EIC Newsbrief – China

April 2013

Oil & Gas – Upstream & Downstream

China's oil demand fall in March by 2%

China's oil demand dropped to 9.77 million barrels per day during March, data from the National Bureau of Statistics have shown. This marks a fall of roughly two percentage points on March's levels.

All top three Chinese NOCs saw profit fall in 2012

On March 25, Sinopec, the country's largest refiner, said its net income for the year stood at 63.9 billion yuan (US$10.27 billion), down sharply from 73.2 billion yuan (US$11.76 billion) the year before. This included an operating loss for refining of 11.9 billion yuan (US$1.91 billion). Sinopec's figures came shortly after PetroChina announced that its 2012 profit had dipped 13.3% to 115.33 billion yuan (US$18.53 billion). The company lost 43.5 billion yuan (US$6.99 billion) on refining in 2012, down from a loss of 60.1 billion yuan (US$9.66 billion) in 2011. While CNOOC's listed unit CNOOC Ltd also posted lower profits for 2012, with the company reporting a 9.3% year-on-year drop in net income to 63.7 billion yuan (US$10.23 billion), the company attributed this to rising exploration costs and a new resource tax.

COOEC completed the construction of Liwan platform topside

China Offshore Oil Engineering Corp. (COOEC) has completed the construction of the topside built for the development of China's first deepwater gas field Liwan 3-1 in the South China Sea. Able to accommodate 120 people, the topside of the central equipment platform for the field weighs 31,385 tonnes. COOEC has re-modified its float barge Hai Yang Shi You 229 into a T shape in order to perform the installation of the giant topside. The unit has been loaded onto the float barge and will be installed on the jacket, which has already been positioned at the site, by May 20. As operator of the deepwater section of Liwan field, Husky is in the middle of drilling 10 production wells in water depths of up to 1,500 metres. First gas is expected by the end of this year, with initial flows estimated at 8-12 billion cubic metres per year of gas, which could later rise to 20 bcm.

CNOOC unveils deepwater R&D centre

The China National Offshore Oil Corp. (CNOOC) unveiled a national deepwater oil and gas engineering technology R&D centre at the end of March. The centre is led by the CNOOC Research Institute with the participation of CNOOC Deepwater Development Co. and Offshore Oil Engineering Co., Ltd. of CNOOC. The R&D centre is tasked to develop key deepwater technology including well drilling and completion; floating platforms; underwater production systems; flow safety; submarine pipelines and riser pipes; well control; and emergence rescue. The CNOOC also plans to develop a deepwater engineering technology system and a standard system and build testing bases for pilots and offshore trials. The CNOOC put its self-developed deepwater rig "CNOOC 981" into operation in the South China Sea in May 2012. The rig has a maximum operation depth of 3,000 meters and maximum drilling depth of 10,000 meters. ***XINHUA, April 8, 2013***

NDRC approves PetroChina Yunnan refinery study

The National Development and Reform Commission (NDRC) has approved PetroChina's feasibility study on the construction of a mega refinery in southwestern China's Yunnan Province. The refinery, the first in Yunnan, is located in Anding City, 32 km away from Kunming, the provincial capital. It will have a faceplate refining capacity of 10 million tonnes per year (200,000 barrels per day). The refinery will incorporate several foreign technologies. For instance, the hydrocracking unit and continuous reformer will use technology provided by the US' UOP, while the US' Chevron and Lummus Technology will provide the residue hydro dewaxing technology and France's Technip will supply the sulphur recovery technology. It is not clear if the Saudi Arabian company will have any stake in the refinery, but according to a memorandum of understanding (MoU) signed with PetroChina in 2011, Aramco has agreed to build a refinery jointly in Yunnan Province.

Sinopec sets goals for high sulphur gas output
Sinopec, China's second-largest oil and gas producer by output, will add 10 billion cubic metres (bcm) of annual natural gas production capacity by 2015 using its own technology to develop high-sulphur gas fields, the China Daily said. China has proven reserves of more than 1 trillion cubic metres of natural gas with high sulphur content, or sour natural gas, it has been a technical challenge for Chinese firms, including Sinopec and top oil and gas producer CNPC to develop high-sulphur gas which contains a high content of poisonous hydrogen sulphide that could be lethal if not properly treated. Companies have sought international expertise to tackle the sour gas. Chevron is in joint venture with CNPC to develop several such gas fields in Sichuan. ***OIL AND GAS NEWS, April 4, 2013***

