

Oil & Gas – Upstream & Downstream

China's implied oil demand slid to a six month low in April

The country's implied oil demand register its first year-on-year decline in three years. April oil demand fell by 0.5% to 9.31 million bpd as economy softens, according to Reuters' calculation based on preliminary government data released on May 11. April's demand by volume was the lowest since Oct.2011.

CNOOC begins its deepwaters using China's first domestically built deepwater rig

According to China Daily newspaper, the Ocean Oil 981 semi-submersible drilling platform began work in waters up to 1500 metres deep in the South China Sea on 9th May. It officially marks the first time that Chinese developers have been capable of venturing in domestic waters beyond the shallow continental shelf without foreign assistance. CNOOC Ltd, the listed arm of state-owned China National Offshore Oil Corp. (CNOOC), is commercially using a domestically developed semisubmersible platform for the first time. It will spend 56 days drilling the Liwan 6-1-1 well, which is expected to descend to a depth of around 2,370 metres. The Ocean Oil 981 took years to develop and more such rigs are being built as the domestic industry considers the possibility of major discoveries in the South China Sea stemming a national decline in onshore fields. Noted by the company's Chairman, one third of China's estimated oil and gas reserves are under the South China Sea, and 70% of those are believed to be in a deepwater region spanning 1.5 million square km.

China's ambitious on expanding its domestic offshore sector

China is placing great hopes in its expanding domestic offshore sector. CNOOC Ltd aims to be producing 50 million tonnes of oil equivalent per year (1 million barrels of oil equivalent per day) from shallow-water operations, and another 50 million toe from deep-water projects by 2020. However, problems include growing confrontations between China and its neighbours over territorial claims in the South China Sea, typhoons and underwater waves will make those production targets very difficult to be achieved.

Lishui 36-1 is up next for CNOOC

China National Offshore Oil Corporation (CNOOC) is developing the Lishui 36-1 gas field in Block 25/34 with its partner Primeline Energy Holdings. CNOOC's offshore engineering outfit COOEC is wrapping up fabrication of a central production platform and project installation is expected in the second half of this year with first gas pegged for 2013. In addition to the platform, the other production facilities include a 127 km, 12-inch, subsea pipeline and an onshore gas processing terminal at Wenzhou, in Zhejiang province. Located 155 km. south-east of Wenzhou, at Block 25/34, in up to 90 metres of water, the platform will incorporate four gas wellheads and six slots. The onshore gas processing plant at Dongtuo county of Wenzhou will have a capacity of 1.2 million cubic metres per day of gas with output to be marketed to utilities and residents in Wenzhou. Lishui 36-1 hosts 4.9 billion cubic metres of proven gas reserves. CNOOC as the operator has been carrying out detailed engineering design, procurement and fabrication of the pipeline and the platform in order to maintain the

development schedule of first gas in the third quarter of 2013. Primeline has a 36.75% interest in this gas field in Block 25/34.

COOEC to complete Liwan jacket in August

COOEC, the offshore engineering unit of China National Offshore Oil Corp.(CNOOC) is to complete the fabrication of a jacket weighing 30,000 tonnes for the development of China's first deepwater gas field in August. The company, will later build the topside modules to be installed on the jacket required for Liwan's central processing platform. The topside will weigh up to 40,000 tonnes. The completion of the jacket will pave the way for the subsea installation of the Husky-operated Liwan gas project, which is due to flow first commercial gas in September 2013. In April, COOEC awarded a pipeline installation contract to Technip for the shallow-water section of the Liwan 3-1, which is located 300 km south of Hong Kong in the South China Sea. The 260-km pipeline will link the Liwan gas platform, which is in about 200 metres of water, to a gas terminal located in Guangdong Province's Zhuhai City. COOEC, meanwhile, finished work on the installation of two heavy lift cranes on China's first deepwater pipelay vessel in early May.

China Rongsheng Heavy Industry Group wins two rig-building contracts

China Rongsheng had won the contracts from Singapore-based PrimePoint Oil & Gas to build a semi-submersible barge rig and a tender barge rig for delivery. The market value of the two rigs is between US\$300 million and US\$400 million, according to Barclays Research estimates.

