LNG Unlimited

LNG JOURNAL PUBLICATION

5 February 2019

Shell LNG sales volumes rise to over 71MT ahead of FLNG start

Output at liquefaction plants is expected to fall in 2019 because of maintenance activities

LNG Journal editor

Prelude FLNG liquefaction hull offshore Australia

Royal Dutch Shell said its annual LNG sales volumes rose by 8 percent to more than 71 million tonnes, including 17.39 million tonnes in the fourth quarter as higher prices boosted earnings and the Anglo-Dutch company progressed with commissioning of the Prelude floating LNG plant offshore northwest Australia.

Shell reported that its earnings mainly benefited from higher realised oil, gas and LNG prices as well as stronger contributions from crude oil and LNG trading, partly offset by movements in deferred tax positions.

Liquefaction

Full-year earnings of $21.4 billion also reflected higher energy prices. Overall quarterly earnings rose 47 percent to $5.59Bln versus $3.80Bln in the same quarter of 2017.

Shell's own LNG liquefaction volumes rose 3 percent in the quarter to 8.78MT from 8.83MT in the same three months of 2018.

Full-year liquefaction volumes amounted to 34.32MT compared with 33.24MT in 2017.

"LNG liquefaction volumes are expected to be 0.4-0.7 million tonnes lower, mainly as a result of divestments and higher maintenance activities," said Shell.

Integrated Gas, the division containing most LNG activities, reported fourth-quarter income amounting to $2.36 billion compared with $1.63Bln in the same quarter of 2017.

Full-year Integrated Gas results came in at $9.39 billion versus 5.26Bln in 2017.

"Production volumes were up by 8 percent compared to the full year 2017, mainly reflecting lower maintenance activity and additional wells from existing fields," said Shell.

"LNG liquefaction volumes were 3 percent higher, largely driven by increased feed-gas availability and lower maintenance activities. This more than offset the impact of divestments," it added.

In December, Shell announced that wells had been opened at its Prelude FLNG facility and commissioning was continuing.

"During this initial phase of production, gas and condensate are produced and moved through the facility. Once this has concluded, the facility will be prepared for reliable production of LNG and LPG," explained Shell.

Shell is also advancing with its LNG Canada project in British Columbia as it increases its LNG cargo trading worldwide from volumes produced in nations such as Qatar, Australia, Nigeria and Russia and new entrants like the US.

Shell Chief Executive Ben van Beurden said he was pleased that Shell had achieved its 2018 targets.

"We delivered on our promises for the year, including the completion of the $30 billion divestment programme and starting up key growth projects while maintaining discipline on capital investment," said Van Beurden.

In its outlook, Shell said Integrated Gas production is expected to decrease by some 140,000-170,000 barrels of oil equivalent per day, mainly due to divestments, the transfer of some activities into the Upstream segment as of 2019 and higher maintenance activities.

The company said that total proved reserves are expected to be around 11.6 billion barrels of oil equivalent. Acquisitions and divestments of 2018 reserves are expected to account for a net reduction of 200 million barrels of oil equivalent. ■

UNLIMITED AGENDA

South Korean shipyards sense full revival as Qatar plans huge orders for LNG carriers to back expansion

LNG Journal editor

South Korean shipbuilders saw their shares surge on expectations Qatar may soon order at least 35 new liquefied natural gas carriers as it advances with plans to build four new processing Trains and to regain its position as the largest global LNG producer.

Korean shipyard executives have been sounded out by Qatar Petroleum officials on freeing up berths over the next 12 months for a wave of Qatari LNG newbuilds.

Investment

Samsung Heavy Industry shares jumped on the South Korean stock exchange, along with those of Daewoo Shipbuilding & Marine Engineering and Hyundai Heavy Industries.

The Korean yards specialize in constructing the Qatari Q-Flex and Q-Max tanker with between 210,000 cubic metres and 266,000 cubic metres capacity.

Between 2004 and 2007, Qatar ordered 45 LNG carriers from the Korean yards when Daewoo built 19 Qatari carriers, Samsung constructed 18 vessels and Hyundai received orders for eight ships.

More of the same: Qatari carriers at Ras Laffan port

The Qataris are also in talks with global oil majors about selling partnerships in the additional four liquefaction Trains being planned to boost production by 40 percent.

