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Senegal gas find by BP provides certainty for a second LNG hub

UK major and partner from Dallas consider potential of 15 trillion cubic feet of feed-gas

Our Europe editor

Upstream success: 'Atwood Achiever' offshore Dakar

West African LNG production plans are growing. UK major BP and its US project joint venture partner Kosmos Energy announced another large natural gas discovery to further enhance the resources offshore Senegal and Mauritania and providing the foundation for a second liquefied natural gas hub.

The latest successful well for BP and Dallas-based Kosmos came from the Yakaar-1 drilling by the "Atwood Achiever" drillship to a total depth of around 4,700 meters in nearly 2,550 metres of water in the Cayar Offshore Profond block.

Renamed

Formerly known as Teranga West, Yakaar-1 is located in waters 95 kilometres northwest of the Senegalese capital Dakar.

BP and Kosmos said the Yakaar discovery, coupled with the earlier Teranga discovery, underpinned the prospects for a further LNG production system in the basin.

The UK and US companies said they would be stem testing the Tortue discovery in mid-2017 and would now drill three additional exploration wells over the next 12 months offshore Senegal and Mauritania.

The Tortue field is estimated to contain more than 15 trillion cubic feet of discovered gas resources.

BP said the Yakaar-1 well intersected a gross hydrocarbon column of 120 metres in three pools within the primary objective and encountered 45m of net pay.

BP only entered the Mauritania and Senegal LNG project area of Kosmos with an agreement finalized in December 2016.

"Kosmos has a 100 percent success rate in the basin with six consecutive successful exploration and appraisal wells drilled to date, confirming that our geologic model and geophysical tools are well calibrated," said Andrew G. Inglis, Chairman and Chief Executive of Kosmos.

"Together with the Teranga-1 discovery made last year, we believe this resource will support a second cost-competitive LNG hub.

"The result also confirms our view of the potential scale of the petroleum system offshore Mauritania and Senegal, in particular the basin floor fan systems which have now been further de-risked, with the well demonstrating that reservoir and trap both work in these previously untested fairways," stated Inglis, a former BP executive.

"Yakaar-1 follows the earlier exploration success that led to the Tortue discovery and further confirms our belief that offshore Senegal and Mauritania is a world-class hydrocarbon basin," said Bernard Looney, BP Upstream Chief Executive.

"This discovery marks an important further step in building BP's new business in Mauritania and Senegal," he added.

"We look forward to results from the additional exploration wells planned for 2017," stated Looney.

BP in April agreed to deepen its investment in Senegal by acquiring the full 30 percent minority participating interests that Timis Corporation held in the Saint-Louis Profond and Cayar Profond blocks offshore Senegal.

"The Saint-Louis Offshore Profond block includes the Senegalese sector of the cross-border Tortue (Ahmeyim-Guembuel) field and significant future prospectivity," said BP.

Participating interests in the Senegal blocks are similar to the aligned partnership in Mauritania, with BP holding participating and effective working interests of close to 60 percent, Kosmos close to 30 percent and Societe des Petroles du Senegal (Petrosen) 10 percent. ■

UNLIMITED AGENDA

Pembina Pipeline's takeover of Veresen and FERC quorum issue unlikely to halt Jordan Cove LNG

Our North America editor in New York

Veresen Inc. of Canada, developer of the Jordan Cove LNG export project in the US northwest state of Oregon, said the LNG venture was still going ahead even as Veresen proceeded with its planned friendly merger with Canadian peer Pembina Pipeline Corp. in a deal valued at US$4.3 billion.

Veresen and Pembina, both based in the city of Calgary in the Canadian province of Alberta, said their transaction is expected to bolster the delivery of their existing strategy and portfolio of projects.

Held up

The Jordan Cove LNG venture is one of those projects, though it is being temporarily held up by a lack of a quorum currently at the US Federal Energy Regulatory Commission.

Veresen commented on the Pembina merger and the delayed Jordan Cove LNG venture in its first-quarter earnings report.

Jordan Cove purchaser is also keen on gas plant projects

"Following the Federal Energy Regulatory Commission decision to deny the request for rehearing on December 9, 2016, the company undertook a thorough review of the Jordan Cove LNG project to evaluate alternatives to create the most value on a risk-adjusted basis to Veresen.