Roc wins a shallow water block in China's Bohai Sea

Roc Oil Co. (ROC) of Australia has secured a contract to explore a shallow-water block in China's Bohai Sea off the northeast coast. ROC said it had won a 100% concession to carry out 3-D seismic surveys and exploratory drillings in Block 09/05, which covers 335 square km in water no more than 10 metres deep. The contract was awarded by China National Offshore Oil Corp. (CNOOC), which has the right to become a 51% shareholding partner if the Australian operator strikes commercial volumes of oil or gas. ROC will pay for all the exploratory costs. Block 09/05 is only 15 km north to Zhao Dong block and is about 50 km south of the major port city of Tianjin. The company has a 24.5% share in Zhao Dong, which now has several operational wells. The company has set target to drill 20 development wells at its Bohai Bay fields this year. Roc is also working with CNOOC in China's Beibu Gulf, off the southwest coast near Hainan Island. The partnership is ready to begin oil production at several locations in Block 22/12 in the gulf, where it has a 40% stake, ROC said.

Development of ROC's offshore Weizhou oilfield is due to kick off

Full development of ROC's offshore Weizhou oil development is due to kick off in the second half of this year, pending government approval. The company said development activity at Weizhou 6-12 and Weizhou 12-8 in the Beibu Gulf off China had started earlier this year, including the construction of a platform. Drilling activity should commence mid-year and will include four exploration wells, to be followed by a development drilling programme in the final quarter of this year. First oil production from the field is expected by the end of the year

and a ramp-up to peak production is set for 2013. The project has previously been estimated to contain proven plus probable (2P) reserves of 24 million barrels of oil.

PetroChina expects to build Yunnan refinery in H2 2012

According to a local government official, PetroChina is expected to start the construction of its 10 million ton per year refinery project at Anning in southwest China's Yunnan province in the second half of this year. Though the project environmental assessment has been passed, it is still waiting for NDRC's final approval. The project will include a 10m tonne/year crude distillation unit, a 3.6m tonne/year residue hydrogenation unit, a 3m tonne/year fluid catalytic cracker, a 2m tonne/year reformer, a 1.8m tonne/year hydrocracker and a 1m tonne/year naphtha cracker. It is designed to process sour crude from the Middle East. The oil giant has started the construction of the Sino-Myanmar Crude Pipeline, which is an accessory facility to the Yunnan refining project. The pipeline is able to transport 22m tonnes/year of crude, and it is expected to become operational in 2013.

CNPC, Venezuela joint refinery set for 2014 opening

The company said in early May that its Guangdong-based mega joint refinery with Venezuelan partner Petroleos de Venezuela SA started construction last Friday and is set to open by the end of 2014. The 58.6-billion-yuan (\$9.3 billion) project, in which CNPC will hold a 60 percent stake and the PDVSA will hold the remaining 40 percent, has a designed annual processing capacity of 20 million metric tons, or 400,000 barrels a day, making it the country's biggest integrated refining complex ever built at once. The project will process Merey-16 heavy oil from Venezuela, China's fourth-biggest crude oil supplier in the first quarter. The plant will mainly produce gasoline, diesel and jet fuel, CNPC said.

Sinopec to build Fuqing caprolactam plant

Sinopec plans to build a 200,000 tons per year caprolactam plant in the city of Fuqing, East China's Fujian province. The largest refiner in Asia said on 21 May on its website that the plant would cost around 3.6 billion yuan. On completion, the plant is expected to generate nearly 4 billion yuan per year in sales revenues. *XINHUA, May 21, 2012*

KunLun Energy targets LNG business development

KunLun Energy Company chairman Li Hualin May 17 showed that the company planned to spend CNY 20 billion developing LNG processing and distribution business this year and was likely to complete construction of 12 workshops next year. LNG processing capacity will exceed 2 billion cubic meters in 2012 and top 4 billion cubic meters by the end of 2013. KunLun Energy has been transforming business from oil and gas exploration into natural gas, mainly engaged in natural gas sales, LNG processing, storage and transportation and natural gas transmission in China. *SINOCAST, May 18, 2012*