The scope of the expansion at the Ras Laffan production complex involves an additional three liquefaction Trains, each with 7.8 million tonnes per annum of output and with pre-investment to add a fourth new Train soon after.

This would take nameplate output up to 108.2 MTPA from 77 MTPA when the four Trains at Ras Laffan are completed by 2023 and 2024.

The Qatari expansion by 31 MTPA amounts to more in volume than the LNG currently produced by nations such as Malaysia, Indonesia and Nigeria, hence the large shipping requirements.

Qatar's foreign shareholders in the existing LNG Trains are ExxonMobil, the largest with stakes in 10 Trains, French major Total with shares in three Trains and Royal Dutch Shell and ConocoPhillips, each with a stake in one Train.

Other holders of small stakes in Qatar LNG Trains include foundation customers, including the Japanese trading houses, Marubeni Corp, Mitsui & Co. and Itochu Corp., as well as Korea Gas Corp.

All are expected to express interest in the tenders set to be launched by Qatar for potential shareholders in the Ras Laffan expansion, along with possible newcomers such as Chevron Corp., Equinor of Norway, Italy's Eni and Far East national oil companies.

Qatar's new onshore facilities will receive about 4.6 billion standard cubic feet per day of feed gas from the southern sector of Qatar's North Field gas reserves in the Gulf.

Qatar has the southern portion of the North Field and the other part is under the jurisdiction of Gulf neighbour Iran. ■

Abu Dhabi National Oil Co. seals large refining sales deal with Eni to support exploration and gas plans

Abu Dhabi National Oil Company, the producer of oil and LNG for the United Arab Emirates, has concluded one of the largest ever deals for refining assets by selling a one-fifth shareholding to Italian energy company Eni for $3.9 billion as the UAE seeks to fund a long extension of LNG output and additional exploration and production activities.

Eni and Adnoc signed a share purchase agreement to enable Eni to acquire a 20 percent equity interest in Adnoc Refining.

"The acquisition of a stake in this high quality refinery complex represents a 35 percent increase of Eni's (global) refining capacity," said the Italian company.

"The deal makes Eni's portfolio more integrated along the energy value chain and more resilient to the highly volatile economic environment," added Eni.

The UAE is the oldest LNG producer in the Middle East from its Das Island plant offshore Abu Dhabi consisting of three Trains with capacity of around 5.5 million tonnes of LNG per annum.

Adnoc recently confirmed new discoveries of gas in place totaling 15 trillion cubic feet and intends to continue LNG production for 40 more years and to increase its discovered resources.

The Das Island liquefaction plant was commissioned in 1977 and mainly supplies the Jera Co Inc. joint venture company formed by Japanese utilities Tokyo Electric Power Co. and Chubu Electric for their shipments.

However, the major currency earner is Adnoc Refining with three refineries, Ruwais East and Ruwais West and the Abu Dhabi Refinery, with a total capacity of more than 900,000 barrels per day.

The Ruwais complex ranks fourth worldwide in terms of capacity and provides for a high conversion factor and a deep conversion process scheme.

Eni is one of the main European energy companies increasing its presence in the Gulf nation. It has also had recent successes in exploration offshore Egypt and Mozambique in southeast Africa, where large-scale LNG production is planned.

"In the space of less than one year, we have been able to create a business hub with world-class upstream operations and a material and efficient refinery capacity with further potential growth," said Eni Chief Executive Claudio Descalzi.

"This transaction, which allows us to enter the United Arab Emirates' downstream sector and represents a 35 percent increase in Eni's global refining capacity, is in line with our announced strategy to make Eni's overall portfolio more geographically diversified, more balanced along the value chain, more efficient and more resilient to cope with market volatility," stated the CEO.

Eni has been present in the UAE upstream sector since March 2018 when it was awarded a 10 percent interest in Adnoc's Umm Shaif and Nasr concession and a 5 percent interest in the Lower Zakum concession. ■

Engineers Toyo build expertise in gas chemicals

Toyo Engineering Corp. of Japan has been awarded two engineering and construction contracts in Thailand and Russia as it redirects its core business to petrochemicals after being involved in the global build-out of LNG liquefaction plants and import terminals, including the Sakhalin export facility in the Russian Far East and the largest Indian import terminal at Dahej near Mumbai.

Toyo along with Japanese peer Chiyoda Corp. completed the Sakhalin liquefaction and export plant in 2009 with 9.6 million tonnes per annum of LNG for project shareholders Gazprom of Russia, Royal Dutch Shell and Japanese trading houses Mitsui and Mitsubishi.

