Cedigaz News Report

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Main news

LNG: Processing

- EmiratesLNG, a joint venture between International Petroleum Investment Company (IPIC) and Mubadala Petroleum, announced it will build and operate the Middle East's first land based liquefied natural gas (LNG) re-gasification facility at Fujairah.

LNG: Supplies- Imports – Exports

- The Kuwait Fund for Arab Economic Development has agreed to finance Jordan's LNG terminal with an investment of US $65 million.
- Lithuania won approval from the European Commission to provide 448 million euros in loan guarantees and other aid to finance a LNG terminal.
- U.S. Energy Department approves additional LNG export volume at proposed Freeport facility.
- The global market for shipped natural gas is entering key years of change in 2014 with several new buyers emerging while big new supplies will only slowly become available from 2015, resulting in a tight market for years to come.

Natural Gas: Exploration – Discovery

- GDF SUEZ has signed an ‘Asset Purchase Agreement’ (APA) with Vale S.A., one of the largest metals and mining companies in the world, to acquire its 20% participating interest in two gas exploration blocks in the Parnaiba onshore basin.

Natural Gas: Reserves

- Myanmar could be sitting on as much as 100 trillion cubic feet of untapped natural gas reserves offshore, in addition to its onshore energy wealth.

Natural Gas: Transport - Distribution

- In an effort to attract more candidates, South Stream Bulgaria said it will repeat the pre-selection procedure.

Natural Gas: Supplies- Imports – Exports

- Egypt’s natural gas shipments are set to drop by about half this year, undermining the military led-government’s attempts to stabilize the largest economy in North Africa.
- Gazprom net volume of natural gas sent to Europe and elsewhere for 2013 increased roughly 10% year-on-year.
- Ukraine to receive EU gas via reverse flow technology.
- FERC has approved NET Mexico Pipeline Partners LLC’s request to build a natural gas export facility with 2.1 Bcf/d capacity at the US-Mexico border.

Natural Gas: Price

- Beijing is expected to raise natural gas prices by 15% in 2014 and another 20% in 2015.

Natural Gas: Storage

- Chinese energy giant Sinopec, is developing a second natural gas storage facility, with a capacity of 10.42 billion cubic meters, at the onshore Zhongyuan block in China.

LNG

PRODUCTION

CANADA: Agreement- **CNR52/17/1**

Ferus and ENN announce two LNG liquefaction plants in Canada

Today Ferus Natural Gas Fuels and ENN Canada Corporation announced a **joint venture to construct, own and operate two LNG liquefaction plants** in Canada. The plants will be located in Vancouver, British Columbia and Edmonton, Alberta to service trucking market as well as other high-horsepower applications including marine, rail, mining, and oil and gas exploration.

According to a joint statement, both facilities will initially be built to **produce 100,000 US gallons per day of LNG**, with the ability to expand as demand grows. Site selection will be determined within six months, and construction will be initiated immediately afterward. First product is expected early in 2016.

As Operator, Ferus Natural Gas Fuels will be responsible for the design, engineering, construction, operation, and marketing and sales of both facilities. ENN Canada has committed to a significant amount of the LNG produced at these plants for its planned fueling stations.

Ferus Natural Gas Fuels specializes in building and operating cryogenic and micro-LNG plants and distribution equipment, and ENN Canada, which is developing LNG refueling infrastructure across the country, brings expertise in the construction and operation of LNG/LCNG stations and provides assistance in acquiring and transitioning to natural gas vehicles. (November 19, 2013)

PROCESSING

ABU DHABI: Agreement - **CNR52/17/2**

EmiratesLNG to proceed with land based regasification terminal

Further to the Abu Dhabi Executive Council's decision approving the project, EmiratesLNG, a **joint venture** between International Petroleum Investment Company (IPIC) and Mubadala Petroleum, announced it will **build and operate the Middle East's first land based liquefied natural gas (LNG) re-gasification facility** at Fujairah. The EmiratesLNG team, integrated with LNG specialists from a number of leading consultants and contractors including KOGAS, Poten & Partners and Technip ,with support from ADNOC's technical team, is working to ensure the successful and timely realization of this project.

The Front End Engineering Design (FEED) was undertaken by Technip , who bring a wealth of experience to designing and building world class LNG terminals. The engineering, procurement and construction (EPC) contract is currently under evaluation and will be awarded to one of the industry's leading contractors in the field.

EmiratesLNG's regasification terminal will have an **average throughput capacity of 1.2 billion standard cubic feet of natural gas per day** (nine million tonnes of LNG per annum). The terminal will be a key infrastructure to support the UAE energy diversification strategy by enhancing energy security and providing flexibility to meet future gas demands. This state-of-the-art terminal will be able to accommodate the largest LNG carriers with the ability to access competitively priced LNG from any source around the world. The strategic and vital terminal location at Fujairah has access points into the UAE gas network and is in close proximity to key power stations and desalination plants. The terminal will add yet another level of security and balance to the gas pipeline network. (November 11, 2013)

TRANSPORT - DISTRIBUTION

RUSSIA: Investment opportunities- **CNR52/17/3**

Gazprom reviews shipping options for LNG

Russian energy company Gazprom said it **reviewed the prospects of using a northern sea route** for the shipment liquefied natural gas. Gazprom Chairman Alexei Miller met in Moscow with Sergei Frank, director general of maritime shipping company Sovcomflot.

"The parties discussed cooperation in the marine shipping of LNG," Gazprom said in a statement. “In particular, the meeting addressed the prospects for Sovcomflot to participate in tenders for the charter of ice-breaking LNG carriers to be utilized by Gazprom."

Gazprom said a Sovcomflot carrier in September 2012 shipped petroleum products using the so-called Northern Sea Route in a record seven days. Russia is the world's largest natural gas supplier and has courted Asian countries, which are starting to demand more natural gas to meet the needs of their expanding economies. (November 20, 2013)

SUPPLIES - IMPORTS – EXPORTS

ARGENTINA: Supply contract - **CNR52/17/4**

Argentine judge lifts block on LNG purchases from Spain's GNF

An Argentine judge reversed a ruling banning the purchase of LNG from Spain's Gas Natural Fenosa (GNF) after Argentina's consumers' union admitted the country needed the fuel. The ban was imposed by a federal judge last month while a lawsuit filed by the consumer group made its way through the courts. Argentina's state-run energy company YPF had said it would continue to buy LNG from GNF, its top supplier, despite the ban. In its lawsuit, the consumers' union alleged a conflict of interest in the purchases. Another Spanish firm, Repsol , owns a 30 percent stake in GNF and also holds a stake in
YPF, which brokers the fuel purchases on behalf of fellow state-run energy company Enarsa.

Fuel imports have been growing in Argentina due to a persistent fall in local production and an increase in demand, especially for gas.

Repsol holds an 11.82% stake in YPF following Argentina's nationalization of Repsol's controlling assets in the state-owned firm last year. (November 21, 2013)

CYPRUS: Delay- **CNR52/17/5**

Delays in Cypriot LNG plant talks with Noble Energy

The Cypriot media reports that the LNG plant due to be built on the island's southern coast is facing delays. Cypriot government officials have admitted that there have been **difficulties in the talks** with Noble Energy, apparently over the **government's stake** in the project. (November 20, 2013)

INDONESIA: Gas exports- **CNR52/17/6**

Indonesia raises 2013 LNG export target by 4 pct

Indonesia's overseas LNG sales are expected to be 4% more than previously expected at 285 cargoes this year, boosted by **higher output and a drop in volumes set aside for domestic use**, the state oil and gas regulator SKKMigas said. Shipments from the world's No.3 exporter of the super-cooled fuel would however still be below last year's 318 cargoes.