Sinopec to build shale gas production site in Fuling region

China Petroleum & Chemical Corp (Sinopec) will build its first shale gas production site in the Fuling region of the Sichuan Basin, the company announced May 11. Sinopec, which began surveys of the Fuling region in 2006, will draft a development plan by May 20 and start drilling in the first half of June, according to the announcement. The Fuling region has original gas in



place (OGIP) shale gas resource of 102.8 million cubic meters, according to a Sinopec announcement April 21. Sinopec's first horizontal shale gas well in the region, Fuye HF1, was fractured with assistance from US-based oilfield service provider Baker Hughes Inc. in March of this year. Sinopec and CNPC, the top two Chinese national oil & gas giants are targeting shale gas output of 2 bcm/y and 1 bcm/y by 2015, respectively.

Siemens wins Chinese orders for power supply packages

The shipyards Yantai CIMC Raffles Offshore Ltd., CMHI/Shenzhen as well as Shanghai Waigaoqiao Shipyard in China have awarded Siemens Energy a total of three orders for electrical power supply packages for offshore drilling rigs. These packages, which include BlueDrive Drilling, are destined for semi-submersible and jack-up rigs for international players such as COSL Drilling Europe, Prospector Offshore Drilling, and Falcon Energy. The power supply packages Siemens is to deliver for installation at a total of 5 drilling rigs comprise medium- and low-voltage switchgear, transformers, medium voltage thruster drives, motors and BlueDrive drilling drives as well as commissioning and project management. For the first time, Siemens is delivering electrical solutions for drilling rigs to the Chinese shipyards CMHI/Shenzhen and Shanghai Waigaoqiao Shipyard though the company has already delivered similar solutions for twelve jack-up and ten semi-submersible drilling rigs in China so far.

Sinopec unit to market Ghana's share of Jubilee oil production

China has tightened its grip on Ghana's oil industry by taking over the marketing of the country's share of production from a newly producing offshore oilfield. Ghanaian media said the deal was part of a US\$3 billion Chinese loan package signed in Beijing during a visit by Ghanaian Vice President John Dramani Mahama in April. The marketing of Ghana's share of oil from the new offshore Jubilee field, which began operations last year, will be done by Sinopec subsidiary UNIPEC. The Ghana National Petroleum Company (GNPC) previously employed Vitol of Switzerland and Woodfields Energy Resource, a Ghanaian firm, to market its oil.

Sinopec unit brings offshore Nigerian block into operation

Addax Petroleum, an overseas unit of China's Sinopec Group, has put an oil block into operation in offshore Nigeria, adding some 450,000 tonnes of equity oil output capacity, according to a statement in the company's website. Addax expects to pump 3.3 million barrels (about 450,000 tonnes) of crude oil per year from the block, named OML126, in which the company has a 65% stake, said the statement. The company plans to boost its equity oil equivalent output to 10 million tonnes per year during the 12th Five-Year Plan (2011-2015). Sinopec Group, the parent company of Sinopec Corp., paid 7.3 billion US dollars in August 2009 to acquire Addax Petroleum, which mainly operates oil and gas assets in West Africa and the Middle East. *XINHUA, May 3, 2012*

CNOOC commissions state shipbuilder to design small LNG carrier

China National Offshore Oil Corp. (CNOOC), the country's leading liquefied natural gas (LNG) terminal operator, has commissioned China State Shipbuilding Corp. (CSSC) to design its first small-scale LNG carrier. CSSC's Shanghai Shipbuilding Technology Research Institute

will design the carrier for CNOOC Energy Technology & Services Ltd., CNOOC announced recently. At present, Hudong-Zhonghua Shipbuilding (Group) Co. Ltd., a subsidiary of CSSC, is the only Chinese company capable of building LNG carriers. The proposed vessel will have 30 thousand cubic meter International Maritime Organization (IMO) type C storage tanks, and will be capable of transporting 90,000 tons of LNG every year, according to CNOOC's announcement. The carrier will ship LNG from coastal receiving terminals to LNG satellite stations.