It was also the partner of Chiyoda in the Dahej LNG terminal construction.

The Japanese company has additionally been developing expertise in the downstream field, building among many other projects a petrochemicals plant in Angola next to the liquefaction facility that effectively uses excess natural gas supplied to the LNG plant.

Toyo announced two new contracts on January 31, including one for expanding petrochemical units at a plant adjacent to Thailand's only LNG import facility at Map Ta Phut in the eastern province of Rayong.

The work will be conducted by Toyo Engineering Korea, the subsidiary in South Korea of the Japanese firm.

The contract was awarded by Bangkok Synthetics Company, a downstream crude products manufacturer. The Map Ta Phut petrochemical extension is scheduled for completion in 2021.

■

Shizuoka Gas signs North Asia deal to supply China with LNG in ISO tanks

LNG Journal editor

China-Japan LNG deal signed for small-scale shipments

Japanese natural gas utility and supplier Shizuoka Gas Co. has signed an agreement with China Clean Energy to deliver LNG volumes in ISO container tanks from its Shimizu import terminal in western Japan in the first North Asian small-scale, export-import deal.

"Shizuoka Gas has been seeking further utilization of its Shimizu LNG terminal since 2017 when it made a success of reloading LNG through a new reloading facility," said the Japanese company.

"This is the first binding term contract in Japan to transport LNG through ISO tank containers to China where gas demand is rapidly increasing," it stated.

Binding

Shizuoka Gas said it would delivered the ISO tanks to Chinese companies Taishan Gas Group and Rizhao Public Transport Group, through China Clean Energy.

China Clean Energy is a subsidiary of Dalian Inteh Holdings Co., based in the northeast Chinese province of Liaoning.

"Shizuoka Gas is continuously committed to satisfying various customer needs and increasing transactions at the Shimizu LNG Terminal in the expanding global LNG market," said the Japanese company whose main business is domestic city-gas distribution in nine towns and cities.

Among the suppliers of LNG to Shizuoka Gas is Japanese energy company Inpex Corp., operator and majority shareholder in the Ichthys LNG plant in Australia's Northern Territory that came on stream in 2018.

Inpex noted that some of its share of Prelude FLNG production, amounting to 560,000 tonnes per annum from the project offshore northwest Australia, would mostly be supplied to Japanese company Jera Co. Inc., though a small balance would go to Shizuoka Gas.

Prelude FLNG is owned by Royal Dutch Shell and is currently completing its commissioning process.

Inpex is also expected to eventually expand the Ichthys plant from its northwest Australian gas field assets.

While imports and exports of ISO tanks of LNG are new for Asia, the US regularly ships ISO containers of LNG to the Caribbean region on regular cargo ships.

■

US FERC brings curtain down on Puerto Rico LNG expansion

The Federal Energy Regulatory Commission has issued an order formerly ending the proposed expansion of liquefied natural gas import facilities in the US territory of Puerto Rico in the Caribbean amid continued problems in the utility sector.

"Aguirre Offshore GasPort requests that FERC vacate its 2015 order authorizing the construction and operation of LNG import terminal facilities along the southern shore of the Commonwealth of Puerto Rico near the municipality of Salinas," said the FERC.

"In its request to vacate, Aguirre stated that it no longer intends to proceed with the project, that no construction has been undertaken, and that no facilities are in service," added the regulator.

The Aguirre project company filed its last status report in June 2018 to the FERC to keep its permit process up to date, though then informed the regulator in November that the venture was not proceeding.

The FERC notice pulls the curtain down for now on plans for LNG expansion in Puerto Rico.

Excelerate Energy, the US specialist in LNG terminals, had previously agreed to provide a floating storage and regasification unit for the Aguirre project in 2019, though was forced to cancel its contract with the bankrupt Puerto Rico Electric Power Authority.

The FSRU was to have been deployed offshore Salinas and would also have had a 6.4 kilometres pipeline to provide regasified LNG to the Aguirre power station.

Puerto Rico's existing EcoElectrica onshore LNG regasification facility at the town of Penuelas is located about 35 miles east of the Aguirre power plant.

Analysts note that Puerto Rico's power sector has been struggling because of financial problems, exacerbated by Hurricanes Irma and Maria in 2017.