Sinopec plans to build China's largest CTG project
A Sinopec Group unit is preparing to invest 70 billion yuan (US$11.3 billion) in building China's largest coal-to-gas (CTG) project in the far northwestern Xinjiang Uygur Autonomous Region, according to a report by the official Xinjiang Daily. Sinopec Xinjiang Energy Chemical intends the work on the project is scheduled to e completed in the next 8-10 years. Located in the Zhundong mining area, the plant is expected to have a production capacity of 8 billion cubic metres per year of gas when fully operational, according to the report. The project is part of Sinopec's 2011-15 investment plan in Xinjiang, which calls for an investment of up to 140 billion yuan (US$22.48 billion) in oil and gas exploration, oil refining and coal based chemical projects. At present, there are more than 30 CTG projects in planning or under construction in Xinjiang, with a capacity totaling 150 bcm per year. PetroChina, which is the country's largest gas producer, is also developing a number of CTG projects in Xinjiang and plans to build 14 pipelines and 8 gas gathering stations there to bundle the synthetic gas into the giant West-East Pipeline (WEP) network.

Xinjiang Energy settles HQ in high-tech zone in Urumqi
There was a ceremony, on April 2, for the founding of the China Petrochemical Corp's (Sinopec) Xinjiang Energy and Chemical Co's headquarter in the State high-tech zone of Urumqi, the capital of the Xinjiang Uygur autonomous region. This also marked the beginning of the headquarter strategic base designed to integrate the company's development, decision-making and management, and scientific research training. Upon completion, the base is expected to attract senior technical personnel and talented managers in the coal and chemical

industry to the area and provide supports for the zone's economic growth and environmental improvements. The Urumqi high-tech zone, which has been pulling in many large enterprises and group headquarters, will increase its cluster effect after work on the base is completed by the Xinjiang Energy and Chemical Co. The zone is expected to be Xinjiang's first economic zone with a GDP of more than 100 billion yuan. ***CHINA DAILY, April 8, 2013***

Sinopec plans for third LNG terminal

The green light for Sinopec's third LNG import terminal has been given by China's energy planning authorities. Construction of a first-phase 3 million tonne per year handling plant is being allowed to go ahead at Wenzhou City on the central eastern coastal province of Zhejiang at the beginning of 2014, said state media citing Wenzhou's municipal government. It said Sinopec's feasibility study for the terminal, expected to cost US$1.87 billion, had been approved by the National Energy Administration (NEA) and the National Development and Reform Commission (NDRC). Sinopec is already developing two other LNG terminals: one at Beihai in southwest Guangxi; the other at Qingdao in northeast Shangdong Province. A possible fourth, at Lianyungang in Jiangsu Province between Shandong and Zhejiang, is at the early application-for approval stage. The Wenzhou terminal will be built on an island adjacent to the city's port.

CNOOC in process of joining Tullow's Turkana

China's major oil corporation is planning to make major inroads in Africa to take advantage of the growing interest in the continent's oil industry. According to China National Offshore Oil Corporation (CNOOC) Chief Executive, Fu Chengyu, the company plans to capitalise on growing interest in the continent among explorers due to high oil prices and growing energy nationalism elsewhere. In Kenya, the company is seeking a stake in Tullow Oil, which is drilling oil in Turkana. ***STOCKHOUSE, April 9, 2013***

CNPC, PEMEX sign memorandum for cooperation

On April 6 in Sanya, Hainan Province, witnessed by Mexican President Enrique Peña Nieto who is paying a state visit to China and attending the Boao Forum for Asia 2013, CNPC President Zhou Jiping and PEMEX CEO Emilio Lozoya Austin signed a memorandum for cooperation. At the signing ceremony, President Enrique Peña Nieto said that Mexico is presently amending energy laws to promote the opening up of its petroleum industry to the outside world. Two state leaders both expressed their support to the cooperation between the two companies, and hoped to see sooner progress and win-win outcomes under the memo. Mr. Zhou Jiping said that CNPC will introduce its proven EOR technologies for mature oilfields to Mexico to facilitate bilateral collaboration. ***CNPC, April 9, 2013***

Dalian Shipyard (DSIC) will soon start new FPSO construction

Dalian Shipbuilding Industry Corp. (DSIC) and its subsidiary DSIC Offshore will soon start building a floating, production, storage and offloading (FPSO) vessel to be installed at CNOOC Ltd's Enping oilfield in the South China Sea. In late 2012, CNOOC signed two separate contracts with DSIC and National Oilwell Varco (NOV) to build the FPSO's hull and single point mooring (SPM) system. The contract to build the FPSO's topside went to China Offshore Oil Engineering Corp. (COOEC), which later subcontracted the project to DSIC Offshore in order to achieve greater efficiency in interfacing with DSIC's construction of the hull. This allows contractors to cut costs while shortening the integration and commissioning time. The 150,000 deadweight tonne (DWT) vessel will have a dual hull and will include a power generation plant and living quarters capable of accommodating 100 crew. Caterpillar Global Petroleum announced earlier that it would supply eight of its Cat 16CM32C generating sets to provide the main power for Enping's fixed platform and FPSO facilities.