Power, New Energy (renewables)

China opens registration for second shale auction

After months of delays China's Ministry of Land and Resources (MLR) has opened registration for the country's second shale gas exploration rights auction although it has still not set a date. The MLR announced recently that registration is open to domestic companies in good financial standing, with registered capital of at least RMB 300 million (USD47.45 million), and qualified in oil, natural gas or mineral exploration. According to the MLR, companies must provide relevant details including registered capital, net assets and ownership structure, by May 25. Participants are required to bid as separate legal entities, with group bidding banned, the announcement said.

Guodian to build combined solar and gas-fired plant in Xinjiang

Guodian Xinjiang Aibilake Valley Development Co. Ltd., a subsidiary of major power provider China Guodian Corp., began surveying potential sites for an integrated solar combined-cycle (ISCC) and gas-fired power plant in northwest Xinjiang Uyghur Autonomous Region, China Guodian announced in May. The proposed RMB 800 million (\$126.59 million) project may be built in Xinjiang's Bortala Mongol Autonomous Prefecture, which shares a 385 kilometer border with Kazakhstan. Some 80 percent of the plant's 59 megawatts of installed capacity will be fueled by natural gas sourced from the 2nd West-East Pipeline (WEP II) while the remainder will be solar powered.

Sembcorp acquires its first wind power assets in China

The company announced on 7th May that its wholly-owned subsidiary, Sembcorp Utilities, has signed a sale and purchase agreement with the AES Corporation (AES) to acquire part of its power asset portfolio in China for US\$85.5 million. The acquisition includes a 49% stake in four wind power assets owned through AES Huanghua, AES Hulunbeier Wind Power Co., AES Xinba'erhu Wind Power Co. and AES Chenba'erhu Wind Power Co., as well as a 25% stake in a coal-fired power plant owned through AES China Corp. The AES Corporation is a global power company listed on the New York Stock Exchange (NYSE: AES). The wind power assets comprise three wind power plants in Inner Mongolia and one wind power plant in Hebei with a total gross power capacity of 247.5 megawatts. These wind power plants are currently owned through four 49%-owned Equity Joint Ventures with Chinese partner, Guohua Energy Investment Co. (Guohua). Guohua is one of the top wind power companies in China and is owned by Shenhua Group Corporation, a listed state-owned enterprise and the largest coal company in China as well as the largest coal supplier in the world. As part of



the transaction, Sembcorp will also acquire a 25% stake in a Cooperative Joint Venture, which owns, operates and manages a 2,100-megawatt coal-fired power plant in the province of Shanxi. The Cooperative Joint Venture expires in 2016. The transaction is expected to be completed in the second half of 2012 upon the satisfaction of certain conditions precedent, including approval by China's relevant authorities.

Trina Solar to supply 2.1MW off-grid solar system in Tibet

Trina Solar will supply an off-grid solar system project in the Northern Tibetan region of Naqu. A supply agreement has been entered with Longyuan (Tibet) New Energy Co., Ltd. The 2.1 MW project is Trina Solar's largest off-grid system project in China in recent years, following the construction of approximately 40 standalone power stations in 2002 in the Chamdo region of Tibet.

Alstom to supply four high-efficiency boilers in Shandong Province, China

Wuhan Boiler Company (WBC), Alstom's largest utility boiler manufacturing site in the world, has signed a contract with Shandong Weiqiao Pioneering Group Co. Ltd., to supply four 350 MW sub-critical pulverised coal-fired boilers, for a cogeneration power plant located in Shandong Province, China. Under the terms of the contract, Alstom WBC will design, manufacture and supply the units. The site's state-of-the-art equipment will raise the efficiency of conventional coal fired power plants, leading to a considerable reduction in CO2 emissions. The delivery of the boilers will be completed by 2013. Alstom WBC and Shandong Weiqiao have a long-term partnership that can be traced back to 1995. Alstom inaugurated the new factory of the Alstom WBC in November 2009, with a total investment of RMB 900 million (€90 million). This is one of the most important boiler business sites of Alstom worldwide, with design, engineering and R&D capacities. The site produces industrial leading equipment including large circulating fluidised bed boilers, high-efficiency 600 MW supercritical boilers and 1000 MW ultra-supercritical boilers, which reduce emissions of CO2. The site vastly enhances Alstom's manufacturing capabilities in China and the Asia-Pacific, and allows Alstom to be closer to its customers in China.