■

NEWS NUDGES

Avenir LNG strategy

Stolt-Nielsen, the Norwegian-listed shipping and storage group involved in the smallscale LNG business with its Avenir subsidiary, reported fourth-quarter net profit of $3.6 million versus $856,000 in the same three months of 2017. Annual net profit was $53.5M compared with $51.1M in 2017. Avenir was first formed by Stolt-Nielsen and now has Norwegian companies Hoegh LNG and Golar LNG as partners. Initial activities will be centred on four small-scale LNG newbuilds on order at Keppel Singmarine in Nantong, China, and a joint venture LNG terminal and distribution facility to be constructed in the port of Oristano on the Italian island of Sardinia.

Marathon Oil board change

Marathon Oil Corp., the US energy company with shale assets in the Eagle Ford and Permian Basins and with stakes in the Equatorial Guinea LNG export plant on Bioko Island in West Africa and the offshore feedgas field, has named Lee Tillman as Chairman of the board. Tillman has held the positions of President and Chief Executive since 2013.

Sempra to sell utilities

Sempra Energy, the California-based utility transforming the US Cameron LNG terminal and the Mexican Costa Azul facility into liquefaction and export plants, said it had decided to sell its equity interests in its South American business in Chile and Peru to focus more on North American markets..Sempra said it initiated sale processes for its stakes in two utilities in the region, Luz del Sur SA in Peru and Chilquinta Energia SA in Chile. ■

Spanish utility Naturgy posts loss with overhaul costs but LNG advances with US-Russia cargoes

LNG Journal editor

Chairman and CEO Francisco Reynes says plan is on track

Naturgy Group, the Spanish utility with major US and Russian LNG supply contracts as well as businesses such as the Maghreb-Europe gas pipeline and gas distribution in five Latin American countries, pledged to re-establish its Egyptian LNG output as it posted annual net losses of 2.82 billion euros ($3.22Bln) amid a corporate overhaul and charges related to simplifying the business.

Naturgy had posted a net profit of 1.36Bln euros the previous year. Gross earnings of the company, formerly known as Gas Natural Fenosa, rose 3 percent to 4.02Bln euros from 3.90Bln euros in 2017.

Shipments

International LNG earnings increased by almost 80 percent to 496M euros from 276M euros in the previous year.

On the LNG business front, Naturgy is one of the companies that have signed 20-year agreements for US Sabine Pass cargoes and is also a main contract holder for cargoes from the Yamal LNG plant in Arctic Russia started by natural gas company Novatek at the end of 2017.

Its diverse LNG supply portfolio also includes shipments from Algeria, Qatar and Nigeria. The company additionally owns a small fleet of LNG vessels.

"Sales increased 15.2 percent versus 2017, supported by the entry of Sabine Pass cargoes and the first shipments of Yamal LNG," explained the company.

"Global LNG demand has remained strong on the back of the continued appetite from Asia, which in turn has supported significant gas price increases relative to 2017," it said.

"Naturgy's shipping fleet has expanded during the period with the addition of two LNG tankers which have supported the increase in volumes," added Naturgy.

The company said it changed its organisational structure with a new reporting divisions from four business units, Gas and Power, Europe and Middle East Infrastructure, South Latin America Infrastructure and North Latin America Infrastructure.

"As part of this process, the company reduced the number of subsidiaries and replaced most of its subsidiary Boards of Directors by joint administrators, while scaling down support functions at the corporate level and reallocating some of these," said Naturgy.

"Furthermore and as part of the new strategic plan, Naturgy carried out an asset valuation review, consistent with its new strategic plan assumptions, which translated into an impairment of 4.85Bln euros, in an effort to provide a more transparent and realistic value of its asset base," Naturgy explained.

Chairman and Chief Executive Francisco Reynes said: "We have established the bases to deal with the transformation of the group, reposition the business for the energy transition and achieve the objectives set in the new roadmap."

Naturgy also pledged to re-start its LNG production at the Damietta liquefaction plant, located east of the Egyptian port of Alexandria and boosted its Algerian gas supplies.

"The company increased the visibility and de-risked its businesses as shown by the agreement to renew and extend its gas procurement contract with Sonatrach in Algeria up to 2030 under improved terms," said Naturgy.

The company operates the Maghreb-Europe gas pipeline as well as production, storage and regasification capacity in Europe.

It also won a key court battle with the Egyptian government.

