

Sempra makes progress on all fronts from LNG plans to utilities

LNG business unit Sempra Infrastructure had strong operational performance in quarter
LNG News Editor

Sempra, the US utility whose LNG unit Sempra Infrastructure owns Cameron LNG in Louisiana and other projects in Texas and Mexico, has reported higher earnings in the first quarter as it proposed a five-year capital expenditure plan amounting to \$40 billion.

Sempra, which also runs gas and power businesses in California and an electric utility in Texas, reported first-quarter earnings of \$969 million, or \$3.07 per diluted share, compared with first-quarter 2022 earnings of \$612M, or \$1.93 per diluted share.

On an adjusted basis, the company's first-quarter 2023 earnings were \$922M, or \$2.92 per diluted share, compared with \$924M, or \$2.91 per diluted share, in the same three months of 2022.

Sempra's LNG business unit, Sempra Infrastructure, had strong operational performance in the first quarter across its three integrated business lines, clean power, energy networks and LNG exports.

Texas FID

Sempra Infrastructure Partners also reached a positive final investment decision in the quarter for the development, construction and operation of the Port Arthur LNG Phase 1 project in Jefferson County, Texas.

The company additionally announced a joint venture with an affiliate of ConocoPhillips, which has acquired a 30 percent non-controlling interest in Phase 1 of the Port Arthur venture.

Sempra pointed out that it also



Civil construction has started at the Port Arthur LNG site

has an agreement to sell to an affiliate of US asset management firm Kohlberg Kravis Roberts (KKR), which is already a stakeholder in Sempra Infrastructure, an indirect, non-controlling interest in Phase 1.

Sempra explained that Sempra Infrastructure Partners was targeting a 25 percent indirect ownership interest in Phase 1 of Port Arthur under this project-level equity partnership.

"The \$13 billion total estimated capital expenditures at the project are being financed with \$6.8Bln of non-recourse project-level debt and \$6.2Bln of project-level equity," Sempra added.

The company noted that 100 percent of current contractable capacity for Port Arthur Phase 1 had been secured with long-duration contracts and high-quality counterparties.

"The civil construction program with has commenced with 150-plus pieces of equipment on site led by Bechtel," said Sempra.

"The sites for LNG trains and storage tank areas were almost cleared and soil stabilization has started," it added.

The company has additionally placed major long-lead time orders with equipment and technology companies Air Products and Baker Hughes.

"Progress also continues at Energía Costa Azul LNG Phase 1 on the Pacific Coast of Mexico where construction at the project remains on track to reach commercial operations by the summer of 2025," added Sempra.

Cameron expansion

The San Diego, California-based company also noted that the Cameron LNG Phase 2 development project in Louisiana received approval from the Federal Energy Regulatory Commission for modifications to its expansion permit.

"Importantly, the modifications approved by the FERC include utilizing electric drive motors to replace gas turbine drives, which is expected to lower the overall direct onsite emissions of Phase 2 compared to the previously authorized project," Sempra said.

The Sempra California business, San Diego Gas & Electric Co. (SDGE) and Southern California Gas Co. (SoCalGas), continue to invest in safety, reliability and technology innovation that align with the state's energy goals.

Sempra's 2023-2027 capital plan targets \$21.4Bln in investments to better serve customers at its California utilities, improve operational safety and reliability.

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Inpex reports steady LNG flows from Ichthys plant amid planned Indonesia joint venture

LNG News Editor

Inpex Corp., the leading Japanese energy company and operator of the Ichthys liquefied natural export plant in Australia and developer of the Abadi liquefaction project in Indonesia, reported 34 cargoes shipped in the first quarter from the Ichthys plant at Bladin Point near Darwin.

Inpex gave the figure in its first-quarter earnings when it reported a more than 60 percent surge in net income on higher volumes and prices.

The company posted a 19 percent jump in quarterly sales of 578.4 billion yen (\$4.28Bln) in the first three months of 2023 versus 485.3Bln (\$3.59Bln) in the 2022 quarter.

Net income for the quarter rose by 61.2 percent to 151.4Bln yen (\$1.12Bln) compared with 93.9Bln yen (\$695 million) in the prior-year quarter coming mainly from sales of oil, pipeline gas and LNG.



Australian cargo delivered to Inpex's Naoetsu terminal

The average overseas natural gas sales price for Inpex increased by 11 percent to \$6.73 per thousand cubic feet of gas from \$6.06 per mcf.