GE drives increased gas compression at Chinese field
General Electric (GE) has successfully started commercial operations of a new gas compressor engine at the Chongqing gas field. The unit is expected to deliver a 3% increase in gas compression compared to other machines in its class. The GE Waukesha engine will drive the largest gas compressor of its type in China and is the first high-speed reciprocating compressor powered by a more than 4,000 bhp gas engine independently developed in China. The Waukesha engine offers an output of 4,835 bhp at 1,000 rpm and is installed at a compressor station owned and operated by South West Oil & Gas, a unit of China National Petroleum Corp. (CNPC). The Waukesha engine is a spark-ignited machine that powers compressors in the storage, production and transmission of gas, boasting higher horsepower, efficiency and fuel flexibility. While Chongqing sees the first installation of a Waukesha engine in China, the technology is used for gas compression elsewhere in the world, including major projects in India.

Shell ready to spend US$1 billion on Chinese shale
Royal Dutch Shell has said that China's government has approved a shale production-sharing contract (PSC) with the company, adding that it plans to spend US$1 billion per year in developing the country's vast unconventional gas reserves. On March 26, Shell spokeswoman Li Lusha said the agreement with partner China National Petroleum Corp. (CNPC) to explore, develop and produce shale gas in the Fushun-Yongchuan block in the Sichuan Basin had been given the green light by Beijing. This marks the first shale gas PSC that has been issued by the country, which is seeking to boost gas production in order to lower its reliance on costly oil imports and meet ambitious environmental targets. No further details of the annual US$1 billion investment were provided, nor of the financial arrangements of the PSC.

Jacobs wins transformer oil project for Shell in Hong Kong
Jacobs Engineering Group Inc. (NYSE:JEC) announced on 9th April it has been selected by Shell Hong Kong Limited to provide detailed design for its Transformer Oil Project located at its Tsing Yi installation in Hong Kong. Officials did not disclose the contract value, but noted that the work is being performed from Jacobs' China operations in Hong Kong and Shanghai. Under the terms of the contract, Jacobs is providing detailed design engineering services for modifications to Shell's existing terminal facility to enable the processing of transformer oil. Shell's 47-acre Tsing Yi installation supplies Hong Kong and Macau with a wide range of oil, gas and chemical products.

Wood Group wins hot gas component supply contract
Wood Group GTS, a provider of rotating equipment services and solutions for the energy industry, has received a contract for the supply of new hot gas path components from CNOOC

and Shell Petrochemicals Company Limited (CSPC). The order is for new parts that will be installed in a GE Frame 6B gas turbine located at CSPC's Dayawan Petrochemical Industrial Park in Huizhou, Guangdong Province and includes multiple stages of turbine buckets, nozzles and shroud sets. This latest award builds on Wood Group GTS' existing relationship with CSPC and follows previous contracts for hot gas path inspection and component repair services at the same facility. ***MARKETLINE, April 12, 2013***

Trelleborg wins supply order for CNOOC's Yuedong LNG terminal

Trelleborg Marine Systems has secured a contract to provide the new Yuedong LNG Terminal with docking and mooring equipment and LNG cargo transfer technology. The 10.3 billion yuan (US$1.65 billion) development, to be located in southeast China's Guangdong Province, will consist of a new LNG terminal, LNG station, wharfs and pipelines; it is designed to have an annual processing capacity of 2 million tonnes. Trelleborg expanded its LNG portfolio in January with its acquisition of SeaTechnik, and its selection for this project brings its total number of terminal installations in China to 13. This maintains its ongoing record for securing the supply of Trelleborg Seatechnik SSL to every Chinese LNG terminal that has been built. Trelleborg will also supply a portable handheld unit (PHU) for dual berth installation and a carry-on-board laptop system for single berth installation.

PetroChina invest gas field in Mozambique

In March, PetroChina bought a 20% stake in a Mozambique gas field in southern Africa from Italian producer Eni for US$4.2 billion. Eni would retain 50% of the Area 4 field, while three other partners each would own 10%. Eni describes Area 4 in Mozambique as one of the biggest gas discoveries of the past decade.