"There was a favourable award from the International Centre for Settlement of Investment Disputes in the arbitral procedure initiated by Union Fenosa Gas in Egypt (Damietta plant), which was recognised by the UK High Court of Justice as Naturgy's, and which should allow it to reach a comprehensive agreement that will re-establish the value of the company's investment in the region," stated Naturgy.

"Furthermore and as part of the new strategic plan, Naturgy launched a new efficiency plan targeting 500 million euros in savings in operational expenses by 2022," said the Spanish company.

In its other divisions, the Gas & Power earnings rose by 38.8 percent to 1.36Bln euros from 980M euros in 2017.

"Gas sales remained stable in the year, driven by growth in the Spanish residential and industrial segments," said Naturgy.

In its Latin American business, Naturgy sold its remaining stake in the gas distribution business in Colombia for 334M euros. ■

Thailand's energy company PTT to boost natural gas security and secure Mozambique LNG funding

LNG Journal editor

Thailand's national energy company, PTT Exploration and Production Public Co, said it would speed up its final investment decision process for its stake in the Mozambique LNG project as it posted annual net profits of 36,202 Thai baht ($1.120 billion), a jump of almost 90 percent on its earnings in the previous year because of higher sales volumes and price.

PTTEP is a 10 percent shareholder in the Area 1 licence of the Rovuma Basin offshore the southeast African nation held by Anadarko Petroleum of the US.

Partners

Other shareholders with PTT are Japanese trading house Mitsui & Co. and three Indian companies, Bharat Petro Resources, ONGC Videsh and Oil India Ltd., as well as the Mozambique state-owned oil and gas firm ENH.

"PTTEP will speed up the final investment decision process for key pre-sanction projects, especially the Mozambique Rovuma Offshore Area 1 which is targeted within the first half of 2019," said Phongsthorn Thavisin, PTTEP President and Chief Executive.

The Thai company said the first phase of LNG production in the southeast African nation is planned for 2024 with initial volumes of 12 million tonnes per annum.

"The government approval of Plan of Development (POD) in the Golfinho-Atum offshore area was significant along with negotiations on a construction agreement for the liquefaction plant," said PTTEP.

Man with a mission: Thai firm's CEO Phongsthorn Thavisin

"In addition, the overall Mozambique project is now being finalized and the signing of long-term LNG Sale and Purchase Agreements (SPAs) with potential buyers are taking place," it added.

"Furthermore, the company also strengthened the exploration activities of its projects particularly in Myanmar and Malaysia, while seeking new investment opportunities in Southeast Asia and the Middle East to support long-term growth and enhance petroleum reserves," stated the company.

In annual earnings highlights, the Thai company noted its acquisition of Royal Dutch Shell's 22 percent interest in the Bongkot field in Gulf of Thailand earlier in 2018 for $750M.

"PTTEP continues to pursue investment plans, accelerate projects to final investment decision and strengthen reserves from exploration as well as capture opportunity in strategic locations both Southeast Asia and the Middle East," said PTTEP.

The United Arab Emirates, the LNG producer that is expanding its natural gas and oil exploration in Abu Dhabi, has signed two concession agreements with Italian energy company Eni and PTTEP.

Eni has acquired a 70 percent stake in the Offshore Block 1 and Offshore Block 2 exploration areas in Abu Dhabi waters for a duration of 35 years while PTTEP has a 30 percent share.

The two blocks, located in the northwest of the Abu Dhabi emirate, were the first blocks to be awarded among those that were offered for commercial bidding by the Abu Dhabi National Oil Company in April 2018 as part of Abu Dhabi's first-ever open block licensing strategy.

PTTEP said in its earnings report that higher average sales volume of 305,522 barrels of oil equivalent per day in 2018 were higher than the 299,206 BOE per day in 2017 as a result of the acquisition of Shell's stake in the Bongkot project to give PTTEP a more than 66 percent shareholding.

"Regarding the winning of Bongkot and Erawan bidding late last year, PTTEP is preparing to sign Profit Sharing Contracts and will proceed to the transition and investment plans to deliver committed volumes from both gas fields to ensure energy security of the country," stated PTTEP.

"The average selling price also improved following the rally of global crude prices to $46.66 per barrel of oil equivalent (BOE), or 19 percent more than the $39.20 average price in 2017," it added.

"PTTEP's financial position remains strong with operating cash flow of $3.27Bln," said the company.