Gas assets

The Inpex oil and gas assets in Japan comprise the domestic Japanese Minami-Nagaoka Gas Field in Niigata Prefecture and the Naoetsu LNG import terminal.

Inpex said average quarterly domestic natural gas prices soared

to 110.67 yen per cubic metres from 65.76 yen per cubic metre in the same quarter last year.

"The company's net sales of crude oil increased by 44.1Bln yen, or 12.4 percent, to 399.6Bln yen, and net sales of natural gas increased by 49.8Bln, or 40.2 percent, to 173.7Bln yen," the company said.

"Sales volume of crude oil increased by 1,502 thousand barrels, or 4.3 percent, to 36,677 thousand barrels, and sales vol-

ume of natural gas increased by 2,456 million cf, or 2.0 percent, to 128,241 million cf," Inpex added.

Inpex own a 66 percent stake the Ichthys plant in Australia's Northern Territory and currently supplies about 10 percent of Japan's LNG imports. The other main shareholder is TotalEnergies.

The Japanese company has also finalized a revised development plan for the Abadi LNG export project in Indonesia, a joint venture with Shell.

Inpex submitted the new plan to Indonesian regulators in April 2023 incorporating a carbon-capture and storage component.

Inpex's venture will be located onshore Yamdena Island in the Tanimbar Island chain and use feed-gas from the Abadi gas field in the Masela Block of Indonesia's Arafura Sea.

The liquefaction and export plant could be expected to be operational by around 2030.

LNG importer and utility Osaka Gas reports rise in sales but profits hit by Freeport closure

Osaka Gas, a leading Japanese LNG importer, reported a 43 percent increase in consolidated net sales for the fiscal year to the end of March 2023, mainly due to higher prices for city-gas in Japan, though profits fell year-on-year because of the shut-down of Freeport LNG in Texas for most of the year from June and the higher cost of replacement cargoes.

Osaka Gas, which is part of the Daigas Group, increased annual sales to 2.27 trillion yen (\$16.8 billion), up from 1.59 trillion yen (\$11.8Bln) in the previous fiscal year.

The utility's gross annual profits dropped to 282.2 billion yen (\$2.09Bln) from 314.2Bln yen (\$2.33Bln) in the 2021-2022 fiscal year.

Ordinary profits declined by

33.5 percent on the year to \$74.65Bln yen (\$560.8M) versus 113.52Bln yen (\$841.5M) in the previous fiscal year.

"This was primarily due to the higher unit selling price of city gas under the fuel cost-adjustment system and an increase in sales from a rise in LNG prices and in the Domestic Energy Business and an increase in sales from the upstream project in the USA and Australia in the International Energy Business," said Osaka Gas.

Negative impact

"In the Domestic Energy Business, although the negative impact of the time lag between fluctuations in raw material costs and their reflection in the unit selling prices diminished compared with the previous fiscal year, costs for LNG

procurement increased," the company explained.

Osaka Gas added that its number of consolidated subsidiaries was currently 154, with nine subsidiaries added and five removed since the fiscal year ended.

In its explanation of reduced profits from Freeport LNG, Osaka Gas noted that a fire broke out at the liquefaction plant of the Freeport LNG project, one of the Daigas Group's investments and LNG sources.

"In response to the shutdown, we prepared to secure replacement LNG for the volumes the Group originally planned to procure from the project during the shutdown period and arranged modification regarding the contracts related to LNG procurement from the Freeport Project. The Project restarted op-

erations at the plant in February of this year," said Osaka Gas.

Global volumes

Osaka gas also has booked volumes from other global projects such as Oman LNG in the Arabian Peninsula, Gorgon LNG in Western Australia, the nearby Northwest Shelf Project and the Bintulu LNG plant in Malaysia.

Other Osaka Gas suppliers include Papua New Guinea LNG and the Sakhalin export plant in the Russian Far East.

In its future earnings forecast to March 2024, the utility said that consolidated ordinary profit was expected to increase by 83.3Bln yen (\$607M) year-on-year to 159.0Bln yen (\$1.78Bln) with Freeport back on stream.

Excelerate profits rise from gas and FSRUs

Excelerate Energy, the leading US provider of floating storage and regasification units (FSRUs) with increased demand from Europe and South America, reported higher net income from natural gas sales in Brazil and Finland and German charter income.

Excelerate reported a jump in first-quarter net income to \$30.7 million from \$12.8M in the same three months of last year.