"Based on the constructive nature of discussions with both existing and potential buyers following the denial, Veresen announced in the first quarter it intends to continue to pursue the Jordan Cove LNG project.

"The development budget for 2017 remains at US$30M, with the expectation that Jordan Cove LNG will finalize agreements with existing buyers and secure additional off-takers.

"This would position the project for a potential final investment decision in 2019 and an in-service date in 2024 at an estimated total project cost of approximately US$10Bln," stated Veresen.

Commenting on the Pembina merger proposal, Veresen explained that it had entered into an agreement with Pembina, under which Pembina would acquire all the issued and outstanding common shares of Veresen.

"It will feature an asset base supported by long-life, economic hydrocarbon reserves concentrated in some of the most prolific resource plays in North America," it said.

"The combined entity will continue to build upon the momentum of the Jordan Cove LNG development project as it progresses toward key regulatory and commercial milestones.

"Jordan Cove is the most advanced LNG export project on the west coast of North America and can compete with LNG from brownfield expansion in the Gulf of Mexico on a delivered to Tokyo basis," it stated. ■

LNG and gas industry praise nominations to fill vacancies at US Energy Regulatory Commission

The US Center for Liquefied Natural Gas and other Washington-based industry bodies have welcomed the nomination of two candidates by President Donald Trump to fill vacancies on the Federal Energy Regulatory Commission and return the regulator of LNG and other projects to a quorum to take decisions.

The President nominated Neil Chatterjee, currently energy policy advisor to US Senate Majority Leader Mitch McConnell, a Kentucky Republican, and Robert F. Powelson, who chairs Pennsylvania's Public Utility Commission.

The five-member FERC has been lacking a quorum since Commissioner Norman Bay resigned at the end of January after the President appointed Cheryl LaFleur as acting chairman. The FERC quorum issue has held up dozens of LNG and other energy projects from moving forward.

"These nominations are welcome news," said Charlie Riedl, Executive Director of the Center for LNG, representing natural gas companies, exporters and project developers.

"Having a quorum at FERC will allow liquefied natural gas developers to move forward with confidence that the required permits and permissions to build projects will be considered quickly and efficiently," added Riedl.

The President appointed LaFleur, an experienced businesswoman and lawyer as well as a Democrat, as the acting head of the FERC after Bay tabled his resignation.

The FERC's five commissioners are essentially political appointees. It previously consisted of three Democrats and two Republicans.

However, two Republicans had resigned in 2015 and 2016, leaving only three Democrats at the turn of the year, then two after the resignation of Bay, meaning the FERC board was without a quorum.

The FERC has been able to conduct routine business, though could not vote on important projects or ruling.

There are presently about 20 US LNG export projects under development and being overseen by the FERC, as well as dozens of other ventures in sectors such as pipelines.

With current commissioners LaFleur and Colette Honorable, both Democrats, the Republicans have now nominated two new commissioners and one more needs to be named.

The American Gas Association (AGA) said it applauded the Trump Administration for nominating Chatterjee and Powelson to fill two of the current three commissioner vacancies.

"AGA urges the prompt confirmation of these nominees by the Senate. Having a quorum will allow FERC to continue its important work for the natural gas industry, including timely decisions on pending and future interstate natural gas infrastructure project certificates," said President and Chief Executive Dave McCurdy. ■

CB&I works through US LNG projects as it senses rebound

CB&I, the US energy and liquefied natural gas engineering company, reported a 77 percent drop in first-quarter net income and revenue also fell, though the company sensed a rebound in opportunities in China and the Middle East.

CB&I said its first-quarter net income came to $25 million compared with $107M in the same three months of 2016 amid a full US book of LNG contracts.

Revenue for the quarter was $2.4 billion compared with $2.7Bln in the year-ago period.

New awards amounted to $3.3Bln versus $1.2Bln for the first quarter of 2016. CB&I's backlog at the end of the first quarter of 2017 was $19.3Bln.

The Houston-based company is currently working on two large-scale LNG export projects on the US Gulf Coast.

These are the Freeport LNG plant on Quintana Island in Texas, led by energy entrepreneur Michael Smith and the Cameron liquefaction project in Louisiana being developed by California-based Sempra Energy and European and Japanese utilities.