Indonesia wants to tap its abundant gas supply and move away from oil as it grapples with record subsidy bills and a trade deficit resulting from costly fuel imports. "For 2013, the production target is 314 cargoes of LNG originating from Arun, Bontang and Tangguh," Widhyawan Prawiraatmadja, SKKMigas' deputy chairman for planning and development, told Reuters. Of this, 29 liquefied natural gas cargoes would be set aside for domestic consumption this year, Prawiraatmadja said.

It produced 332 LNG cargoes last year, of which 14 were kept for domestic use. Indonesia currently consumes about 40 billion cubic metres of gas and demand is growing by at least 10% annually. (November 12, 2013)

KUWAIT/JORDAN: Financing project - **CNR52/17/7**

Kuwait Fund to finance Aqaba's LNG terminal investment of US $65 million.

The Kuwait Fund for Arab Economic Development has agreed to finance Jordan's LNG terminal (LNG) with an investment of US $65 million.

The Kuwait Fund for Arab Economic Development approved of the Aqaba Development Corporation's (ADC) decision to award the LNG terminal contract to BAM-MAG JV and **will finance the project completely**. The move is part of a **framework agreement** signed on September 18, 2012 by the Government of the Hashemite Kingdom of Jordan and the Kuwait Fund for Arab Economic Development worth US $ 1.25 billion regarding the utilization of a grant allocated by the Government of the State of Kuwait and entrusted to the Fund for its administration in the Framework of the GCC Development Program to finance development projects in Jordan. Kamel Mahadin, ADC Chairman and the Chief Commissioner of the Aqaba Special Economic Zone Authority (ASEZA), said that the project will change the Aqaba Ports Community and improve Jordan's ports system, above all as it will solve the kingdom's needs for oil and energy and comes under King Abdullah II's vision and directions to transform Aqaba into a business and logistics hub in the region. (November 20, 2013)

LITHUANIA: Planned project – Approval - **CNR52/17/8**

Lithuania gets EU approval for state aid to LNG project

Lithuania won approval from the European Commission to provide **448 million euros ($606 million) in loan guarantees and other aid to finance a LNG terminal**, which will reduce its dependence on Russian gas. The project, developed by Klaipedos Nafta, a majority state-owned oil importer, could become the first LNG import terminal on the eastern coast of the Baltic Sea if it comes online as planned in December 2014.

The aid includes government loan guarantees for the project and payment to Klaipedos Nafta of a fee that Lithuania imposes on all users of its gas transmission system, the so-called "LNG supplement". The government introduced the fee in 2013, and it amounts to about 17 million euros per year. Lithuania's top gas consumer Achema, which produces fertilisers, has challenged the fee, saying it undermines competitiveness.

The EC approval was needed to release a 87 million euro loan agreed by the European Investment Bank (EIB) in July after Klaipedos Nafta failed to attract funding for the project from commercial banks. The operator will be obliged to provide regasification services to any third party on regulated tariffs and under non-discriminatory conditions, the Commission said.

Klaipedos Nafta has signed an agreement to lease a floating storage and regasification unit (FSRU) from Norway's Hoegh LNG for 10 years, with an option to buy it later. The vessel, which will serve as a floating import terminal at Klaipeda port, will be able to import 2-4 billion cubic metres of natural gas per year from 2015 Klaipedos Nafta has said the terminal needs to import at least 0.54 bcm of gas per year to remain operational, which amounts to six to seven standard LNG cargoes.

The Baltic state, which bought 3.3 bcm of gas from Russia's Gazprom last year, paid one of the highest natural gas prices in the EU, the Commission said. Gazprom's long-term supply contract with Lithuanian gas utility Lietuvos Dujos expires in 2015. (November 20, 2013)

RUSSIA: Planned project – Approval - **CNR52/17/9**

Gazprom to build LNG terminal in Kaliningrad region by 2018

Gazprom will build a gas liquefaction terminal in the Kaliningrad region capable of processing **2.4 million tons of LNG per year**, the company announced recently. The new terminal will be linked to the existing gas pipeline near the **local underground gas storage facility**, which will allow to deliver gas to local consumers as well as pump it into storage reservoirs, Interfax said.

Considering the geographical position of the most-western Russian region delivering liquid natural gas by sea would "significantly improve the region's energy security," Gazprom said in a statement. The company is currently considering several locations for building the new terminal. Details on exact investments required for the project will be finalized next year, the company said. (November 22, 2013)

RUSSIA: Investment opportunities - **CNR52/17/10**

Gazprom's investment in Vladivostok LNG plant seen at $13.5 bln

Gazprom is to invest $13.5 billion in its planned LNG plant near the city of Vladivostok, the local governor said, double the previously stated investment in the project. Gazprom had previously put investment in the Vladivostok plant at 220 billion roubles ($6.7 billion), though a Gazprom spokesman said recently the new figure also includes infrastructure such as a port, gas pipeline and power station as well as the plant itself.

Gazprom is competing for the upper hand in the global LNG market with rivals including Rosneft and producer Novatek. Competition for LNG exports is growing as Russia plans to lift Gazprom's monopoly in overseas shipments of the frozen gas. The lower house of parliament has already initially approved a bill to liberalise LNG exports.

Gazprom plans to build the Vladivostok plant by 2018 with a capacity **of between 10 and 15 million tonnes per year**. Rosneft, jointly with Exxon, wants to launch a 5 million tonnes per year LNG plant on the Pacific island of Sakhalin in the same year.

Russia now has a share of around 4.5% of the global LNG market, which is dominated by Qatar. Russia aims to double its share by 2020 with the production of between 35 million and 40 million tonnes a year by then. (November 21, 2013)

RUSSIA: Regulation - **CNR52/17/11**

Rosneft faces restrictions on LNG export ambitions

Plans by top oil producer Rosneft to export liquefied natural gas have hit a snag in parliament as lawmakers passed a bill that **limits state companies' LNG exports to gas produced in offshore fields**. Russia's lower house of parliament last week voted for the withdrawal of state-run Gazprom 's gas export monopoly, paving the way for LNG exports by other companies to expand the country's reach in global energy markets after its late adoption of the new gas technology.

The restrictions do not allow Rosneft to produce and export LNG from onshore deposits — a stipulation that could limit Rosneft's ability to compete with rivals, including Gazprom.

At the same time, Russia's No. 2 gas producer, Novatek — majority controlled by its chairman Leonid Mikhelson and Gennady Timchenko, co-owner of the Gunvor trading house — will be able to produce and export LNG in the Yamal and Gydan Arctic peninsulas. Novatek, in partnership with France's Total and China's CNPC, plans to complete the Yamal LNG project in time to hit annual production of 16.5 million tons by 2018.

Rosneft and ExxonMobil, meanwhile, have agreed to build a plant with annual production capacity of 5 million tons on the Pacific island of Sakhalin, close to Japan. (November 21, 2013)

RUSSIA: Planned project – Approval - **CNR52/17/12**

Russia to order 13 LNG vessels from South Korea

Russia plans to award South Korean shipbuilders a contract to build 13 or more LNG carriers, South Korea's presidential office said recently. As part of the agreement, the government said Russian energy giant Rosneft and South Korea's Daewoo Shipbuilding & Marine Engineering Co Ltd had signed a memorandum of understanding on shipbuilding cooperation. (November 13, 2013)

SENEGAL: Investment opportunities - **CNR52/17/13**

Senegal mulls building offshore LNG terminal

Senegal is considering whether to build an offshore LNG terminal, a document from the state-run utility showed, in a move to lessen its dependence on expensive fuel oil imports. The energy-poor country plans a three-month study to explore ways to introduce LNG into its energy mix. Senegal, unlike many of its neighbours, pumps no oil or gas of its own and has failed to discover hydrocarbon reserves. It imports oil from OPEC member Nigeria.