"Net Income and adjusted EBITDA for the first quarter increased over the prior year first quarter primarily due to higher margins earned on gas sales contracts in Brazil along with gas sales into Finland and higher FSRU and terminal services revenue from the Finland and Germany charters," said the company.

Income from the first quarter decreased from the fourth quarter of 2022, primarily due to a scheduled dry dock for the FSRU "Excelsior" along with higher planned maintenance expense at the company's Bangladesh terminal, partially offset by Brazil gas sales contracts.

Revenues stalled to \$211.1M compared with \$591.7M in the 2022 quarter.

In Germany, the FSRU "Excelsior" commenced its charter hire with the German Federal Government under a five-year charter agreement signed in October 2022.

The Germany charter has been placed on a temporary suspension agreement while the FSRU "Excelsior" is deployed to provide seasonal regasification services at the Bahia Blanca GasPort terminal in Argentina.

K-Line LNG operations to rise from Qatar amid Singapore switch

LNG News Editor

Kawasaki Kisen Kaisha, the Japanese shipping company known as K-Line, is planning an LNG carrier growth strategy focused on Qatar and with ship management operations being moved into southeast Asia.

K-Line said in its fiscal year earnings statement that it signed long-term time charter contracts for a total of 12 vessels with QatarEnergy in August and November 2022.

Energy Transport

In its tankers division fleet for Energy Resource Transport, K-Line has 87 vessels including 44 LNG carriers, 28 thermal-coal carriers, six very large crude carriers, four liquefied petroleum gas carriers and two other petroleum tankers.

Annual income in the Energy Resource division amounted to 100.2 billion yen (\$742.8M) compared with 89.7Bln (\$650M) in the previous year.

"LNG carriers, thermal-coal



One of Japan shipping company's fleet of 44 LNG carriers

carriers, Very Large Crude Carriers and the LPG carrier businesses secured stable profits backed by medium-term to long-term charter contracts," explained K-Line.

"In addition the LNG business is expanding in Qatar, where our largest customer is and we will make steady progress on strengthening our customer base in emerging regions where growth is expected," said K-Line.

K-Line said it was aiming to further increase the number of contracted vessels lifting cargoes

at Ras Laffan in Qatar.

"We are moving the ship management site to Singapore and building close relationships with customers and partners by strengthening the sales system there," K-Line explained.

The company said that it also signed long-term, time-charter contracts for multiple vessels with Malaysian LNG producer Petronas, which "recognized our service quality and ship management" expertise.

South Korea holds ceremony for LNG bunker ship 'Blue Whale'

South Korea has held a ceremony for the formal hand-over of a new liquefied natural gas bunkering vessel equipped with Korean-designed and constructed cargo storage systems.

The "Blue Whale" ship was constructed at the Hyundai Heavy Industries shipyard in the southern port city of Ulsan, where the ceremony took place.

Cost

"The vessel cost 55.3 billion won (\$41.7 million) and is the first vessel equipped with the Korean type KC-2 cargo storage design," said a statement from the South Korean Ministry of Trade, Industry and Energy.

The country developed its initial LNG cargo storage technolo-

gies from 2004 to 2014, called KC-1, and several vessels adopted that system, though it never made a commercial breakthrough.

"Based on that, it launched a project in 2017 to upgrade the KC-1 system to come up with the advanced KC-2 tank design," added the statement.

"The 'Blue Whale' will be able to provide 7,500 cubic metres of LNG fuel directly to vessels, compared with an average of 30 cubic metres of LNG carried by a bunkering truck," it stated.

The Ministry described the construction of the "Blue Whale" as an achievement by the shipbuilding industry of 20 years of work on LNG storage issues.

Two different designs were ini-

tially developed for LNG containment tanks for vessels, the Moss design and the membrane-type tank system using thin, flexible membranes supported only by the insulated hull structure.

Other ship and tank designs also emerged, including the KC-1 design from Korea Gas Corp. and backed by three Korean shipyards but was never taken up outside Korea. The system has now been upgraded and improved and is the KC-2 system used in the "Blue Whale".

The Moss design was first commercial storage design taken up in 1971 and is well known by its independent spherical tanks that often have the top half exposed on LNG carriers.

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NEWS BRIEFS

Africa project progress

Kosmos Energy, the developer with UK major BP of the Mauritania and Senegal floating LNG project and natural gas hub, said phase one of the venture called the Greater Tortue Ahmeyim project continued to make good progress. "First gas is targeted at the end of 2023 with continued progress across the four major work streams," said Dallas, Texas-based Kosmos. "Hub construction work is complete and activity is focused on progressing the final commissioning for hand-over to operations around the end of the second quarter of 2023," Kosmos explained.