However, CB&I has not mentioned any new LNG contract wins so far in 2017.

Its last LNG contract award was in November 2016 and worth more than $200M. This was from Puget Sound Energy for the engineering, procurement and construction of an LNG storage and fuel terminal in Tacoma port in Washington state.

The scope of that work includes a 30,000 cubic metres full containment storage tank, which is a CB&I speciality. The facility will provide peak shaving, marine bunkering and truck loading.

■

Caribbean LNG market boosted as Dominican Republic sells to Barbados

Our North American editor in New York

AES Dominicana, a subsidiary of AES Corp. of the US, has signed an agreement to supply liquefied natural gas to the Barbados National Oil Company from its AES Andres LNG terminal in the Dominican Republic.

"The agreement represents an important milestone for the country's positioning as the Caribbean's most geographically strategic distribution center," said Edwin De los Santos, President of AES Dominicana.

Distribution

In addition to distributing LNG via ISO containers, AES will also transport LNG via small bulk carriers following the successful modifications at the AES Andres LNG terminal in January 2017.

AES has operated the Punta Caucedo regasification terminal in the Dominican Republic since 2003 and the facility has recently undergone modifications.

AES plans to deliver ISO tanks and small ship loads

"The LNG will be loaded at the LNG truck-loading facility and transported via ISO containers," said George Nemeth, Director of LNG Marketing for AES Dominicana.

At the beginning of 2017, AES Dominicana completed construction of the new AES Andres Marine Facility at the import terminal at a cost of US$9 million.

This included infrastructure changes to the regasification terminal to allow the re-loading of cargoes for export on ships as small as 10,000 cubic metres capacity.

"For smaller scale customers, AES will load LNG into ISO tanks at the liquefied natural gas truck terminal so that fuel can be delivered by container ships to neighboring countries," said AES.

Barbados is already an importer of LNG in ISO containers from the US state of Florida.

Latest US Department of Energy figures show that about four cargoes of US LNG per month are exported in ISO container tanks from the Hialeah facility near Medley in Florida, via the port of Miami, to Barbados.

■

Crowley extends Florida LNG supply deals for Puerto Rico pharma plants

Crowley Maritime Corp. said its liquefied natural gas services group has been awarded a multi-year contract to supply additional volumes of containerized LNG shipped from Florida to pharmaceutical manufacturing plants in Puerto Rico.

The contract, executed through Crowley's Carib Energy, extends a 2014 contract awarded to Crowley for LNG supply for the facilities by expanding the service to additional plants.

"It includes the fuel supply and transportation of LNG, which helps the customer yield substantially lowered emissions and provides an alternative to their current fuel source, diesel," said Crowley.

Crowley's domestic logistics operation will manage the transportation of the LNG in 40-foot intermodal containers from US liquefaction plants to the Port of Jacksonville in Florida.

The ISO tanks are authorized by the US Department of Transportation to each carry approximately 10,000 gallons of LNG.

Once in Puerto Rico, the LNG will be regasified into pipeline natural gas for boiler consumption at the pharmaceutical plants.

Puerto Rico is the fifth-largest area in the world for pharmaceutical manufacturing with more than 80 plants in the US territory, including some of the largest such as AstraZeneca and Bristol Myers Squibb.

Crowley entered the LNG market in 2015 by acquiring Florida-based Carib Energy. Founded in 2011, the Crowley company was the first to receive a small-scale, 25-year LNG export licence from the Energy Department for LNG transport from the United States.

"We are thrilled to enhance our relationship by growing our LNG services and volumes with this critical customer in Puerto Rico," said Greg Buffington, Crowley Vice President.

"Crowley will continue to provide an uninterrupted supply chain of natural gas to the customer's site, just as we have done since 2014, helping them utilize a safe, reliable and environmentally friendly fuel for their operations," added Buffington.