One option under consideration is to build an **offshore regasification terminal** through a private sector partnership, the document said. Under the proposed scheme, tankers carrying LNG would discharge it into the floating terminal's storage tanks, where it would be regasified and sent via pipeline to shore. Another option is to import gas-generated power from neighbouring Mauritania. The results of the study will be available by next June, the document said. (November 13, 2013)

UNITED STATES: Market trends - **CNR52/17/14**

BP sees six US LNG export projects being built

BP expects six US LNG export projects to be built totalling **67.2mn t/yr of liquefaction capacity**, BP LNG chief operating officer Jonty Shepard said at the LNG World Summit. The projects are — Sabine Pass, Freeport T1-T3, Lake Charles, Cove Point, Cameroon and Elba Island.

Projects located on brownfield sites of existing import terminals are more likely to be developed because some infrastructure is already in place, he said, adding that those with offtake agreements are also more likely to be approved. BP trades around 100 cargoes of LNG a year and has nine LNG tankers in its fleet. (November 20, 2013)

UNITED STATES: Regulation - **CNR52/17/15**

U.S. Energy Department approves additional LNG export volume at proposed Freeport facility

The U.S. Energy Department announced recently that it has conditionally authorized Freeport LNG Expansion, L.P. and FLNG Liquefaction LLC to export additional volumes of domestically produced LNG **to countries that do not have a Free Trade Agreement (FTA)** with the United States from the Freeport LNG Terminal in Quintana Island, Texas. Freeport previously received approval to export 1.4 billion cubic feet of natural gas a day (Bcf/d) of LNG from this facility to non-FTA countries on May 17, 2013. The Freeport

Expansion application was next in the order of precedence after the Energy Department conditionally authorized Dominion's proposed Cove Point facility in September 2013. Subject to environmental review and final regulatory approval, the facility is conditionally authorized to export an **additional 0.4 Bcf/d, for a total rate of up to 1.8 Bcf/d, for a period of 20 years**.

The next two U.S. Energy Department pending applications to export LNG to Non-FTA countries in order of processing are:

- Cameron LNG, LLC - Hackberry, Louisiana: Cameron LNG has applied to export up to 1.7 billion cubic feet per day for a 20 year period. Cameron LNG, a subsidiary of Sempra Energy, is a LNG receiving terminal on a 260-acre site along the Calcasieu Channel in Hackberry, Louisiana. The completed liquefaction facility will be comprised of three liquefaction trains with 4.5 million tonnes per annum of capacity each, 13.5 Mtpa total.
- Jordan Cove Energy Project, L.P. - Port of Coos Bay, Oregon: Jordan Cove Energy Project, L.P. is requesting authorization to export as LNG both natural gas produced domestically in the United States and natural gas produced in Canada and imported into the United States, in an amount up to the equivalent of 0.8 billion cubic feet per day over a 25-year period. (November 15, 2013)

WORLD: Market trends - **CNR52/17/16**

Global LNG market to remain tight in 2014 and beyond

The global market for shipped natural gas is entering key years of change in 2014 with **several new buyers emerging while big new supplies will only slowly become available from 2015**, resulting in a tight market for years to come.

Demand for LNG has been rising for years, driven mostly by booming Asian demand and a loss of nuclear power in Japan and more recently South Korea. Import needs are set to rise further in 2014 as China and Latin America are becoming increasingly active buyers. While demand for LNG is expected to rise, analysts say that big supply additions are not expected before 2015.

"On the supply side, there is plenty to be concerned about. Projects in Angola, Algeria and Nigeria have been underperforming. Major Australian projects should start to hit the market in 2014, but we continue to see a dearth of new liquefaction projects coming online until 2015," Bank of America Merrill Lynch (BoAML) said.

As a result of the tight market in 2014, the report said that Asian spot prices could rise above last winter's highs of almost $20 per million British thermal units (mmBtu) this winter, up from a current price of $18.30 per mmBtu.

While some new supply sources are expected to ease the market somewhat by 2015, driven largely by new exporters from the United States and Australia, analysts say that a rise in LNG demand of around 7 percent a year until 2020 will still result in a tight market for most of the decade.

"Global gas demand is surging, which is driven by a preference towards lower carbon fuels, a shift away from nuclear and emerging market growth. As a result, we expect international gas markets to remain 'tight' through to 2020," Bernstein Research said this month in a global gas market study.

Beyond an overall tight market outlook, **large regional supply and demand differences are expected to remain in place**.

North America, where the shale gas boom has pulled down prices, will benefit from low domestic prices and an opportunity to export its excess gas to Asia, where prices are expected to rise further on the back of booming demand and a lack of significant gas production of is own.

The researchers added that this imbalance would result in a sharp rise in global LNG trading activity, as producers and shippers try to take advantage of regional price differences. (November 18, 2013)

COMPANIES

AUSTRALIA: Agreement - **CNR52/17/17**

BG Group completes transaction with CNOOC for sale of additional interests in QCLNG

BG Group announced the company has completed transactions with CNOOC for the sale of additional interests in the Queensland Curtis LNG (QCLNG) project in Australia for US$1.93 billion. Under a separate agreement, BG Group will also supply CNOOC with an additional 5 million tonnes per annum of LNG.

CNOOC has also reimbursed BG Group for QCLNG project expenditure commensurate with its increased interests incurred from 1 January 2012 to 30 September 2013. From 1 October 2013 CNOOC will fund project expenditure commensurate with its new equity holding. Completion of the deal followed approvals from government, regulatory and other relevant authorities, and execution of related documents. (November 11, 2013)

GTL

SUPPLIES - IMPORTS – EXPORTS

QATAR: Conversion to GTL use - **CNR52/17/18**

GTL may well replace LNG as Qatar's chief export

Gas-to-liquids (GTL) may well soon replace LNG as Qatar's chief export, with the former enjoying growing demand by the global marketplace, an Oxford Business Group (OBG) report has said. Qatar International Petroleum Marketing Company (Tasweeq), the state-owned oil and gas marketing Company, has been actively promoting the use of GTL jet fuel, a 50/50 blend of GTL kerosene and conventional crude oil-derived standard jet fuel, produced at the country's Pearl facility. "The move toward GTL and other value-added production comes as Qatar's energy sector has reached a plateau, with limited expansion expected in the gas segment for some years to come, at least until the moratorium on the development of the North Field is lifted," said OBG.

A recent note by Standard & Poor's said that it foresaw an average annual gradual decline in oil production of 6 percent for the 2013-16 period, as Qatar's fields matured. While oil exploration campaigns are underway and could yield new fields, any additional production would likely not occur for some time.

