36**

**US gas exports to Mexico will more than double by 2016**

US natural gas exports to Mexico will more than double in 3 years -- from an average of 2 Bcf/d in 2013 to 4.5 Bcf/d in 2016, according to a report from Barclays Capital. The expected increase comes as **natural gas demand in Mexico has been strong** and is poised to accelerate further, driven by **new power generation and industrial use**, and enabled by "a massive expansion of the country's pipeline network," said the report.

Eight major pipelines with a total capacity of 5.6 Bcf/d are scheduled to start operations within Mexico from 2013 to 2017, the report said. Several will deliver gas to areas currently lacking sufficient distribution infrastructure, and will spur new demand. Three of these pipelines will connect directly to the US pipeline grid, and are mirrored by US expansions.

Several analysts and consultant groups have said projections of demand growth in Mexico of about 3 Bcf/d in the next five years are expected to come to fruition, although there are areas of uncertainty, including how fast the Mexican economy will grow and how quickly new infrastructure would be built. Mexican demand for gas is expected to increase by 2.7 Bcf/d by 2018, of which 1.4 Bcf/d will be for gas-fired generation, according to Platts unit Bentek Energy. Mexican demand last year stood at 8.1 Bcf/d, up from 5.9 Bcf/d in 2005.

To meet this demand, US pipeline export capacity to Mexico is expected to increase by 4.3 Bcf/d over the next five years, Bentek said. Meanwhile, a report by Goldman Sachs earlier this year put the jump in export capacity at 4.8 Bcf/d by 2015.

The Barclays report pointed to Mexico's state-owned Comision Federal de Electricidad (CFE,) which has announced plans to grow gas-fired generation capacity by 24.5 GW from 2010 to 2025, which could bring an additional 3.9 Bcf/d of natural gas demand. (October 2, 2013)

## STORAGE

AUSTRALIA : Forecast – Domestic supply - **CNR52/14/37**

**Mondarra gas storage will improve energy security**

The flexibility and security of Western Australia's gas market has been boosted by the expansion of the State's only commercial gas storage facility. Energy Minister Mike Nahan said the Mondarra Gas Storage Facility had been expanded in line with recommendations following the 2008 Varanus Island gas supply disruption. The opening follows a decision by the State Government in May 2011 to approve a long-term arrangement between Verve Energy and the APA Group to further develop the Mondarra Gas Storage Facility. Dr Nahan said the expanded facility was now operating, which would help strengthen the security and reliability of gas supplies for industry, as well as gas and electricity consumers.

The Minister said the Mondarra facility near Dongara was only the second of its type in Australia. The expansion has increased its commercial gas storage capacity by five times from three petajoules to 15 petajoules. Dr Nahan said the gas stored at Mondarra on behalf of Verve Energy could supply Perth's power needs for up to two months, in the event of a major disruption to gas supply.

The Minister said Verve Energy would be able to store spare gas for use at another time. Facility customers will also be able to take advantage of opportunities to purchase gas when short term 'spot' wholesale gas prices are low, which reduces exposure to high priced gas and reduces business costs. (September 18, 2013)

GERMANY : Forecast – Domestic supply - **CNR52/14/38**

**WINGAS opens gas storage facility in Jemgum, Germany**

WINGAS, a joint venture of Gazprom and Wintershall, has commissioned one of the highest performance and largest cavern storage facilities in Jemgum, Lower Saxony, Germany. The owners of the storage facility are WINGAS and VNG Gasspeicher GmbH, with 5/6 and 1/6 shares, respectively. Responsible for the construction and operation of the storage facility is WINGAS subsidiary «astora GmbH & Co. KG».

The infrastructure of the facility is linked to the transportation grids of German GASCADE Gastransport and Dutch Gas Transport Services B.V. Its location allows to put into storage natural gas delivered through the Nord Stream pipeline.

By 2018, the storage facility operator plans to create ten caverns in the salt dome in Jemgum. These caverns will be able to accommodate up to a billion cubic meters of natural gas — enough capacity to supply more than 500,000 households with natural gas for a whole year. Contrasting to aquifer reservoir storages, salt cavern facilities can comparatively quickly switch from filling to withdraw mode, and provide very high withdrawal and injection rates. Up to a million cubic meters of gas can be withdrawn of Jemgum storage in an hour. At aquifer reservoir storage facilities this process usually takes twice as long. This feature makes the Jemgum facility an attractive partner for renewables. (September 17, 2013)

SPAIN : Planned project – cancellation - **CNR52/14/39**

**Government halts activity at gas storage plant as tremors worsen**

The Industry Ministry and the Valencia regional government announced that work on an offshore gas-storage plant, located off Spain's Mediterranean coast, would be halted indefinitely until the cause of a series of earthquakes that have been detected in coastal towns in the area is established.