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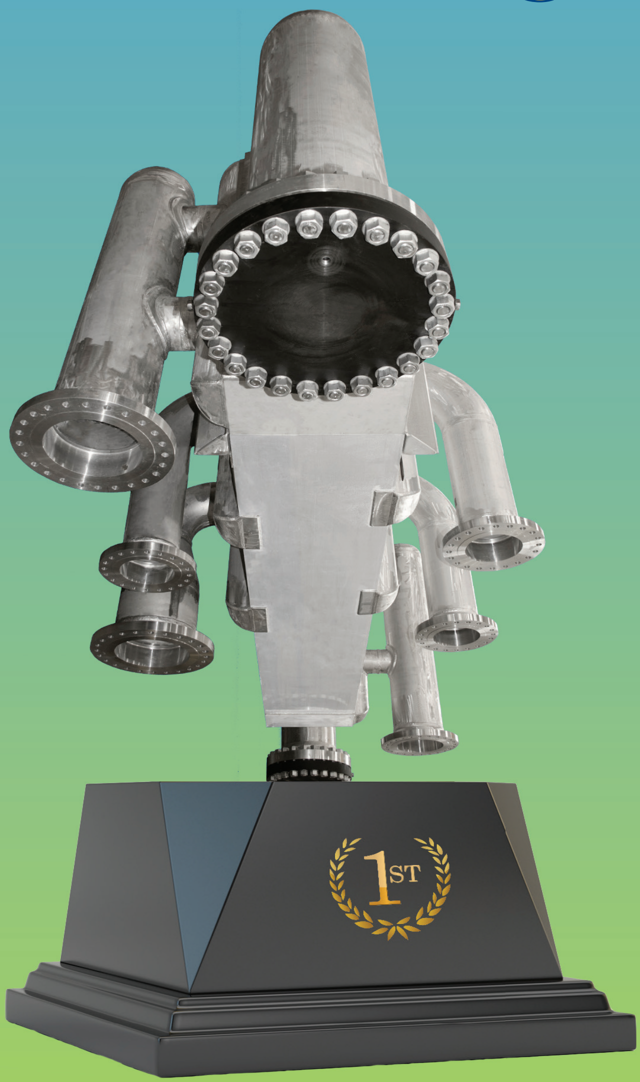

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NEWS NUDGES

Cameron LNG stays on track

The Sempra Energy head of infrastructure businesses, Joseph Householder, said the US Cameron LNG export project in Louisiana remained on track after experiencing some weather-related construction delays. Householder said the California-based utility and energy company and its French and Japanese partners, Engie, Mitsui and Mitsubishi were committed to the current Cameron schedule for the first of three liquefaction Trains to be on stream by early 2018. “The commitment of each of our partners and customers to get the project finished and into operation is completely there,” Householder told a meeting of analysts.

Egyptian gas supply increases

BP of the UK said it had started natural gas production from the first two fields of the West Nile Delta development in Egypt. The West Nile Delta venture and the Zohr gas project in the East Mediterranean are expected to lessen current Egyptian dependence on LNG to meet domestic demand. The project was delivered eight months ahead of schedule and the first gas was delivered to Egypt’s national grid. “The commissioning of all nine wells of the development’s first two fields and ramp up to stable operations has now been completed,” said BP.

Clean Energy makes choice

Clean Energy Fuels Corp., the LNG and gas fuel company and station network owner on the US West Coast, said it appointed Frank Meyer as President of its compression subsidiary. Clean Energy, based in Newport Beach in California, said Meyer brought 24 years of leadership experience after serving in a variety of roles. ■

Tokyo Gas lines up feed-gas for US LNG exports with stake in Haynesville

Our North American editor in New York

Japanese utility and LNG importer Tokyo Gas has completed a transaction to take a strategic equity investment in a US company with natural gas assets in Louisiana and Texas, including the Haynesville shale play, for future use in liquefaction tolling agreements at Gulf Coast export plants.

Castleton Commodities International (CCI) said Tokyo Gas had purchased 30 percent of its subsidiary Castleton Resources.

The Haynesville shale lies under parts of three southern states, including East Texas, northwest Louisiana and southwest Arkansas.

Haynesville straddles Texas, Louisiana and Arkansa

Deal signed

CCI, based in Stamford, Connecticut had previously purchased the Carthage upstream and midstream assets in East Texas from subsidiaries of Anadarko Petroleum Corp. for over $1 billion.

CCI subsequently combined the acquired assets with the company's existing East Texas upstream assets under a newly formed company Castleton Resources.