"The development of GTL also limits Qatar's exposure to gas prices, which are trending downward as they become increasingly decoupled from oil prices and new production techniques have lowered costs. This in turn has boosted the commercial viability of processed gas products, including GTL, OBG added. (November 13, 2013)

CNG

PRICE

INDIA: Domestic supply - **CNR52/17/19**

Government orders sale of gas at uniform price to city CNG projects

After a rap from the Gujarat High Court, the government has decided to allot natural gas at a uniform price to retailers of the fuel in different cities. Presently, cheaper domestically produced gas is mostly allocated to firms in Delhi and Mumbai for sale to automobiles and households, while costlier, imported gas is sold to such suppliers in other cities. Compressed natural gas (CNG) is used by automobiles and piped natural gas (PNG) is supplied as a cooking fuel.

The Oil Ministry on November 14 issued guidelines for "allocation/supply of domestic natural gas to CGD entities" for sale to automobiles and households. It allocated 6.4 million standard cubic meters per day of domestically produced gas, which is currently sold at USD 4.2 per million British thermal units, to meet almost 80% of the requirement of CNG and PNG in all cities. Allocation to cities is to be made in proportion to demand, the order said, adding that presently, 8.02 mmscmd of gas is consumed by city gas projects.

State-owned gas transportation and marketing monopoly GAIL India Ltd has been asked to ensure "uniformity in supply of domestic gas across all CGDs for CNG and PNG segments without discrimination among CGD entities, subject to operational imperatives," the order said. (November 19, 2013)

NATURAL GAS

EXPLORATION – DISCOVERY

AUSTRALIA: Regulation - **CNR52/17/20**

NSW government alters gas exploration laws

The NSW government says it's changing gas exploration laws so that landholders have more say over miners trying to access their land. Resources Minister Chris Hartcher said the amendments would be introduced into parliament soon in an effort to "satisfy a range of concerns held by landholder groups". Key changes were to permits companies obtained to access land in an exploration phase and a Code of Practice to guide the way explorers negotiated access deals with landholders. "The changes include stipulation that permit provisions may only be utilised for environmental data collection and geological survey purposes such as water monitoring, flora and fauna - at the exploration phase only," Mr Hartcher said. (November 19, 2013)

BRAZIL: Agreement - **CNR52/17/21**

GDF SUEZ makes first foray into Brazilian exploration market

GDF SUEZ has signed an 'Asset Purchase Agreement' (APA) with Vale S.A., one of the largest metals and mining companies in the world, **to acquire its 20% participating interest in two gas exploration blocks in the Parnaiba onshore basin**, located in the northeast of Brazil. Signing of the APA marks the first entry of GDF SUEZ into the exploration-production activities in Brazil.

Blocks 2 and 3 cover an area of 3,067 sq km and 3,065 sq km respectively in a region relatively under-explored, with **high potential of natural gas**. These licenses were awarded in March 2008 as part of the ninth exploration bid round to Vale (20%), BP (40%, operator of block 2) and Petrobras (40%, operator of block 3). One exploration well in each of these two blocks is scheduled by March 2014. (November 15, 2013)

PRODUCTION

CHINA: Forecast – Domestic supply - **CNR52/17/22**

China prepares to open its first deep-water gas project

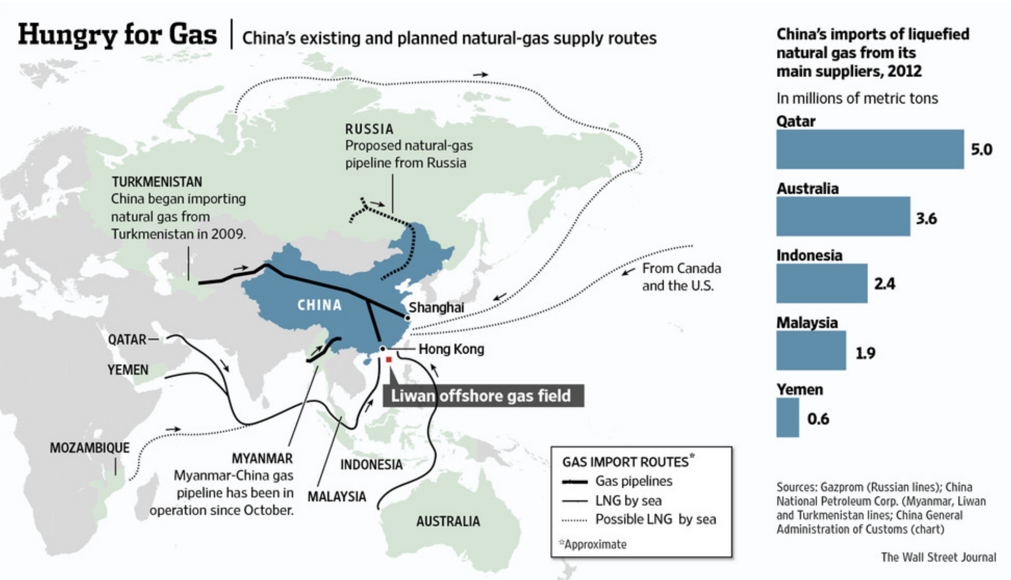
Cnooc, Canada's Husky Energy Collaborate on $6.5 Billion Project in South China Sea. China is set to start the pumps at its first deep-water natural-gas project, an engineering feat using a Chinese-made platform designed to withstand typhoons and using hundreds of miles of undersea pipelines. The field is part of Beijing's effort to more than double its use of gas to 10% of China's energy mix by 2020, helping to wean the country off the dirtier coal that produces two-thirds of its electricity.

The Liwan-3 gas field in the South China Sea about 200 miles southeast of Hong Kong is expected to go online by early next year and eventually to pump about 4% of the country's gas supply. It has the **potential to send more gas to China than current imports from Australia**, China's second-largest supplier of liquefied natural gas.

For all its complexity, the $6.5 billion project is located well. The field is in undisputed waters in the South China Sea and close to where China most needs the gas—its fast-growing, but energy deficient, southern and eastern coastal regions.

Husky Energy Inc. operates the project and owns 49%. Chinese state-owned energy company Cnooc Ltd. holds the rest.

Cnooc has made a push to develop its offshore-drilling expertise, last year paying $15.1 billion for Canada's Nexen Inc. That purchase gave Cnooc access to technical skills used by Nexen in the Gulf of Mexico, which is far deeper than Liwan's location, and which can be used in future deepwater projects. Husky and Cnooc contracted with deep-water specialists, including Italy's Saipem for assistance at Liwan.



Liwan's initial output of about 300 million cubic feet a day will rise to about 350 million next year when a second, nearby field goes online. With the connection of a third field more than a year from now, production is expected to reach about **500 million cubic feet a day**. Liwan's peak output, in 2015, will amount to around 4% of Chinese domestic gas output and roughly 7% of the gas that China imports.

The first gas will come from nine wells drilled into the seabed beneath 4,750 feet of water. The gas will then flow through two 49-mile pipelines to a shallow-water platform—the core of the project—at which point it will be piped 160 miles to the coast between Macau and Hong Kong. (November 14, 2013)

ISRAEL: Delay - **CNR52/17/23**

Leviathan gas field drilling postponed

The oil drilling in the Leviathan gas field, which was planned for February, was **postponed to the second half of 2014**. A rig was meant to reach Israel early in 2014 that can drill past seven kilometre, where an oil reserve containing some 210 million barrels.

The arrival of the rig was postponed and along with it the drilling. Drilling in the Leviathan gas field had already been halted last year due to lack of proper equipment. (November 18, 2013)

UNITED KINGDOM: First gas - **CNR52/17/24**

ConocoPhillips announces first gas production from Jasmine field

ConocoPhillips announced first gas production from the Jasmine field, one of the UK's largest discoveries in the last 10 years. "The start-up of Jasmine represents another important milestone for ConocoPhillips and builds upon the recent successful start-up of Ekofisk South in Norway and the Christina Lake Phase E oil sands project in Canada," Matt Fox, executive vice president said.