East Med FLNG plans

NewMed Energy, the Israeli natural gas company and LNG project developer in the East Mediterranean and currently considering a 50 percent stake sale to UK major BP and Abu Dhabi National Oil Company, said BP and ADNOC were now carrying out a due diligence review of NewMed and its assets. With respect to the expansion plan for the Leviathan gas field offshore Israel, NewMed said there were continuing pre-engineering work and discussions taking place.

China ship passed

French LNG storage technology firm GTT has obtained approval from French classification society Bureau Veritas for the design of an LNG-powered, dual-fuel Very Large Crude Carrier in China. The Bureau Veritas approval in principle is part of a joint development project with Shanghai Waigaiqiao Shipyard. "The flexibility offered by this new (Mark III) 10,000 cubic metres capacity fuel tank allows ship-owners and charterers to make round trips between the Middle East, Asia, and Europe with a single LNG bunkering operation," added GTT.

Germany's RWE lukewarm on LNG as profits fall on gas-fired power as Essen-based utility feeds on green dream

LNG News Editor

RWE AG, the German utility with an LNG floating import facility at Brunsbüttel on the Elbe River, reported a drop in net income as it shut its last nuclear plant in Germany but still relies on coal to replace Russian energy supplies while renewables earnings have fallen.

RWE reported net income for the first quarter of €1.59 billion, down from €2.16Bln in the same three months of 2022.

However, on an adjusted basis RWE said gross earnings increased to €2.3Bln compared €251M in the same quarter last year at the start of the Ukraine crisis.

External revenues, excluding taxes, advanced to €9.41Bln in the January-to-March period, up from €7.99Bln in the same quarter last year.

The Essen-based utility's power generation total dropped during the quarter to 37,196 gigawatt hours from 39,366 GWh in the same quarter last year.

Power generation from non-renewables came to a total of 25,266 GWh versus 11,834 GWh from wind and solar.

Gas-fired power

Gas-fired power generation fell to 10,458 GWh from 12,232 GWh in the prior-year quarter.

Power from brown coal (lignite) generated 10,839 GWh, hard coal 1,906 GWh and nuclear 2,063 GWh.

RWE's LNG activities are part of its Supply and Trading division, one of the company's four core businesses with Offshore Wind, Onshore Wind and Solar and the Hydro-electric, biomass and gases unit.

Supply and Trading earnings in the quarter plunged more than 64 percent to €298M from €837 in the 2022 quarter.

The Brunsbüttel FLNG terminal comprises the floating storage and



FLNG terminal wasn't mentioned in RWE earnings review

regasification unit, the "Höegh Gannet", to send natural gas into the German gas grid.

Analysts said RWE remained lukewarm on LNG like other German utilities where management lacks realism as they have to pay lip-service to the German Greens movement and its anti-Americanism at the expense of shareholders.

"The Supply and Trading adjusted EBITDA reflects an excellent trading performance. This figure is markedly up on 2022 as the previous year's figure includes an €847M impairment recognised for Russian hard coal supply contracts," RWE explained.

Hydro, biomass and gas-fired power generated earnings were highest at €1.03Bln and coal and nuclear earnings in the quarter surged to €452M from €180M in the first quarter of 2022.

Lame renewables

The two renewables units combined brought in €425M, down on the €491M of earnings in the same period of 2022.

While RWE is still involved in coal and nuclear, these are regarded by management as a "non-core" business and primarily consist of German electricity generation from coal and nuclear fuel as well as brown coal production in the Rhenish mining region to the west of Cologne.

RWE still holds a 30 percent stake in the Dutch nuclear power

plant operator EPZ and coal and nuclear activities are now overseen by RWE Power.

Quarterly highlights included RWE acquiring the Magnum gas-fired power station in the Netherlands from Vattenfall.

The facility has been in operation since 2013, and has a net capacity of 1.4 GW.

"It is considered to be one of the most modern power stations in the Netherlands and the preliminary purchase price was €443M," RWE said.

Last N-plant shut

After the quarter, RWE's last nuclear plant was taken off the grid.

"On 15 April, our last German nuclear power station went offline. The Emsland plant near Lingen (Lower Saxony) had a net capacity of 1,336 MW and had been used to securely produce zero-carbon electricity since 1988," said the utility.

"It was one of three German nuclear power plants that was still online in 2023," RWE said.