“Our partnership with Tokyo Gas will align CCI with one of Japan's largest LNG market participants and further solidify our company's commitment to expanding in Asia and connecting Asian and Western markets and investors,” stated Nicholas Haslett, Senior Managing Director and Chief Strategy Officer of CCI.

Tokyo Gas currently has volume and tolling agreements with the Cameron LNG plant in Louisiana and the Cove Point project in Maryland, while it is known to be in talks with other US export projects under development in Texas and Louisiana.

Castleton Resources is also now focused on the acquisition and development of further oil and gas assets in the East Texas-Louisiana region with a specific focus on Haynesville shale assets.

“The Gulf Coast area, specifically East Texas and North Louisiana, is strategically important for Tokyo Gas and we are excited to join forces with CCI and the quality management team at Castleton Resources,” said Shunjiro Yamashita, President and Chief Executive of Tokyo Gas America. ■

Australian firm Monadelphous wins offshore contract for Ichthys LNG

Australian engineering and construction company Monadelphous said it was awarded the long-term offshore maintenance services contract for the Ichthys LNG project being developed by Japanese energy company Inpex near Darwin in the Northern Territory.

Monadelphous said the contract was for an initial period of six years with a further two two-year extension options and is in the Browse Basin offshore northwest Australia.

Inpex is developing the Ichthys project at a cost of US$37 billion with French joint venture partner Total and the liquefaction plant at Bladin Point is on schedule to begin LNG production before the end of 2017.

Monadelphous has been engaged to deliver operational, campaign and shutdown maintenance services for the offshore feed-gas facilities.

Its work is specifically focused on project implementation associated with the Ichthys Central Processing Facility, the “‘Ichthys Explorer” and the Floating Production Storage and Offloading (FPSO) facility, the “Ichthys Venturer”.

The “Ichthys Explorer” is the world’s largest semi-submersible central processing facility.

When completed by the main contractors, the JKC consortium comprising Japanese engineering groups JGC and Chiyoda and US engineering company KBR, the liquefaction facility will have two Trains with nameplate output of just short of 9 million tonnes per annum.

Ichthys has long-term contracts to supply LNG shipments to the Japanese utilities Tokyo Gas, Osaka Gas, Kansai Electric Power, Toho Gas and Jera Co. Inc., the joint procurement venture between Tokyo Electric Power and Chubu Electric. ■

Malaysia and US energy company Murphy plan to proceed with floating venture over Rotan gas field

Our Asia-Pacific editor

Malaysian energy company Petronas said it expected to proceed with a second floating liquefied natural gas project involving a US company after the successful start-up of "PFLNG Satu", the world's first production hull deployed over the stranded Kanowit gas field offshore Sarawak.

"Our first cargo went to India, and the vessel will sit on the Kanowit gas field for five years, after which our development people will be looking at the next field," said Petronas Upstream Vice-President Adnan Zainol Abidin in a statement issued in Kuala Lumpur.

Production hull 'PFLNG 2' back on track in Korean yard

Exports

Abidin said the operating FLNG venture with output of around 1.2 million tonnes per annum would increase Malaysia's total LNG production to over 30 MTPA, most of it coming from the seven Trains at the onshore Bintulu production plant in Sarawak.

The Kanowit FLNG hull was constructed at the Daewoo Shipbuilding and Marine Engineering shipyard in South Korea.

"Next, we want to stabilise our operation on the first facility and in 2020, our second vessel, 'PFLNG Dua' is scheduled to be released," explained the Petronas executive.

The "PFLNG Dua" will be designed to produce 1.5 MTPA and it, like the first vessel, would be designed to operate for 20 years without drydocking.

The second FLNG venture was originally scheduled to be started up in 2018 and to be deployed over the deepwater Rotan gas field, about 80 miles offshore of Sabah, the Malaysian state occupying the northern part of the island of Borneo.

The Rotan gas well was discovered by Murphy Oil Corp. of the US in in 2007 in the Block H licence in Malaysian waters of the South China Sea and both companies had previously sanctioned first FLNG output by 2018.

However, Petronas said in March 2016 that "PFLNG Dua" had been postponed as part of cost-cutting measures amid much lower revenues because of the oil slump.