The company expects the project to contribute to its 3-5% expected production growth rate through 2017. The Jasmine facility, discovered in 2006 by ConocoPhillips (36.5% and operator), Eni (33%) and BG Group (30.5%), has the gross capacity to produce 140,000 barrels of oil equivalent per day. According to the note, the field is a high pressure, high temperature gas-condensate reservoir. It is located in Blocks 30/6 and 30/07a of the Central North Sea, close to the Judy platform. (November 21, 2013)

RESERVES

CANADA: Discovery - **CNR52/17/25**

Discovery of a conventional natural gas reservoir

Ressources et Energie Squatex Inc. is pleased to announce the discovery of a **significant reservoir rock which could contain a large quantity of conventional natural gas** in the Lower St. Lawrence area. While carrying a stratigraphic coring program which started in 2010 to evaluate the oil and gas potential of its licences, important porous dolomitized limestone zones of hydrothermal origin containing gas (89%Methane) were met in a core hole that reached 1874 meters in the Mitis River area, south of Rimouski. These horizons of the Sayabec Formation are covered with fine grains rocks of the St-Leon Formation acting as cap rocks. A similar porous horizon was already known outcropping near St-Cléophas in the Matapedia, some twenty kilometers more to the east.

Squatex is currently evaluating different options in order to finance the continuation of geoscientific work such as the recording of new seismic lines, the AVO processing of existing lines and to carry out the drilling of confirmation wells on the structure and determine its potential. (November 15, 2013)

MYANMAR: Reserves estimates - **CNR52/17/26**

Myanmar's energy sector poised for boom

Myanmar could be sitting on as much as **100 trillion cubic feet** of untapped natural gas reserves offshore, in addition to its onshore energy wealth. What the Southeast Asian nation doesn't have is experience and expertise, both of which it will have to get from international energy companies.

Of that figure, 20 trillion cubic feet of reserves have already been proven, and the rest are considered "probable and possible" before proper exploration of the deep-water areas have even begun, according to the North Petro-Chem Corporation (Myanmar) Ltd. The company gave a presentation at a recent conference attended by the 61 local and international firms prequalified to bid for blocks in Myanmar, along with other energy players.

The 18 onshore blocks will be awarded to the highest bidders before the end of the year, while bidding for the 30 offshore blocks recently completed, and licenses are set to be awarded early next year.

What has been explored thus far looks promising. The Shwe gas field, which went into operation some weeks ago, has reserves of up to 9.1 trillion cubic feet of natural gas – enough for China to build a $3.7 billion gas pipeline that is now sending gas from Myanmar to China.

But the country is not prepared for modern drilling practices. Myanmar, unaccustomed to modern exploration and extraction practices, is seeking outside expertise to exploit its resource-rich territories.

Multinational energy companies will be relied on to bring their expertise and investment. Among those allowed to bid for the offshore blocks are Total SA, Chevron Corporation, Exxon MobilCorporation and Statoil ASA, along with Chinese, Japanese and Korean companies. (November 14, 2013)

TRANSPORT - DISTRIBUTION

ASIA: Cooperation - **CNR52/17/27**

ADB touch to regional gas pipeline project

The political turmoil may not recede in Afghanistan and Pakistan, but the initiative for an inter-country gas pipeline project continues as the Asian Development Bank (ADB) has 'appointed transaction advisor to **help attract a commercial consortium leader of global repute that will build, own and operate the planned 1,800-kilometer natural gas pipeline**.

The gas pipeline connecting Turkmenistan through Afghanistan and Pakistan with India is estimated to export up to 33 billion cubic meters of natural gas a year from Turkmenistan to Afghanistan, Pakistan, and India over 30 years. The project (TAPI), supposed to be completed by 2017 will allow the landlocked Turkmenistan to diversify its gas export markets to the southeast Asia and it will also provide a vital new fuel source for developing Afghanistan and help Pakistan tackle chronic fuel shortages, said a statement issued recently by the ADB from Ashgabat of Turkmenistan.

The ADB is understood to advise on the establishment of the said gas pipeline project and also 'handle the bidding and selection of a commercial consortium leader to build, own and operate the pipeline'. The entire project is jointly owned by four country gas firms namely Turkmengas, Afghan Gas Enterprise, Inter State Gas Systems pvt ltd and GAIL (India) ltd.

The energy starved India, which is set to become the third largest energy consumer in the globe by 2025 after the US and China, continues it's initiative for acquiring natural gas from Myanmar too. However, few days the Indian foreign minister Salman Khurshid termed the TAPI gas pipeline project as a real-time investment for the country of one billion populaces. The minister of course admitted that it would be necessary to keep patience as the route involves countries (read Afghanistan and Pakistan) with difficult situations till today. (November 21, 2013)

BALTIC SEA: Pipeline - **CNR52/17/28**

Load tests under way on Nord Stream gas pipelines

Nord Stream AG is performing a load test on both lines of the Nord Stream gas transportation system in the Baltic Sea. The industry-standard tests, which started on Nov. 5, are designed to confirm the reliability of the pipelines. The process is expected to last about one month.

During the program, gas transportation parameters will fluctuate in different modes. Since start-up of Nord Stream's first trunkline in November 2011, the system has continually transported to various utilities in Europe all gas nominated and supplied by Gazprom Export. (November 21, 2013)

BULGARIA: Delay - **CNR52/17/29**

Bulgaria says no shady South Stream tenders

In an effort to attract more candidates, South Stream Bulgaria said it will repeat the pre-selection procedure by letters of intent for the construction of the Bulgarian part of the Russian-backed South Stream natural gas pipeline, local media reported. A source close to the Bulgarian government told that the tender for commissioning the contract to construct South Stream in the Bulgarian territory has been postponed with the idea of attracting more reputable interested companies".

Meanwhile, the European Commission has said that South Stream and Member States whose territories it would cross would have to abide by EU rules. The source reminded that in the spring of 2013 the European Commission had written to all EU Member States who have agreements and/or contracts concerning South Stream to the effect that any practical step which would be interpreted as commencement of construction could be considered by the Commission as a breach of EU energy law and that country could be passed onto consideration for penalties. However, the source noted that the Bulgarian government has reiterated South Stream is a priority.

South Stream is initiated by Gazprom and Italian ENI. The onshore pipeline will connect Varna on the Black Sea to northern Italy, via Bulgaria, Serbia, Hungary and Slovenia. The Bulgarian section is estimated to cost €3.5 billion. South Stream is planned to go on stream by the end of 2015 with a pipeline capacity of some 63 billion cubic metres per year. (November 21, 2013)

IRAN: Financing project - **CNR52/17/30**

Iran Needs $15-20 bn to expand gas pipeline network

Iran need close to $15-20 billion to expand its gas pipeline network and build a spare one, Managing director of National Iranian Gas Transfer Company (NIGTC) Reza Almasi said. The company plans to construct 6,000 kilometers of high pressure pipeline.

Rega Almasi pointed that present pipeline network has been designed and built just to connect the feeding points and consumption markets without considering any alternative network for emergency situations, Shana reported.