CEO Thavisin said the company would be moving forward again in 2019.

"Recently, the company has been granted the concessions of 2 offshore blocks in the United Arab Emirates and this marks our significant step in returning to the Middle East, which is considered as the strategic investment destination," explained Thavisin.

"This opportunity granted to PTTEP to partner with world-class E&P companies, demonstrates our strategic alignment with the new vision of 'Energy Partner of Choice', strongly emphasizing long-term value for all stakeholders," added the CEO.

Cyprus tender deadline set at March 29 for LNG project

The Government of Cyprus has now set a tender deadline of March 29 for a floating LNG import terminal and associated facilities.

The Cypriots also said they would shortly start an additional tender process related to the terminal proposal.

"Following the completion of a feasibility study in 2016, the Government of Cyprus decided to proceed with the development of a facility for the import, storage and regasification of LNG in Vasilikos Bay, near Lemesos," said a statement.

"The government requires the completion of the new LNG terminal by 30 November 2020," it added.

Cyprus explained that the main tender whose deadline is extended to March entails the design, construction and operation of the project, procurement of a floating storage and regasification unit (FSRU) with at least 125,000 cubic metres of storage capacity to unload LNG from carriers up to 217,000 cubic metres capacity.

The Cyprus project will be linked to a gas-fired power plant through the conversion of an existing oil-fired facility.

European Union funding of the project would amount to 40 percent of its cost.

The Public Gas Corporation of Cyprus (DEFA) said it had made the tender documents available on the e-procurement portal of the Republic of Cyprus website.

Cyprus is following the route of another Mediterranean Island member of the EU, Malta.

The Maltese brought their floating storage unit on line in January 2017 in Marsaxlokk Bay to supply the nearby Delimara power station with LNG imports. ■

GasLog Partners hit by expiry of charters and derivatives losses

LNG Journal editor

GasLog Partners, the US-listed affiliate of Monaco-based GasLog Limited, said spot charter rates were currently at around $69,000 per day for tri-fuel, diesel-electric vessels as it reported lower fourth-quarter revenue and a 37 percent drop in profits attributed to derivatives losses, the expiry of charters and higher expenses in operating the 14 LNG carriers in its fleet portfolio.

GasLog Partners posted $86.8 million in fourth-quarter revenues, down 6 percent on the $92.38M achieved in the same three months of the previous year.

Charter rates are currently assessed at $69,000 per day

Seasonality

GasLog's quarterly profits dropped to $21.8M versus $34.44M in the corresponding quarter of 2017.

"TFDE spot rates are currently assessed at $69,000 per day. Notwithstanding the recent fall and anticipated seasonality in the Spring shoulder months, we continue to believe that the medium-term outlook for spot rates through 2019 and 2020 is positive given supportive LNG commodity fundamentals and LNG shipping supply and demand," said GasLog.

Annual profits for GasLog came in 14 percent lower at $115.51M compared with 134.74M in the prior-year period.

"The decrease in profit of $12.6M for the fourth quarter is mainly attributable to a decrease in a derivatives loss of $10.4M in the fourth quarter of 2018 compared with a gain of $3.6M in the same period of 2017, a decrease in revenues of $5.6M, mainly due to the expiry of the initial charters of the 'GasLog Shanghai', the 'GasLog Santiago' and the 'GasLog Sydney' and an increase in administrative fees of $900,000," explained GasLog Partners.

All of the LNG vessels in the GasLog Partners fleet were built between 2006 and 2016 and most are chartered to the shipping unit of Royal Dutch Shell.

During the quarter GasLog Partners completed the acquisition of the "Methane Becki Anne" from its affiliate GasLog Ltd. for $207.4M, including assumed debt of $93.9M and the attached multi-year charter to Shell. ■

Finland's Containerships line gets Dutch fuel for first LNG vessel

Containerships, the Finnish shipping line and part of the French CMA CGM Group, said its first LNG-powered vessel, "Containerships Nord", successfully underwent its first marine LNG bunkering at the Dutch Port of Rotterdam.

Around 240 metric tons of LNG was bunkered, more than enough to take the vessel on a roundtrip from the Rotterdam to St. Petersburg.

The first bunkering was carried out at lay berth in a ship-to-ship LNG fuel operation from the Royal Dutch Shell-owned bunker vessel, the "Cardissa".