The US company, based in Arkansas, still holds about 50 percent of the Block H licence for the Rotan gas field. ■

US natural gas output on track to support growth in LNG exports

US natural gas production is expected to rise to an average of 74.1 billion cubic feet per day for 2017 and to surge even higher in 2018 as benchmark prices also increase on the back of LNG exports and more demand from the domestic market.

"US dry natural gas production is forecast to average 74.1 billion cubic feet per day (Bcf/d) in 2017, a 1.8 Bcf/d increase from the 2016 level," according to the short-term energy outlook from the Energy Information Administration.

This rise reverses a 2016 production decline, which was the first annual decline since 2005.

The nation's natural gas production in 2018 is forecast to be 3.2 Bcf/d more than the 2017 level.

The average Henry Hub natural gas spot price during April was $3.10 per million British thermal units, $0.22 cents per MMBtu above the March level.

LNG export from the Sabine Pass plant in Louisiana, where four liquefaction Trains have now been completed, are gradually rising.

More LNG export capacity is coming on stream in the next 24 months and coupled with pipeline export to Mexico will send Henry Hub prices higher when added to more domestic demand.

"New natural gas export capabilities and growing domestic natural gas consumption contribute to the forecast Henry Hub spot price rising from an average of $3.17 per MMBtu in 2017 to $3.43/MMBtu in 2018," said the report.

By 2018 and early 2019 at least three other US LNG export plants will be on stream, the Cove Point facility in Maryland, Freeport LNG in Texas and Cameron LNG in Louisiana.

US LNG firm Tellurian performs like favoured tech stock in advancing

Our North America editor in New York

Meg Gentle, President and CEO has five-year game plan

Tellurian Inc. reported a net loss of $141 million in the first-quarter of 2017 as it followed its game plan to develop the Driftwood LNG plant near Lake Charles in Louisiana by 2022 to match the Sabine Pass venture of Cheniere Energy with 27 million tonnes per annum of output.

"Tellurian continues to consistently execute its plans to build a global natural gas business and has laid the foundation to design, permit, and finance the next world-scale LNG infrastructure in southwest Louisiana," said Meg Gentle, President and Chief Executive.

Marketing

"We recently began marketing LNG to potential customers and we have received positive feedback and interest in our Driftwood project which we expect to produce first LNG in 2022," she stated.

Tellurian was founded by former Cheniere CEO Charif Souki as well as Martin Houston, who ran the LNG operations of the portfolio company, BG of the UK.

In the earnings statement, Tellurian reported five key events during the first three months of the year.

Firstly, it issued 23 percent of its common stock to French energy company Total for $207M of investment.

It also closed a reverse subsidiary merger with Magellan Petroleum Corp. to become a public company listed on the Nasdaq global exchange.

Tellurian additionally received authorization from the US Department of Energy to export LNG to Free Trade Agreement countries from its Louisiana plant.

Driftwood LNG then submitted applications to the Federal Energy Regulatory Commission to construct and operate the liquefaction plant and export terminal on a 1,000-acre site on the west bank of the Calcasieu River near the town of Carlyss in Calcasieu Parish, Louisiana.

Fifth and most importantly Tellurian and its Driftwood venture engaged French investment bank Société Générale as a financial advisor to help lead the money-raising efforts to make the plant a reality.

LNG developer Anadarko makes two changes in its upstream leadership

Anadarko Petroleum Corp., the US company with plans to develop LNG projects in the southeast African nation of Mozambique, has made executive changes to its US and international operations team leadership as it moves forward after the Colorado accident that led to a temporary shutdown of 3,000 wells in the state.

The company said Daniel E. Brown had been named Executive Vice President for International and Deepwater Operations and Bradley J. Holly will be Executive Vice President for US Onshore Exploration and Production.

Darrell E. Hollek, formerly Executive Vice President for Operations, will serve as a senior adviser until his retirement later this year.

Anadarko only appointed Hollek to the operations post in August 2016 ahead of his impending retirement.

He had replaced the retiring Bob Daniels, who was Anadarko Vice President of Worldwide Exploration when the Mozambique natural gas discoveries were made between 2010 and 2013, opening the way for LNG project development.

The US company's main foreign asset is its licence for Offshore Area 1 in Mozambique in which it still holds a 26.5 percent participating interest.

The company said earlier in 2017 it was progressing with three elements that will position the LNG project for future execution and delivery, including the legal framework of the onshore liquefaction plant, project finance and long-term LNG sales contracts.