"Right now the length of gas pipeline network stands at 34,000 km but for expanding the network we are needed to build another 6.000 km," he said. Iran's petroleum minister has asked National Iranian Gas Co (NIGC) to upgrade the national gas network in order to be able to meet domestic needs and exports simultaneously. (November 20, 2013)

MACEDONIA: Cooperation - **CNR52/17/31**

South Stream deal boosts Macedonia's gas prospects

Macedonian businesses hope that the energy deal signed recently in Moscow can solve the country's long-term energy needs and provide cheaper power for businesses and households. Meanwhile they also urge speeding up construction of a secondary gas network in the country to make these benefits possible. "The business community expects that more companies will start using gas and that a secondary gas network will be built for households, which would lower the price [of energy]," Mirce Cekredzi, deputy head of the Macedonian Chamber of Commerce, SSKM, said.

Macedonia and Russia signed an **agreement to cooperate on construction of the Macedonian leg of the South Stream Gas Pipeline** in Moscow recentl. The pipeline will transport Russian natural gas produced by Gazprom through the Black Sea to Bulgaria and then to Italy and Austria, transiting several Balkan countries. The project, already in construction, is scheduled for completion in 2018.

Macedonia already uses Russian gas, but only 130 million cubic metres a year, and only accessible to several big companies. With the new pipeline, estimates are that by 2030 the country will use 2.5 billion cubic meters of gas, the head of Gazprom in Macedonia, Sergey Ikonikov said. (July 26, 2013)

TURKMENISTAN: Talks - **CNR52/17/32**

EU maintains hope for Trans-Caspian gas pipeline

A long-stalled project to deliver Turkmen gas to Europe is again in the spotlight after a European Union official said the idea remains on the table. Denis Daniilidis, the head of the EU mission in Ashgabat, told an oil and gas conference in the Turkmen capital on November 19 that negotiators are finalizing a deal to construct a pipeline from Turkmenistan to Azerbaijan across the Caspian Sea, bypassing Russia, Russia's RIA Novosti news agency reported.

According to the diplomat, negotiators are working on "some outstanding issues," RIA said. The EU, Turkmenistan and Azerbaijan will sign an agreement on related environmental issues this year, he added.

The trans-Caspian pipeline project is part of the EU-sponsored Southern Corridor that would deliver natural gas from Central Asia, the Caucasus and the Middle East to Europe while easing Europe's dependence on Russian gas. Russia and Iran oppose the construction of any pipeline across the Caspian Sea, citing the unresolved status of the sea and maritime borders. But both have done little in 22 years since the breakup of the Soviet Union to remedy the issue, and both have been accused of creating obstacles to alternative energy corridors. (November 20, 2013)

UNITED STATES: Planned project – Approval - **CNR52/17/33**

William Partners gets FERC OK for Transco pipeline expansion

Williams Partners LP said it received federal approval to expand Transco, the nation's largest natural gas pipeline system, to serve Dominion Resources Inc's new 1,358-megawatt gas power plant in Virginia. The approval from Federal Energy Regulatory Commission for Transco's $300 million expansion would serve Dominion's unit in Brunswick County and help replace generating capacity from retiring coal-fired plants.

Of the total expanded capacity, more than 90% will serve Dominion Virginia Power's new power plant. The rest will serve Piedmont Natural Gas Company's local distribution business in North Carolina.

The Virginia Southside Expansion is part of $2.2 billion of Transco growth projects that Williams Partners plans to bring into service by 2017. The Transco pipeline is a 10,200 mile-long line that has a current system capacity of about 10.15 million dekatherms per day (dth/d), which is enough natural gas to serve the equivalent of more than 42 million homes. (November 21, 2013)

SUPPLIES - IMPORTS – EXPORTS

EGYPT: Regulation - **CNR52/17/34**

Egypt's thirst for cheap gas threatens export prospects

Egypt's natural gas shipments are set to drop by about half this year, undermining the military led-government's attempts to stabilize the largest economy in North Africa. Eni SpA and BG Group PLC, international oil companies with investments in Egyptian export terminals, said a policy that encouraged gas consumption at home, capped prices and had left the state owing $6 billion to producers was holding back investment in new fields. Egypt is set to fall behind Equatorial Guinea to fourth place among Africa's gas exporters this year, according to data compiled by Bloomberg.

The dilemma for Egypt's new leaders is that the nation's thirst for cheap gas leaves little scope to pare back subsidies that cost 7.3% of gross domestic product. While the state is starting to repay the debt owed to gas producers, the country will find it hard to win new investment into its country's largest export industry until price limits are raised, Eni Chief Executive Officer Paolo Scaroni said.

"Certainly if gas prices were higher in Egypt, we could exploit some discoveries we made in the Mediterranean," Scaroni said in an interview. The government has promised to start repaying this year some of the $800 million to $900 million it owes the Rome-based company, the largest energy producer in Egypt, he said.

While Egypt's benchmark stock index has climbed about 19% since Mohammad Morsi's government was overthrown by the army in July, the economy remains in crisis with both unemployment and the budget deficit near records after three years of political unrest. Egypt's gas production fell 8.5% to an average of 5.4 billion cubic feet a day in the first nine months of the year compared with last year, according to Egyptian Natural Gas Holding Co. Chairman Taher Abdul- Rehim. The slump has even forced Egypt to consider importing gas from outside the country to meet energy demand during peak summer months.

There are signs the government is trying to address the challenges of energy policy. A pledge to start paying back the cash owed to gas producers is a positive step, said Martijn Murphy, an analyst at Wood Mackenzie Ltd., an energy consultant in Edinburgh. Still, cutting the debt will be easier than paring back subsidies that hold down energy costs for consumers even though exporting gas can be five times more profitable than selling it in Egypt, according to Christine Tiscareno, an equity analyst at Standard & Poor's in London.

"Our priority is the supply of natural gas to the Egyptian local market," Egypt's new oil minister, Sherif Ismail, said in phone interview. "Any change in the subsidy system should be put up for societal discussion,... (November 20, 2013)

INDONESIA/CANADA: Planned project – Final investment decision - **CNR52/17/35**

Petronas moves to secure Asian market with natural gas megaproject

Malaysia's Petronas is lining up Asian energy players to help build a Canadian LNG megaproject, but there is a catch. **Before anyone joins the ownership team, the prospective partners must sign long-term contracts to buy LNG**. The state-owned energy giant is optimistic that it will find partners eager to participate in the massive development planned by Petronas-led Pacific NorthWest LNG LP. Petronas has a 90% stake in Pacific NorthWest, while Japan Petroleum Exploration holds a 10% interest.

A condition of becoming a co-owner is to agree to take delivery of LNG in Asia. "When you look at our project, our partners will be fully integrated and have a physical need for LNG," Pacific NorthWest president Greg Kist said in an interview. Pacific NorthWest selected TransCanada Corp. earlier this year to design and build a pipeline stretching across 900 kilometres. That $5-billion pipeline, called the Prince Rupert Gas Transmission Project, would carry natural gas to Lelu Island, which will be transformed into an $11-billion LNG export terminal.

Tokyo-based Japex, which acquired its minority interest in Pacific NorthWest earlier this year, also picked up a 10% stake in the Montney natural gas play in northeastern B.C. from Petronas-owned Progress Energy Canada Ltd.

Pacific NorthWest expects to receive a decision by the end of this year on its application for an LNG export licence from the National Energy Board. Mr. Kist said Petronas, Japex and whatever future partners there might be will make a **final investment decision** in late 2014 on whether to proceed with the LNG project. (November 17, 2013)

KAZAKHSTAN: Export forecasts - **CNR52/17/36**

Tethys plans to export Kazakh gas to China by 2015

Tethys Petroleum, oil and gas exploration and production company focused on Central Asia and the Caspian Region, is looking to export Kazakh natural gas to China and double output, reports news agency Bloomberg. Earlier this month, Tethys entered into an agreement for the sale of 50% of its Kazakh oil & gas assets to SinoHan Oil and Gas Investment B.V., part of HanHong, a Beijing based private equity fund.