"In future, the bunkering will be carried out at a normal operational berth simultaneously with loading and discharging operations. This means no disadvantages in operative efficiency will occur compared to traditional oil-burning vessels," said Containerships.

The shipping line point out that bunkering procedures are based on detailed hazard identification and safety assessments. All vessel crew have passed LNG bunkering-specific training.

"We are proud to supply Containerships with a cleaner burning and viable fuel for the shipping industry," said Tahir Faruqui, General Manager of Shell Global Downstream LNG.

As part of an agreement signed by Containerships and Shell, the Anglo-Dutch company will supply all LNG to the shipping line's vessels via ship-to-ship bunkering in Rotterdam.

All the newbuilds will be bunkered by specialized Shell fueling vessels, including the "Cardissa".

"LNG bunkering is a very safe operation and we look forward to conducting simultaneous operations with Containerships in the future," added Faruqui.

The newbuild "Containerships Nord" started sailing from the Chinese shipyard to Europe in mid-December 2018. ■

The Most Established Gathering of PNG's Petroleum & Power Sector Decision Makers

PRODUCED BY: CWC

FROM THE ORGANISERS OF: CWC WORLD LNG & GAS SERIES | WGC 2021 28th WORLD GAS CONFERENCE DAEGU, KOREA 21-25 JUNE | LNG2019 SHANGHAI 1-5 APRIL

CWC 3RD PAPUA NEW GUINEA PETROLEUM & ENERGY SUMMIT

19 - 21 MARCH 2019

HILTON PORT MORESBY, PAPUA NEW GUINEA

UNDER THE PATRONAGE OF

Hon. Peter O'Neill CMG MP
Prime Minister
Papua New Guinea

ENDORSED BY:

THE MINISTRY OF PETROLEUM

THE MINISTRY OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND ENERGY

HOST SPONSOR:

KUMUL PETROLEUM Holdings Limited

Distinguished Speakers Include:

Hon. Dr. Fabian Pok Mec Ph.D MP
Minister of Petroleum
Papua New Guinea

Hon. Sam Basil MP
Minister of Communication, Technology & Energy
Papua New Guinea

Andrew Barry
Managing Director
ExxonMobil PNG Ltd

Jean Marc Noiray
Managing Director
Total PNG Limited

Peter Botten
Managing Director
Oil Search

Bacho Pilong
Vice President
International Assets
Petronas

GOLD SPONSORS:

ExxonMobil | PNG LNG | LNG JAPAN CORPORATION | sojitz | Oil Search COMMITTED TO PNG

SILVER SPONSORS:

TOTAL | PNG CR SERVICE COMPANY | MRDC

BRONZE SPONSORS:

CHIYODA CORPORATION | HIGH ARCTIC ENERGY SERVICES | ANZ | PUMA ENERGY | Honeywell THE POWER OF CONNECTED | Westpac | JX Nippon Oil & Gas Exploration | kinabank

Tap into exciting business opportunities in Papua New Guinea

For more information, contact Elliott McGinn on
UK +44 20 7978 0000 | UAE +971 506659505 or email png@thecwcgroup.com

#PNG19
pngsummit.com

China's Wison get approval for floating gas plant that recalls Tassie Shoal LNG-methanol plans

LNG Journal editor

Wison Offshore and Marine, the Chinese shipbuilding company and builder of the first floating LNG production barge set to be deployed in Argentina, has received approval from the American Bureau of Shipping for its latest Floating Natural Gas-to-Methanol facility, recalling previous methanol and LNG plans for the Tassie Shoal offshore Australia.

Wison Offshore, the operator of shipyards in the eastern Chinese port of Nantong and Zhoushan, said its latest facility was one of the most innovative solutions the company has developed for the offshore gas production industry.

Wison Offshore and Wison Engineering teams get certificate

Integrated

"The fully integrated gas-to-methanol system is more cost-effective for 'stranded' natural gas production and can eliminate heavy upfront capital expenditure during offshore LNG production for our customers," said the Chinese company. The topside design has been carried out by both Wison Offshore and its affiliate Wison Engineering.

The floating natural gas-to-methanol facility can be deployed to nearshore or offshore gas fields, with an annual capacity of 1.8 million tons of methanol and offers a storage capacity of up to 200,000 cubic metres.