The assets should have been decommissioned at the end of last year with the German nuclear phase-out but were kept online to meet Germany's winter energy needs.

RWE also issued two green bonds totalling €1Bln to "improve its fiscal headroom" for green growth investments.

Italian gas grid and terminals owner SNAM reports drop in demand and more LNG

LNG News Editor

SNAM, the Italian natural gas grid and LNG terminals operator, said gas demand in Italy in the first quarter dropped by 19.4 percent to 20.54 billion cubic metres compared with 25.47 Bcm at the same time a year ago even as more LNG cargoes were unloaded at the Panigaglia onshore terminal near Genoa and Italy's fourth terminal was starting operations at the end of May.

"In the first quarter, 0.88 Bcm of LNG were regasified at the LNG terminal in Panigaglia, versus 0.13 Bcm in the first quarter of 2022 with 21 tankers unloaded compared with 3 tankers unloaded in the first quarter of 2022," SNAM said.

"There was an increase in the volume of LNG regasified in Italy and a consequent increase in the number of ships unloaded, mainly due to the impact on the gas market of the war between Russia and Ukraine which led to an increase in the demand for LNG to meet domestic demand," SNAM explained.

SNAM is commissioning Italy's newest and fourth LNG import terminal at the Port of Piombino in Tuscany.



Panigaglia terminal near Genoa had 21 cargo deliveries

SNAM has deployed the 154,950 cubic metres capacity floating storage and regasification unit (FSRU) "Golar Tundra" at Piombino and begun commissioning procedures with a cargo delivery made on May 5.

Start-up

The new FLNG terminal will start its commercial operations at the end of the month and will make available 2 Bcm of gas this year and around 5 Bcm next year.

With reference to the FSRU terminal at Piombino, SNAM said in its first-quarter earnings on May 11 that at the end of the procedure for the first allocation of regasification capacity for a 20-year

period between 2023-2024 and 2043-2044, more than 95 percent of the capacity was allocated for multi-year periods of which 86 percent was for the entire 20-year period.

"The excellent result achieved will allow more natural gas to be fed into the national transportation network, thereby contributing substantially to the diversification of supplies and the security of the national energy system," SNAM stated.

In its earnings numbers, SNAM's first-quarter revenues increased almost 13 percent to €912 million from €808M in the same three months of last year.

SNAM's adjusted net profits in

the quarter fell by 7.4 percent to €301M from €325M.

Gas storage

The Milan-based company said that overall storage capacity managed by the Snam Group as of the end of March, including strategic storage, amounted to 16.5 Bcm, the highest level in Europe in this period.

Natural gas held by the SNAM storage subsidiary Stogit amounted to around 5.4 Bcm, plus 4.5 Bcm of strategic storage, with a fill rate at the end of March of approximately 60 percent.

SNAM said the outlook for the rest of the year was still characterised by "deep uncertainty and volatility" with SNAM still committed to an investment programme to ensure greater energy security and diversification of the country's supplies.

"The most recent estimates on the evolution in natural gas demand in Italy for 2023 are in line with 2022, influenced by the mild weather conditions recorded in the recent winter and the continuation of an uncertain situation on energy prices and industrial consumption," SNAM concluded.

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Shell wins landmark Nigeria spill ruling

Shell, Europe's largest oil and gas major and LNG market player, has won a landmark ruling from the Supreme Court of the United Kingdom against claims over an oil spill in Nigeria where Shell is still a shareholder in Nigerian oil and gas assets and the LNG plant.

The five UK Supreme Court judges unanimously rejected an appeal over an oil spill that happened in 2011, upholding prior rulings that claims were not made before a legal deadline and that the effects were not ongoing.

The Nigerian claimants had argued that there was huge impact from a leak at the Bonga oilfield which released 40,000 barrels of crude into the Gulf of Guinea.

Shell had argued that the spill was "swiftly contained" while the claimants had sought to overturn rulings from two lower courts, arguing that the oil spill constituted a "continuing nuisance" to this day.

The Appellants comprised some 42,500 people who are citizens of Nigeria and inhabitants of the areas allegedly affected by oil leaks from pipelines and associated infrastructure.

The Supreme Court declared that the leak was a "one-off event" in a judgment which does not affect a separate legal action against Shell over other spillages.

"The claimants' argument that there is a continuing nuisance, because on the assumed facts oil is still present on their land and has not been removed or cleaned up, is rejected," said Judge Andrew Burrows.