According to Bloomberg, the company plans to boost output to about **1 million cubic meters a day** (6100 barrels of oil equivalent) from about 3,000 barrels now, said Executive Chairman David Robson.

The company may also export gas to China as soon as 2015 through the planned Kazakhstan-China pipeline, Executive Chairman David Robson. (November 21, 2013)

RUSSIA: Gas supply - **CNR52/17/37**

Gazprom sales to Europe increase

Gazprom said recently its net volume of natural gas sent to Europe and elsewhere for 2013 **increased roughly 10% year-on-year**. Gazprom published its financial information for the first six months of 2013, ending June 30. It said it delivered **3 trillion cubic feet of natural gas** to Europe and elsewhere in the reporting period, up from the 2.7 trillion reported for the same period last year.

Gazprom didn't report exclusively on sales to countries in the European Union. The EU has turned to rival suppliers in the Caspian region to break the Russian grip on its energy sector. Russia meets about 20% of Europe's gas needs. Gazprom, meanwhile, has started focusing on Asian economies, where demand for natural gas is increasing. (November 14, 2013)

RUSSIA: Stake modification - **CNR52/17/38**

Novatek, Gazprom Neft to Buy Eni’s Share of Arctic Gas Unit

Novatek and Gazprom Neft, agreed to acquire Eni SpA (ENI)’s holding in a natural gas producer in the Russian Arctic for $2.94 billion, increasing control in one of the nation’s largest new energy projects. Yamal Development, the venture owned by the Russian companies, will raise its total share in the SeverEnergia gas and condensate project to 80.4% from 51%, Novatek said in a statement.

The partners are boosting their stake after state-controlled Rosneft’s $1.8 billion acquisition of 19.6% in SeverEnergia from Italian utility Enel SpA (ENEL), which closed this month. Rosneft’s ambitions to gain share in the domestic gas market have placed it in competition with Novatek, now Russia’s biggest supplier of the fuel after state-run Gazprom, the owner of Gazprom Neft. (November 20, 2013)

RUSSIA: Gas supply - **CNR52/17/39**

Russia's Gazprom reassures West Europe on supplies

Ukraine is once again buying Russian gas and no longer endangering supplies to Western Europe, Russia's state natural gas company said recently. Most of the gas that Gazprom supplies to Europe goes through pipelines that cross Ukraine. Ukraine, which Gazprom says owes it $1.3 billion, a week ago stopped buying Russian gas and said it would rely on its underground stores through the end of the year.

Gazprom warned recently that this would deplete the amount of so-called technical gas needed to drive the gas through the pipelines to Europe. This raised echoes of 2009, when Russia cut gas shipments to Europe for three weeks in a dispute with Ukraine.

Friday, November 15, Russian news agencies quoted Gazprom Chief Executive Alexei Miller as saying that Ukraine has resumed purchases of Russian gas and stopped taking gas from its underground stores. Russian Prime Minister Dmitry Medvedev and his Ukrainian counterpart, Mykola Azarov, discussed the situation by telephone. A statement posted on the Ukrainian government website said they **confirmed that each side would do everything necessary to make sure supplies to Europe were not disrupted**. (November 15, 2013)

TANZANIA: Agreement - **CNR52/17/40**

Ophir in $1.3 billion deal with Temasek unit for Tanzania gas

Britain's Ophir Energy agreed a $1.3 billion sale of a stake in Tanzanian gas fields, bringing in a unit of Singapore's Temasek Holdings to help fund a development project in the latest Asian investment in East Africa's gas sector. Ophir, whose shares soared 16% after the announcement of the long-awaited deal, said

last month a sale process was under way with Indian state-run gas company GAIL in the running as a potential buyer.
The Tanzanian fields that Ophir discovered with its partner BG Group are its prize assets, estimated to hold **15 trillion cubic feet of gas**.
Ophir said it would sell a 20% interest in Tanzanian Blocks 1, 3 and 4 to Pavilion Energy, owned by Singapore state investor Temasek, for an initial $1.25 billion plus a further contingent consideration of $38 million. The development of the LNG facilities required to exploit the fields will cost an estimated $10 billion, prompting Ophir, a company worth about $2 billion, to bring in a deep-pocketed partner.
Ophir retains a 20% stake in the three blocks following the deal with Pavilion. It also has majority stakes in two other exploration areas in Tanzania and exploration assets elsewhere in Africa, in Kenya and Equatorial Guinea. (November 14, 2013)

UKRAINE: Gas supply - **CNR52/17/41**

Ukraine to receive EU gas via reverse flow technology

Gas pipeline operators in Ukraine are about to sign a deal with Slovakia that will enable the post-Soviet republic to receive European gas through reverse flow technology. The deal, facilitated by EU Energy Commissionaire Guenther Oettinger, would mark an important milestone for Ukraine, reducing its dependence on Russia. "We consider that we are very close to a deal,…the content of the deal has been agreed, whereby the gas will flow from West to East through Slovakia to Ukraine. It's just a matter of signing, which should be in the next few day." said European Commission spokeswoman Marlene Holzner.
The technology allowing pipeline flows to be reversed, made available last year, allows Ukraine to re-import some gas back from EU nations, including Hungary and Germany via Poland. Reverse flow through Slovakia is more helpful strategically as it could increase the volumes. However, it might become more politically sensitive, putting Slovakia's own supplies at risk. Slovakia's gas pipeline operator Eustream has annual transmission capacity of 90 billion cubic metres, 90% of which goes to the European Union. All the gas is purchased from Russia. (November 19, 2013)

UNITED STATES / MEXICO: Construction facilities - **CNR52/17/42**

FERC approves gas export facility at Mexican border

FERC has approved NET Mexico Pipeline Partners LLC's request to build a natural gas export facility with **2.1 billion cubic feet per day** (Bcf/d) capacity at the US-Mexico border. The company, a subsidiary of Houston-based NET Midstream, requested a Presidential Permit and Granting Authorization* (under Section 3 of the Natural Gas Act). The export facility will be linked to a 120-mile, 42-inch diameter intrastate pipeline that NET Mexico is planning to build from the Agua Dulce Hub in Nueces County, Texas, to the export facility. The export facility would then deliver gas to the planned Mexico's Los Ramones Pipeline.
The FERC order adds that the export facility was "necessary to meet the expanding fuel demand for power generation and industrial activity in Mexico" and to promote North American trade.
According to the US Energy Information Administration (EIA), Mexico is a net importer of natural gas, mostly via pipeline from the United States. Its natural gas demand is rising due an increased use of the fuel for power generation. Most of Mexico's electricity generation comes from conventional thermal plants, the fuel source for which is increasingly natural gas. US natural gas exports to Mexico grew by 24% to 1.69 Bcf/d in 2012, the highest level recorded (see graph). Natural gas flows from US pipelines accounted for about 80% of Mexico's overall natural gas imports in 2012. (November 20, 2013)

PRICE

CHINA: Regulation - **CNR52/17/43**

China looks to energy price reform to unlock gas supply

China is set to **accelerate energy price reforms to encourage competition**, boost oil and gas supply and reduce inefficient fuel consumption in a country that two months ago became the world's largest net oil importer.