The development of the Wison offshore plant recalled plans by a company called MEO Australia, now known as Melbana Energy, to tap into natural gas in the Tassie Shoal offshore northwest Australia to produce LNG and methanol. The proposal was cancelled in 2016.

Tassie Shoal is an area of shallow water in the Australian waters of the Timor Sea about 275 kilometres northwest of Darwin in the Northern Territory.

The Australian company had approvals to construct, install and operate a single plant known as the Tassie Shoal LNG project with 3 million tonnes per annum capacity and two separate small methanol plants with 1.75 MTPA of capacity.

Wison Offshore floating gas-to-methanol plant followed on for its completion in 2015 of the world's first barge-based floating LNG liquefaction and storage facility.

The "Caribbean FLNG" was handed-over to a joint venture led by Belgian shipping line Exmar for a project on the Caribbean coast of Colombia that was since cancelled.

However, Argentina plans to deploy the FLNG barge at the port of Bahia Blanca in the second quarter of 2019 under an agreement with Exmar and the Argentine oil and gas producer Yacimientos Petroleiferos Fiscales (YPF).

The Chinese-built vessel will be renamed "Tango FLNG" to make the Argentines the first FLNG producing nation on the South American continent.

Weimin Chen, General Manager of Engineering at Wison Offshore, said the floating gas-to-methanol plant represented a successful collaboration between Wison and ABS. ■

US LNG and industrial gas equipment supplier Air Products boosted by projects in China

Air Products, the LNG equipment maker and process provider with a growing industrial gases business in China, posted higher quarterly net income as revenue was again more than $2.2 billion.

The Lehigh Valley, Pennsylvania-based company posted 4 percent higher adjusted net income from continuing operations at $410.2 million in its fiscal first quarter to the end of December compared with $394.6M in the same period in fiscal 2018.

"Excluding the impact of a plant sale in the prior year, diluted adjusted earnings per share from continuing operations increased 9 percent," said Air Products.

Quarterly sales were little changed from the same three months the previous year at $2.2 billion, as 1 percent higher pricing and 5 percent higher energy pass-through were offset by 3 percent lower volumes and 2 percent unfavourable currency exchange conditions.

Air Products added that net quarterly income from continuing operations was $347.5M compared with $155.6M in the same quarter a year ago.

Highlights during the quarter included new orders from the US states of California and Minnesota, an Air Separation Unit (ASU) coming onstream in India and helium investments in Algeria.

The US company said its Lu'An synthesis gas $1.3-billion joint venture project in Changzhi City in China's Shanxi Province continued to drive sales and profit growth.

It was additionally awarded a sixth on-site nitrogen facility near the northeast Chinese port of Tianjin to supply a major electronic components manufacturer's new production line.

Air Products manufactures proprietary equipment to produce LNG and other industrial gases and its processing liquefaction Trains are operating in most of the world's large-scale LNG plants.

Air Products said it delivered its 19th consecutive quarter of adjusted EPS growth to be the best-performing industrial gas company in the world.

"On an underlying basis, we delivered nearly 10 percent adjusted EPS growth, despite a headwind from currency," said Chairman, President and Chief Executive Seifi Ghasemi. "We do not control events that impact economies around the world, but we do control the operational performance of Air Products. Therefore, we continue to feel confident that we will deliver on our previous adjusted EPS guidance for fiscal year 2019," he stated.

Air Products said it expected full-year fiscal 2019 adjusted EPS of $8.05 to $8.30 per share, up 10 percent at midpoint over the previous year.

The company continues to expect capital expenditures in the range of $2.3Bln to $2.5Bln for full-year fiscal 2019. ■

Solutions for ALL your Natural Gas needs.

On-site/Factory Built Storage Tanks for LNG, Ethane, etc., Intermodal ISO Tank-Containers, & more.

Corban Energy Group (CEG) has been creating highly engineered products required by the natural gas supply chain, from upstream to downstream. CEG has established natural gas terminals throughout the world, provided quality LNG/CNG equipment for the American market, and built storage tanks as large as 200,000 CM in capacity, with its worldwide network of engineering & manufacturing partners.

Call or e-mail us to find out how your company can benefit from our comprehensive natural gas products and services today.

www.CorbanEnergyGroup.com

CORBAN ENERGY GROUP

Your Solution for LNG/LPG

T. **201.509.8555** info@corbanenergygroup.com

418 Falmouth Avenue, Elmwood Park, NJ 07407, USA