"We owe Darrell our gratitude for his many contributions over the last 37 years," said Anadarko Chairman, President and Chief Executive Al Walker.

"He was instrumental in leading many areas of the company over the years, as well as helping to build the deep opportunity our portfolio offers today.

"We will continue to benefit from his insight over the next several months in his advisory role and wish him all the best in retirement," added Walker.

India's Petronet LNG posts rise in profit on back of import and regas capacity surge

Our Asian editor

Petronet LNG of India, operator of the Dahej import terminal near Mumbai, almost doubled net profits for the fourth quarter of fiscal 2017 in line with the surge in imported cargoes and a rise in regasification capacity.

Petronet's earnings showed net profits at 471 crore rupees ($72.84 million) compared with 245 crore rupees ($37.89M) in the same three months of 2016.

Expansion

Revenue was around 5 percent higher at 6,365 crore rupees ($984M) versus 6,065 crore rupees in the fiscal 2016 fourth quarter.

Petronet's Dahej terminal capacity was expanded during 2016 from 10 million tonnes per annum to 15 MTPA. Another project is underway to add a further 2.5 MTPA of regas capability.

Prabhat Singh has led Petronet in growing gas market

The company's annual net profits for fiscal 2017 amounted to 1,705 crore rupees (($263.79 million) versus 913 crore rupees ($141.25M) in fiscal 2016.

After the earnings report was issued, Petronet shares on the Bombay Stock Exchange jumped more than 2 percent to 437.70 rupees.

Petronet, led by Chief Executive Prabhat Singh, has benefited from the rise in its own capacity at Dahej as well as overall LNG imports, which were up in March to 1.53 million tonnes compared with 1.44MT in the same three months of 2016.

In addition to the imports at Petronet's facility, India's Hazira and Dabhol terminals, also near Mumbai, import cargoes for Shell India and Gas Authority of India (GAIL) respectively.

Petronet's Kochi terminal in the southwest state of Kerala is also operational, though little used because of a lack of pipeline capacity for customers.

The latest import data from the Ministry of Petroleum and Natural Gas showed cumulative LNG imports for the full fiscal year to date of 12 months from April 2016 to March 2017 were 15.5 percent higher at 18.20MT compared with the previous fiscal year when they were 15.76MT.

For the calendar year of 2016 imports had risen 30 percent to 18.99MT from 14.60MT in 2015, led by Qatar with 11.37MT and countries such as Nigeria with 2.63MT, Equatorial Guinea with 1.33MT and Australia with 1.11MT.

Petronet's controlling shareholders are Gas Authority of India, Oil and Natural Gas Corp., Indian Oil Corp. and refining company Bharat Petroleum.

French energy and utility company Engie also owns 10 percent of Petronet, a stake it was planning to offload. The Petronet shares had been purchased by the Engie predecessor company Gaz de France. ■

Woodside plans to extend life of Australian LNG plant rather than have separate venture

Woodside Petroleum Chief Executive Peter Coleman said global liquefied natural gas market conditions are pushing the company towards using its Browse Basin resources offshore Western Australia to double the life of its existing Northwest Shelf liquefaction plant rather than undertaking a separate Browse LNG joint venture.

"As you know, we have worked for some years to find the right development concept for the world-class Browse resources," Coleman told the annual meeting of shareholders in the city of Perth.

"I'm very excited about where we are headed," the CEO said.

"Conditions are aligning for us to look closely at an opportunity to basically double the life of the North West Shelf by bringing the Browse resources into it," he stated.

"Utilising the existing facilities has the dual advantage of ensuring the most efficient use of capital while minimising risk by relying on proven technologies," he explained.

The NWS liquefaction plant, a key supply to Japan and China, is located at Karratha in the Pilbara region of Western Australia and has been in production since 1989 with a nameplate capacity of 16.3 million tonnes per annum from five Trains.

"As operator of both Browse and the North West Shelf, Woodside is well-placed to make this happen and we are talking to joint venture participants in both assets," Coleman said.

"It's still early days but we think this is a compelling option and could be achieved at a competitive price and in a reasonable timeframe," the CEO added.