China, which already imports about 60% of its crude oil consumption, is expected to see its crude import bill alone reach half a trillion dollars a year by 2020. To prevent further runaway rises in fuel costs, Beijing has vowed to allow a **greater role for market forces** to govern consumption. "We should hand over prices that can be set by market forces to the market... We will push forward price reforms in sectors including water, oil, natural gas, power, transportation and telecommunications." said a reform document released by the Communist Party.

A gas supply crunch in China is hampering the government's ability to reduce the volume of coal burnt for power. Public anger is rising in major cities over heavy smog caused by emissions from coal-fired power stations.

Gas pricing reforms could help China unlock the vast potential of its shale gas, which is believed to be larger than reserves in the United States where the development of shale gas resources has fuelled an energy revolution.

Beijing is expected to raise natural gas prices by another 15% in 2014 and another 20% in 2015, said Simon Powell, head of Asia Oil and Gas Research at CLSA in Hong Kong. In China, oil imports, domestic oil and gas fields and basic infrastructure like pipelines are under the control of the state. Reforms to give a greater role to the market and non-state firms in these areas may be rolled out at a slower pace. (November 15, 2013)

WORLD: Market trends **- CNR52/17/44**

Regional gas price differences will remain beyond 2035

Natural gas prices will vary across regions until more flexible supply terms develop and a global market is formed to narrow the gaps, according to the International Energy Agency. For prices to converge, contracts for liquefied natural gas supplies and oil-indexed pricing need to be loosened, spurred by accelerated gas-market reforms in Asia and LNG exports from North America, the IEA said in its World Energy Outlook 2013 report.

“Although gas price differentials have come down from the extraordinary levels seen in mid-2012, natural gas in the U.S. still trades at one-third of the import prices to Europe and one-fifth of those to Japan,” the IEA said. “While regional differences in natural gas prices narrow in our central scenario, they nonetheless remain large through to 2035.”

Next-month gas in the U.S. averaged $3.66 per million British thermal units in the past year on the New York Mercantile Exchange. The comparable price in the U.K. was 66.5 pence a therm, equivalent to $10.62 a million Btu, on the ICE Futures Europe exchange. LNG for delivery to Northeast Asia in four to eight weeks averaged $16.09, according to assessments by World Gas Intelligence.

While gas demand is expected to rise in Asia and the Middle East by 2035, led by a quadrupling in China, it will struggle to return to 2010 levels in the European Union amid competition from a rising share of renewables and more profitable coal in power generation, the IEA said. China and parts of Latin America and Europe could replicate U.S. success in developing unconventional gas resources “at smaller scale,” the IEA said. (November 12, 2013)

STORAGE

CHINA Planned project – Expansion - **CNR52/17/45**

Sinopec developing second gas storage facility

Chinese energy giant Sinopec, is developing a second natural gas storage facility, with a **capacity of 10.42 billion cubic meters**, at the onshore Zhongyuan block in China. According to the company National Development and Reform Commission has already approved the results of the feasibility study for the Wen-23 gas storage project, Platts reported. Sinopec started its first gas storage facility, the Wen-96 project, in September last year.

The company said the Wen 96 project has accumulated 232 million cu m of gas to date, and is expected to store a further 60 million cu m over the coming winter and spring seasons, Platts reported. The project has **storage capacity of 588 million cu m** and stores gas from the Wen 96 gas field in the Zhongyuan block.

The two projects are part of previously announced **plans to develop more than 20 gas storage facilities** to help ease shortages during peak demand periods. (November 19, 2013)

KYRGYSTAN: Cooperation agreement - **CNR52/17/46**

Kyrgyzstan offers Uzbekistan to create joint venture for operation of underground gas storage Severniy Soh

There is a major natural gas storage facility in Soh area in Kyrgyzstan, General Director of JSC KyrgyzGas Turgunbek Kulmurzaev said at a press conference recently in Bishkek. According to him, issue of returning of gas storage in Soh was raised in 2010, there is a solution of the parliament, the government mandated to address this issue.

As Kulmurzaev said, Babanov's government and current government did not solve the issue, although there is an agreement signed by the presidents of the CIS countries in 1992 and in 1997, and ratified by Kyrgyz parliament. It is clearly written that **all the objects that are constructed during the Soviet Union, should move to states on whose territory they are located after the state gained independence**. This issue is still not resolved, and it has to be addressed.

There is a very large gas storage facility on the territory of Soh area, Uzbekistan needs this storage more than Kyrgyzstan because until 2010 Uzbekneftegaz pumped gas in the volume of 2-2.5 billion cubic meters in summer, while in winter, when gas production is falling, they provided Fergana Valley from this repository. After 2010 Uzbekneftegaz does not use the storage, this object remains controversial. **Kyrgyzstan offered Uzbekistan to create a joint venture at the gas storage facility, so that Uzbekistan could use it and Kyrgyzstan might take necessary amount in the winter**. But so far the issue remains open. Recently Kyrgyz side made similar offer to Uzbekistan. This gas storage facility is necessary first of all to Fergana Valley, he added. (November 22, 2013)

CONSUMPTION

CHINA: Gas supply **- CNR52/17/47**

China winter gas shortages to last through 2020

China is likely to see natural gas shortages every winter until the end of the decade as domestic production fails to keep up with demand, a factor likely to drive global liquefied natural gas prices higher, energy consultancy Wood Mackenzie said in a report.

Increased gas demand from China for heating has already helped lift spot LNG prices by over 20% since mid-September and will aggravate an already tight market for spot LNG cargoes. "Winter gas shortages will be exacerbated through to 2020 as seasonal demand growth in northern China increases at an annualised rate of approximately 16% per annum,…China's increased LNG demand will increase competition among Asian spot LNG buyers during peak demand periods and allow suppliers to drive spot prices upwards during winter months," Wood Mackenzie said in the report.

China's need for more imported gas comes just as the needs of top LNG buyers Japan and South Korea are also rising due to reduced nuclear capacity. Spot LNG prices LNG-AS are currently close to $19 per million British thermal units (mmBtu), up from around $15 mmBtu in September.

Domestic gas production in China during the first nine months of 2013 rose 9% year-on-year to 58 billion cubic meters, but the increase was insufficient to keep up with surging demand. China's top natural gas producers have already cut supplies to industrial consumers to ensure homes and users of transport have enough fuel.

The report said China will need to rely on imported LNG for up to 46% of its additional gas demand. The rest will be met by supplies piped in from Central Asia and Myanmar. Wood Mackenzie recommended China further develop its natural gas industry, including investments in shale gas, to reduce its reliance on imports. (November 22, 2013)

USE FOR POWER GENERATION

UNITED STATES: Gas supply - **CNR52/17/48**

Increased production leads to greater natural gas use for power production in Northeast

An additional supply of natural gas in the north-eastern U.S. has led to greater use of gas for power generation, according to a report from the U.S. Energy Information Administration. Natural gas production in the region **rose from 2.1 billion cubic feet per day (Bcf/d) in 2008 to 12.3 Bcf/d in 2013**, which has reduced the cost of the fuel and reduced net inflows of natural gas into the region, according to the EIA.

During the first nine months of 2013, net inflows of gas to the region decreased 50 from all outside sources compared to 2008, the EIA reported. The flow on pipelines has been replaced in part by natural gas from the Marcellus Shale.

ISO New England stated after the announcement of the Vermont Yankee Nuclear Plant in August that natural gas generated more than 52% of the power in New England in 2012, identifying the dependence on natural gas as a key strategic risk. (November 19, 2013)

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