Saudi Aramco reports fall in profits and domestic natural gas advances

LNG News Editor

Saudi Arabian Oil Company (Saudi Aramco), the largest oil exporter, reported lower first-quarter net income while free cash flow from operating activities edged higher and advances were made on more domestic natural gas production as a Saudi strategic priority.

Aramco reported net income of \$31.87 billion in the first three months of 2023, down almost 18.7 percent from 39.47Bln in the same quarter of last year.

Cash flow

Free quarterly cash flow amounted to \$30.89Bln versus \$30.62Bln in the 2022 quarter.

That was after Aramco reported record 2022 profits of \$110.0Bln, well above the \$49.1Bln reported in 2020 and record cash flow from operating activities in 2022 of \$186.2Bln.

The Dhahran-based company, which is managed by the leader of the 23-nation OPEC+ group of oil producers, the Kingdom of Saudi Arabia, added that an extraordinary general assembly had approved a bonus shares grant of one bonus share for every 10



Aramco has made associated natural gas strategic priority

shares held. Aramco said it remained focused on creating shareholder value across business cycles and the company declared a cash dividend of 73.2 billion Saudi riyals (\$19.5Bln) for the first quarter.

Aramco sells about 60 percent of its crude shipments to Asia, most of them under long-term contract pricing which is reviewed each month.

China, Japan, South Korea and India are the biggest buyers of Saudi crude and analysts said that the still impressive results showed global demand was still substantial despite global economic challenges and OPEC production cuts.

Aramco said its average first-quarter realized crude oil price

was \$81.0 per barrel compared with \$97.7 per barrel in the same three months of 2022.

"Our growth strategy remains on track and we made significant progress on the strategic expansion of our Downstream business during the quarter, announcing a key acquisition in the US as well as important investments and partnerships in China and South Korea," said Aramco President and Chief Executive Amin H. Nasser.

Aramco said that meeting the growing domestic natural gas demands remained a strategic priority for Aramco and the company said it successfully advanced multiple natural gas projects during the quarter.

Pipeline natural gas player Denmark signs pact with LNG importer Sweden

Denmark and Sweden, whose electricity systems have been interconnected for more than 100 years, have signed a natural gas supply agreement to be implemented in case of emergencies with the Danes pledging to supply Swedish essential services with gas.

The Nordic nations have entered into a "solidarity agreement" on gas supplies signed by the Director General of the Swedish Energy Agency, Robert Andrén, and the Director of the Energy Agency of Denmark, Kristoffer Böttzauw.

"The agreement will come into force if an emergency situation

arises, where the energy crisis escalates and gas shortages occur in the coming winters," said a statement.

Critical

"In that case, Denmark will contribute to securing the supply of the protected customers in Sweden. This applies, for example, to households, hospitals, emergency services and other critical functions," according to the agreement.

While Sweden is a small-scale LNG importer of around 400,000 tonnes per annum for bunkering fuel and other uses, Denmark has the key pipeline links to North Sea

natural gas supplies.

Andrén, the Sweden's Energy Agency head, explained that their energy systems were complex and connected to several countries.

"The agreement shows the strength of international cooperation, especially for security of supply, where the benefits of cooperation are obvious," added Andrén.

The backbone of the regional gas infrastructure is the Danish transmission system, which transport natural gas from the North Sea to distribution networks on land.

5th anniversary Power Play AWARDS

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The 2023 Power Play Awards are here!

The fifth annual Power Play Awards are now accepting nominations. Let's celebrate the accomplishments of the remarkable women and men in the LNG industry who uphold the importance of supporting and empowering others in the workplace.

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Given to a professional who displays outstanding leadership

The Pioneer

Awarded to an LNG champion demonstrating outstanding business, innovation and/or technology contribution

Join us in recognizing the individuals who fan the flames of progress. **Nominations are open through June 9.**

We encourage you to submit your nominations for the Rising Star, Ambassador and Pioneer awards.



LNG

ExxonMobil

Tellurian gives update of engineering and site work as well as aims for Lake Charles plant

LNG News Editor

Tellurian Inc., the developer of the Driftwood liquefied natural gas LNG export plant near Lake Charles in Louisiana, has given an update of engineering work being carried out by Bechtel Energy and costs per tonne of LNG.

“Driftwood LNG development activities have already seen substantially completed all critical Phase I owner’s projects, including the re-location of a pipeline relocation and highway and road widening,” said Tellurian in a first-quarter report and presentation update.