Coleman noted that sending Browse feed-gas to the NWS plant would come at a time when there is expected to be a tightening in LNG supplies because of the growth in demand from new markets and the current challenging economic conditions for new large-scale developments.

"These factors point to a supply shortfall in the 2020s, adding to the case for developing Browse," said Coleman.

"We anticipate that first gas from Browse could enter the North West Shelf plant from the mid-2020s, coinciding with the forecast supply crunch," he stated.

The Woodside CEO added that he was pressing ahead with his strategy of developing the LNG fuel market using the company's second liquefaction plant in the Pilbara region, Pluto LNG.

"We're finalising plans to support supplying LNG from Pluto to fuel the local mining and marine sectors, which currently rely heavily on imported diesel," he said.

"Supporting the development of LNG as a low-emissions transport fuel has both economic and environmental benefits for Australia, as well as potential long-term commercial benefits for Woodside.

"To bring these opportunities together, we're focused on creating a Burrup Hub that will maximise value from existing facilities," the CEO told shareholders.

"Woodside is in a unique position in the Pilbara of having equity in both key onshore infrastructure and offshore resources.

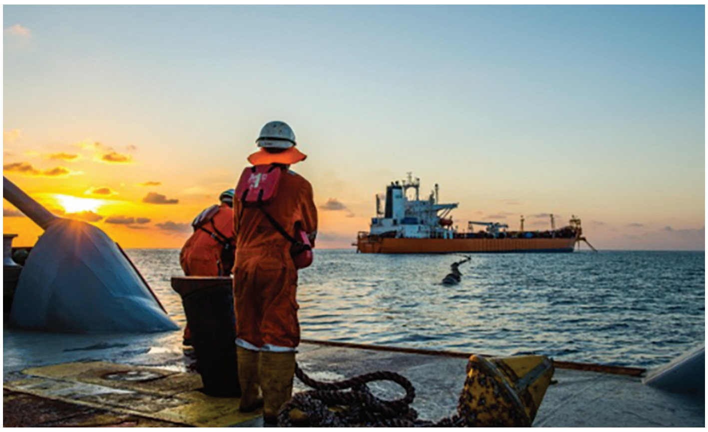
"In fact, we're the only company with equity in both the largest undeveloped offshore resources and the two onshore plants that have the most ready expansion capability," he said. ■

Equatorial Guinea's Fortuna FLNG project has three issues to finalize after midstream contracts signed

Our Europe editor

Golar LNG, the Norwegian fleet owner and project developer, has signed agreements for conversion of the 126,000 cubic metres capacity carrier "Gandria" to a floating liquefaction facility to be deployed for the Fortuna project offshore Equatorial Guinea, led by UK company Ophir Energy.

The primary contract for the "FLNG Gandria" was entered into with Singapore's Keppel Shipyard, while the liquefaction technology will be provided by Black & Veatch of the US.



Ophir CEO Nick Cooper says midstream plans are settled

Proceeding

This contract leaves just three issues outstanding as Fortuna FLNG proceeds to its final investment decision.

The "Gandria" vessel will be acquired by the Fortuna Joint Operating Company upon reaching the planned FID within several weeks.

The Republic of Equatorial Guinea, as a partner in the venture, has the right to acquire up to 30 percent of the FLNG vessel.

Ophir said that the award of the midstream ship conversion and engineering contracts completed another import phase leading up to the FID.

"At this point three external milestones remain," explained Ophir. The UK company listed the outstanding issues as the award of the upstream Engineering, Procurement, Construction, Installation and Commissioning (EPCIC) contracts, the completion of the debt facility and the allocation of LNG offtake.

Ophir said that as regards progress, the EPCIC contract was on schedule, term sheets have been agreed with a consortium of China-based banks and the project financing was at the final documentation stage.

In relation to offtake agreements, Ophir said: "The Fortuna partners will determine in May the structure and amount of the expected 2.5 million tonnes per annum to place under contract at FID. An award of offtake will be made from the shortlist of attractive proposals from high-quality counterparties."

Nick Cooper, Chief Executive of Ophir commented: "The award of the midstream construction completes another milestone as we approach FID. We remain firmly on schedule for the FID of Africa's first deepwater FLNG Project in mid-2017."

Parties to the Fortuna project had earlier signed a full legal and fiscal framework agreement.