Industry, Energy and Tourism Minister José Manuel Soria announced that there "appears to be" a "direct relation" between the injection of gas into the Castor offshore storage plant and the tremors. The minister did, however, add that there was still no "scientific evidence" to prove a cause and effect.

The Castor storage plant, which belongs to a company called Escal, was being filled with gas when the tremors began. The Castor Project, which has a total cost of 1.2 billion euros, is designed to make use of a depleted oilfield to store up to a third of Spain's gas needs during 50 days. But it would seem that the injection of gas has caused hundreds of tremors since September 13, most of which have been on a minor scale. (October 3, 2013)

UNITED KINGDOM : Planned project – cancellation - **CNR52/14/40**

**Centrica withdraws from UK gas storage plans**

In September 2013 the UK government confirmed its decision to rule out public subsidies to support gas storage. The decision tacitly assumes existing gas reserve levels are sufficient for supply security at peak times in winter, and that other sources of gas, such as LNG and pipeline imports, will be ample to avoid steep price hikes during cold spells.

The decision, which the government says will save an estimated GBP750m over 10 years, is based on evidence that there is (and will be) enough gas supply storage, which is currently estimated at some 15 to 21 days' worth of demand.

Historically the UK has needed less storage capacity than its neighbors thanks to indigenous gas reserves in the North Sea. If all other things remain equal, current storage will suffice, as it was used to provide just 7% of the UK's total supply in 2012. And the operational evidence is that current storage levels have proven sufficient - demonstrated in December 2012 and March 2013, when temperatures plunged. Despite claims in March by the Crown Estate that the UK only had six hours of storage gas left to meet demand, both the government and National Grid judge the UK's gas supply to be resilient because of the diversity of gas supply and the rarity of the severe temperature drops recorded in March.

The government's decision is based on the assumption that extra storage is in fact not needed, and if it is that the market will provide it without government help. Whether or not extra storage is needed, the market's reaction is clear in Centrica's decision to withdraw from its new gas storage project off the coast of Baird, Norfolk and to put a project on hold in East Yorkshire. (October 2, 2013)

## CONSUMPTION

GERMANY : Forecast – Domestic supply - **CNR52/14/41**

**Germany overtakes Britain as Europe's biggest gas user**

Britain has lost its long-standing position as Europe's leading gas consumer to Germany, and the shift could threaten the UK's ranking as the continent's biggest gas trading hub. Britain's natural gas demand has plunged 22 percent over two years due to a weak economy and because cheap coal imports have made coal more profitable for generating electricity than gas.

Although German gas demand has also been affected by cheap coal, its economy has fared better than Britain's, supporting industrial use. Most data suggests the switch happened between 2012 and 2013, and it is almost certain that Germany will have overtaken Britain as Europe's biggest gas user by the end of this year.

German gas consumption was above 50 billion cubic metres (bcm) in the first half of this year, while Britain's demand lingered around 46 bcm, according to government data. Whether Germany will remain Europe's biggest gas user is unclear. Germany's developing position as a gas import hub thanks to Baltic Sea pipelines and signs of economic recovery in Britain make it difficult to predict. (October 4, 2013)

## USE FOR POWER GENERATION

CHINA : Planned project – Agreement - **CNR52/14/42**

**Beijing to replace coal-fired power plants before 2015 to reduce emissions**

Beijing will build four power centers by the end of 2014 to replace coal with natural gas in heating and power generation, municipal authorities said. Construction of the centers is part of the city's efforts to optimize energy mix and reduce emissions, according to officials with the Beijing Municipal Commission of Development and Reform.

With investment of 47.7 billion yuan (7.79 billion US dollars), the four power centers and 40 other related utility projects will reduce sulfur dioxide by 10,000 tonnes, provide heating for 100 million square meters and generate 7.2 million kilowatts of electricity through natural gas.

These services have so far been powered by four coal-fired power plants, which burned 9.2 million tonnes of coal in 2012, or 40 percent of the 23 million tonnes Beijing consumed in the same period. They will be shut down once the new power centers start operation. (October 5, 2013)

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