Bechtel progress

Tellurian noted that Driftwood construction was underway with US engineers, Bechtel Energy, having started in April 2022.

“Bechtel cleared all Phase I critical areas, drove percent of Phase I piles and poured plant 1 compressor foundations,” said Tellurian.

“The advanced site work de-risks the project and provides ac-



Driftwood LNG construction underway managed by Bechtel

celeration options upon full notice to proceed,” stated Tellurian.

“Bechtel has completed demolition of all existing land structures, cleared or backfilled all critical Phase I areas, driven over 30 percent of all Phase I piles and completed foundation work for Plant 1 compressors,” explained Tellurian.

“Upcoming Bechtel activities include completing the piling for Plant 1 and the LNG tanks and to continue to pour foundations while constructing the marine offloading

facilities,” added the company.

Tellurian reported other multiple landmarks in the first quarter of 2023, saying it had invested or received commitments for \$2 billion for the over plant construction which is set to cost \$9Bln.

Engineering, procurement and construction costs were given as \$815 per tonne of LNG and capital costs as \$1,100 per tonne of LNG.

The company reiterated that it had also received approval from the Federal Energy Regulatory Commission for the Driftwood Line

200 and Line 300 pipelines with “more cost-efficient and environmentally-friendly” options.

The Houston, Texas-based company forecasts that its Upstream unit will have 2023 average natural gas production of between 180 million cubic feet per day to 190 MMcf per day.

Tellurian added that said the Line 200 and Line 300 pipelines would be capable of delivering up to 550 billion cubic feet of natural gas per annum which is the required volumes to meet production capacity of 11 million tonnes per annum in the first phase for two liquefaction Trains.

“For a full development plan comprising five liquefaction Trains the feed-gas requirement would be 1,380 Bcf per annum,” stated Tellurian.

Tellurian said it produced 19.3 Bcf of natural gas for the first quarter to the end of March 2023 compared with 6.1 Bcf for the same period of 2022.

US pipeline company Williams posts profits jump from record gas-gathering and contracted capacity

Williams, the US pipelines company and growing LNG sector participant, reported a surge in first-quarter net profits and cash flow from record natural gas-gathering volumes and contracted capacity.

The Tulsa, Oklahoma-based company reported a 144 percent jump in net income to \$926 million, or \$0.76 per diluted share, from the £379M logged in the first three months of 2022.

Cash flow from operations increased by 40 percent to \$1.514 billion from \$1.08Bln in the same quarter last year.

Williams handles about one third of transported US natural gas and operates 33,000 miles of pipelines, including the nation’s largest, the Transcontinental Gas

Pipeline (Transco). Williams said its assets and projects are expected to drive additional growth of the business in 2023 and beyond.

Louisiana Gateway

These include the Williams gas-gathering Louisiana Energy Gateway Expansion (LEG) project that will gather 1.8 billion cubic feet per day of natural gas produced in the Haynesville basin for delivery to premium markets, including the Transco pipeline and the expanding LNG export demand along the Gulf Coast.

The project is expected to go into service in late 2024 while Williams also intends to create opportunities to pursue additional market access projects as well as to develop carbon-capture and

storage infrastructure that will further decarbonize the natural gas value chain.

Williams has said it was committed to incorporating emerging technologies to deliver the next generation of natural gas, offering an “infrastructure solution” that integrates real-time emissions monitoring and emissions-reduction strategies.

The company said growth would also come from the closed acquisition of MountainWest natural gas transmission and storage business and the bringing into service of the Taggart discovery in Deepwater Gulf of Mexico.

Williams also pointed to the Haynesville shale Springridge expansion and the Marcellus shale-gathering expansion in Southwest

Appalachia. “Williams experienced record natural gas gathering volumes and contracted capacity in the first quarter, driving higher earnings across all four core business segments with adjusted EBITDA up nearly 20 percent,” said Alan Armstrong, President and Chief Executive.

Core businesses

The core businesses are Transmission & Gulf of Mexico, Northeast Gathering and Processing (G&P), the West energy unit and Gas and Natural Gas Liquids Marketing Services.

“These results proved without question that our core business is performing as designed amid volatile price cycles,” explained Armstrong.

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Air Products to supply LNG technology and equipment to electric-driven plant in China

LNG News Editor

Air Products, the leading liquefied natural gas equipment-maker and industrial gases company, said it was chosen to supply process technology and equipment to an electric-driven LNG liquefaction plant in China, its second infrastructure order in a week after the Port Arthur project award in Texas.