GE and Shenhua Partner on Coal Gasification

GE has established GE Shenhua Gasification Technology Company with joint venture partner Shenhua Group to expand the adoption of integrated gasification combined cycle plants in China. The technology is designed to reduce emissions from coal-fired plants. The new company will sell industrial gasification technology licenses in China, conduct research and development to improve cost and performance of commercial-scale gasification and work to expand the development of integrated gasification combined cycle (IGCC) plants in China, GE said in a recent statement. Shenhua is one of the world's largest coal and energy companies, with integrated coal production, power generation, railway, port and shipping infrastructure. Shenhua also has developed its own carbon capture and storage technology.

Guangzhou primed for gas-fired power project

Guangdong Yuedian Group Co. Ltd. will begin retrofitting Guangzhou's thermal power plants to become gas-fired distributed power co-generation facilities. The largest power provider in

the manufacturing base of Guangdong Province and state-owned company plans to initially retrofit a thermal power plant in Guangzhou's Huangpu District with two 390-megawatt (MW) turbines for gas-fired Combined Cooling, Heating and Power (CCHP) co-generation. The proposed RMB 3.24 billion (USD512 million) expansion is scheduled to begin by the end of the year and wrap up in April 2014. The Huangpu-based power plant will be the first of Guangzhou's nine large-scale thermal plants to adopt gas-fired distributed co-generation technology, the local newspaper Nanfang Daily reported on 13th May.

Hongyanhe Nuclear Power Plant to go on-line by year end

The Hongyanhe Nuclear Power Plant in northeast China's Dalian City, Liaoning Province, is scheduled to begin limited commercial operations by the end of the year, China Power Investment Corp. (CPIC) said on May 7. Construction of the RMB 50 billion (\$7.96 billion) power plant began in August 2007 with financing provided by CPIC, China Guangdong Nuclear Corp. and the Dalian municipal government. The plant features six 1-gigawatt (GW) generators and will ultimately be able to generate over 30 terawatt hours (TWh) of electricity per year, CPIC said. The country currently operates 11 nuclear power plants totaling 9.1 GW of installed capacity. An additional 24 reactors are presently under construction, while another four have received central government approval.

Guodian expands its Yangbajing solar power in Tibet

China Guodian Corp. has expanded the installed capacity of its Yangbajing Solar Power Plant in the Tibet Autonomous Region by 20 megawatts (MW), the company said on May 11. The RMB 450 million (\$71.66 million) expansion brings Yangbajing's aggregate installed capacity to 30 MW, said the company, noting that the additional capacity will generate an estimated 37 gigawatt hours (GWh) of electricity annually. Yangbajing is the largest solar power project in Tibet.

Yunnan to boost wind power installed capacity to 1 GW by year end

South China's Yunnan Province plans to expand its wind power installed capacity to one gigawatt (GW) by the end of the year, the provincial government said May 10. Yunnan currently houses 870 megawatts of wind power installed capacity, according to the provincial office of the National Development and Reform Commission (NDRC). The local NEA office noted that more than 3.6 GW of wind power projects are either under construction or in the planning phase. State-owned nuclear power provider China Guangdong Nuclear Power Holding Co. Ltd. operates approximately one-third of Yunnan's wind farms, making it the largest wind power developer in the province.

China invested \$222 mln on shale gas in 2011

China's investment in domestic shale gas exploration and development reached approximately RMB 1.4 billion (\$221.92 million) in 2011, the Ministry of Land and Resources' (MLR) internal newspaper reported in May.