Sinopec, PetroSA to build refinery

Sinopec Group, parent of Asia's largest refiner Sinopec Corp, said recently it had signed a framework agreement with South African state oil firm PetroSA to build a major refinery in the African country. The two state-owned firms would build what they called a world-class refinery in Port Elizabeth, according to a statement from Sinopec Group. It gave no details on the project. In May last year, PetroSA said it had partnered with Sinopec Group to push along the building of the refinery, originally slated to cost $9 billion-$10 billion and produce to 400,000 barrels a day. The Mthombo project, in the industrial port of Coega near Port Elizabeth on South Africa's south coast, had been in the pipeline for several years but progress stalled mainly because of a lack of funding. ***REUTERS, March 26, 2013***

Fujian Meide selects UOP's Oleflex technology for petrochemical production in China

China-based Fujian Meide Petrochemical Company has selected UOP's C3 Oleflex technology to produce propylene from propane in the country. The value of the contract was not disclosed. Fujian Meide will use the C3 Oleflex process technology at its new unit at Fujian Meide's facility in Fuzhou City, Fujian Province. The new unit is expected to begin operations in 2015 and produce 660,000 metric tonnes of propylene. Apart from the technology licensing, UOP will also provide engineering design, catalysts, adsorbents, equipment, staff training, and technical service for the project. US-based Honeywell's wholly-owned subsidiary UOP is a supplier and licensor of process technology, catalysts, adsorbents, process plants, and consulting services to the petroleum refining, petrochemical, and gas processing industries. ***CHEMICALS INFOMART, March 21, 2013***

CNPC gets new chairman
Zhou Jiping, former general manager of the China National Petroleum Corporation (CNPC), has officially become the company's chairman, updated information on the CNPC website showed 16th April. Zhou's new role came after the company's former chairman, Jiang Jiemin, resigned last month to head the State-owned Assets Supervision and Administration Commission. Zhou, 60, who has nearly 40 years of work experience in the oil industry, remains vice chairman and president of PetroChina Company Limited, the listed arm of CNPC. ***XINHUA, April 16, 2013***

Power, New Energy (renewables)

CNPC plans to produce 20 bcm of shale gas in 2020
The China National Petroleum Corporation (CNPC) has announced plans to boost shale gas production to 20 billion cubic metres by 2020, up to 50 bcm by 2030, and intends to spur a large injection of foreign technology and capital to achieve its aims. CNPC may release some shale gas acreage to foreign companies in exchange for upstream assets overseas as a method of expanding its foreign presence, according to a report in Upstream.

Total in shale gas talks with Sinopec
Total is in talks with Sinopec, one of China's three oil giants, on joint development of shale gas in China, said Margerie, global CEO and board chairman of Total, on 25th Mar.So far, Total and Sinopec have entered the final discussion on blocks to be developed, and they would drill a test well in the selected block for resource valuation after their cooperation is approved by Chinese government authorities. ***XINHUA, March 25, 2013***

China Power Investment, Total sign agreement on CTO project
Total and China Power Investment Corp., one of China's five power giants, recently inked a second memorandum of understanding (MOU) on launching coalto-olefin (CTO) project in Inner Mongolia in North China, said Margerie, global CEO and board chairman of Total on 25th Mar. The two companies will found a JV to operate CTO project. The planned CTO project would involve a total investment of 3.5 billion-4 billion US dollars and is designed to process 3.6 million tonnes of coal into chemical products annually. ***XINHUA, March 25, 2013***

Huaneng increased its stake in Chinese shale gas project
China's leading power utility Huaneng has increased its stake in a unit of Chongqing Energy in an effort to speed up the development of shale gas in southwestern China. Recently, the state-owned power producer acquired a 36% stake in Chongqing Mining for an unspecified amount, increasing its total share in Chongqing Mining to 65%. Following the acquisition, Huaneng will focus solely on exploring Youyang, while Chongqing Energy will focus on

Qianjiang. Chongqing is home to 12.75 trillion cubic metres of shale gas in place, with 3 tcm seen as recoverable – both accounting for 10% of the respective national total. Local shale gas reserves are spread over an area of 40,000 square km, of which Sinopec and PetroChina already have licences to explore 30,000 square km for conventional gas. Huaneng has also agreed to partnerships with local authorities in Hunan and Anhui Provinces to explore and develop local shale gas resources jointly.