The LeHigh Valley, Pennsylvania-based company was chosen to supply the equipment by European engineering firm Technip Energies, which is constructing a plant for Shaanxi LNG Reserves and Logistics Company in Shaanxi Province in China.

The Air Products technology will enable a liquefaction Train to produce 800,000 tonnes per year of LNG when the plant becomes operational.

Under the agreement, Air Products will supply its AP-SMR™ LNG Process technology, with proven performance for mid-scale LNG production, as well as the engineering, design and manufacturing of the coil-wound main cryogenic heat exchanger



Air Products LNG equipment being loaded at Florida factory

for the liquefaction section of the plant.

Advisory services

Air Products said it would also provide technical advisory services for the installation and commissioning and performance testing when operational.

"This will be the largest liquefaction unit worldwide to date using a single electric motor-driven mixed refrigerant compressor, which will enable low-carbon LNG production to help meet the growing demand for clean energy," explained Air Products.

The LNG produced will be distributed to the Chinese market for

use in residential and industrial applications. "Air Products is honored to be selected for this project and again work with Technip Energies to provide our unrivalled liquefaction process technology and equipment to the dynamic Chinese mid-scale LNG market," said Samir J. Serhan, the Chief Operating Officer at Air Products.

The Chinese venture is the fourth mid-sized liquefaction Train placement in China for Air Products with the most recent being for the Yangling LNG project, which also uses Air Products' AP-SMR LNG Process technology and coil-wound heat exchanger.

The LNG equipment will be

built at the US company's Port Manatee manufacturing facility in Florida.

Texas venture

Air Products announced earlier in May that it signed an agreement to supply LNG technology and equipment for the Port Arthur project in Texas being developed by Semptra Infrastructure.

Air Products signed an accord with US engineering company Bechtel Energy to provide its process technology, equipment and advisory services to the Port Arthur facility in Jefferson County in Texas.

The Port Arthur venture is fully permitted and is designed to include two natural gas liquefaction Trains, two LNG storage tanks and associated facilities with a nameplate capacity of around 13 million tonnes per annum.

Air Products will also manufacture the equipment at its facility in Port Manatee in Florida.

It will consist of two main cryogenic heat-exchangers for its AP-C3MR LNG process technology.

Pennsylvania company maintains leadership role in LNG technology and posts \$3.2Bln of sales

Air Products, the LNG equipment-maker and industrial gases company with several mega-projects in the Middle East and Asia, boosted its orders backlog with four new liquefied natural gas orders and remains the world leader in the sector.

Air Products, which also has a growing presence in the industrial gases and new energies sectors, reported fiscal second-quarter sales up 9 percent to \$3.2 billion compared with \$2.94Bln in the same three months of 2022.

However, the company's net income declined by 16 percent on the quarter to \$494.9 million from \$536.8M in the prior-year quarter.

Adjusted gross earnings rose by 13 percent to \$1.15Bln in the

quarter. "The company signed four LNG process technology and equipment agreements during the quarter, including with US engineers Bechtel Energy, for Semptra Infrastructure's Port Arthur LNG Phase 1 Project in Jefferson County in Texas," said the earnings statement.

China deal

A second deal was signed with European engineering firm Technip Energies for the Xi'an LNG Emergency Reserve and Peak Regulation Project in Shaanxi Province in China.

"Our team successfully drove pricing and volumes in our base business, delivering critical productivity, efficiency and sustain-

ability benefits for our customers," said Seifi Ghasemi, Chairman, President and Chief Executive.

"The team also continued to advance our first-mover clean hydrogen mega projects that will decarbonize heavy transportation and industrial sectors globally," he added.

"I am proud of the continued achievements of our team who delivered outstanding results despite the ongoing economic and geopolitical challenges in the world," Ghasemi stated.

The LeHigh Valley, Pennsylvania-based company, has among its key projects the \$12 billion gasification and power joint venture

with Saudi Aramco, ACWA Power and the US firm's Saudi unit, Air Products Qudra, in the Jazan Economic City in Saudi Arabia.

Jazan project

"We completed Jazan Phase II in January 2023, which began contributing to equity affiliates' income during the second quarter," said Air Products in listing its quarterly highlights.

"We issued inaugural green bonds in \$600M and €700M debt offerings, making Air Products the first US chemical company to qualify green and blue hydrogen projects as an eligible expenditure category," the company added.



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A handwritten signature in black ink, likely belonging to Jill Evanko.

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