Energy Monthly News

November, 2021

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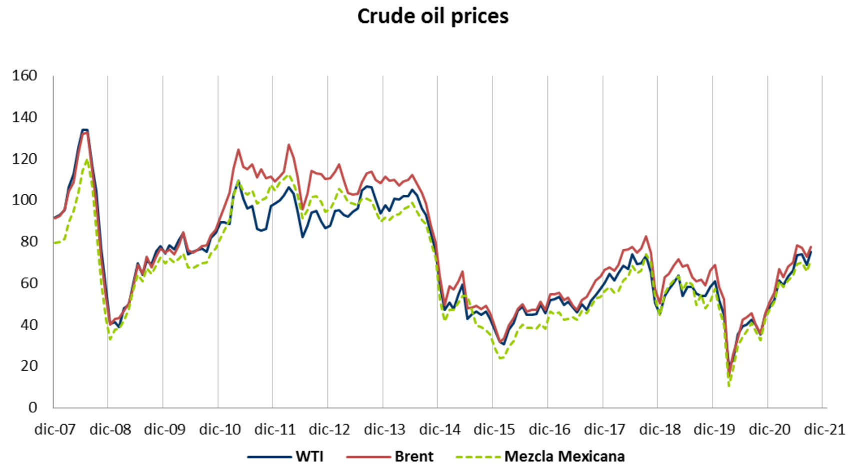
This month in review

** 24/11/2021* ***26/11/2021*

Crude oil price MME US/BD	77.47
NG price HH* US/MMBTU	5.7
Mx crude production MMbd – *October*	1.74
Mx NG production MMpcd – *October*	4,635
US crude production MMbd - *August*	11.30
FX Rate**	20.32



Source: EIA. El Reforma, Pemex, Banxico, and CNH

Oil & Gas - Mexico

Lukoil makes a new oil discovery at block 12 in – *Lukoil Press Release*

Lukoil announces discovery of an oil field within the Yoti West structure at Block 12 offshore Mexico. The field was discovered after drilling the first exploration well. According to preliminary estimates, the initial oil in place reaches 250 million barrels.

The Yoti West-1 EXP well was drilled 60 km offshore from the Valaris 8505 semi-submersible platform. An assessment plan for the Yoti West field is planned to be developed based on drilling results. In 2017, Lukoil obtained the right for exploration and production of hydrocarbons at Block 12 in the Gulf of Mexico. The Block has an area of 521 km. The stakeholders are Lukoil – 60% (project operator), and Eni – 40%. The resource base of the Block is currently being assessed based on drilling results.

Pemex launches tenders for pipeline work – *Bnamericas*

Pemex has launched two tenders, one involving the construction of onshore pipelines and a second to establish maintenance administration for its undersea pipeline network.

The first tender is to contract a company to carry out the engineering, procurement and construction of onshore pipelines for the transportation of hydrocarbons both in the northern and southern regions of the country for PEP. Opening of bids and presentations will take place December 27 with results announced January 18.

With the second tender, Pemex seeks to contract a company to manage the integrity and reliability program for the transportation of hydrocarbons via marine pipelines owned by the state company. "The supplier shall manage the integrity and reliability of the hydrocarbon transportation system through marine pipelines that comprise the Abkatun-Pol-Chuc, Ku-Maloob-Zaap and Cantarell to the Tabasco coastline and northern assets," according to PEP. Opening of bids and presentations will take place January 3 with results announced January 9.

CNH approves Mayacaste's O&G modification to the evaluation plan – *CNH*

CNH approves Mayacaste's Oil & Gas modification to the Evaluation Program in contract CNH-R01-L03-A13/2015. It has a total area of 21,867 km² and is located in Comalcalco, Tabasco. The modification is made by a variation in the number of wells to be drilled. The operator will carry out four major repairs, three minor repairs, two PVT tests, and 318 core studies. The investment program proposed in the modification amounts to USD $7.77 million, the main activity being the drilling of wells, with 86.76% of the programmed cost.

Pemex gets green light to spud Xanab exploratory well – *CNH*

Pemex has been cleared to spud a new exploratory well in the Xanab field for total investment of USD $98.8 million (USD $71.5 million on spudding and USD $27.3 million on completion). The field is located in the offshore portion of the firm's AE-151-M-Uchukil assignment.

Drilling of the well is set to start September 25 and run to February 3, 2022, while completion is scheduled from February 4 to April 4 next year. Crude produced at the Xanab field reached 90,919b/d on average in July, the second month of declines since hitting a 2021 peak in May of 93,237b/d. Meanwhile, average daily natural gas production came to 82,726boe/d, lower than the 84,221boe/d in June.

Fieldwood and Petrobal start production in Ichalkil and Pokoch – *Fieldwood Press Release*

Fieldwood and its partner Petrobal, began production in Ichalkil and Pokoch fields, located in shallow waters off the coast of Campeche. In this first part of the project, Fieldwood and Petrobal, have invested USD $1,200 million. Disbursements were focused on the exploration, development, construction and reconditioning of the infrastructure required to achieve production from the fields. It is expected that between 2021 and 2041, this project will recover a total of 455 million barrels of crude oil and 567,000 million cubic feet of gas.

Fieldwood and its partner Petrobal expects to reach 8,000 barrels per day of crude by the end of the year; a platform that could reach up to 40,000 barrels per day.

Pemex to invest USD $104 million to develop the Bedel field – *CNH*

CNH authorized Pemex to modify the development plan for the assignment A-0045-M-Campo Bedel. The assignment located in the state of Veracruz has an area of 22.79 km², currently has 20 drilled wells. The Bedel field is in the fourth stage of production with an extraction rate of 6.24 thousand barrels of oil and 5.13 million of gas. With the modification, the operator plans to drill 5 wells, 1 major repair, 531 minor repairs, the construction of a pipeline and infrastructure and expects to recover 11.39 million barrels and 11.19 billion cubic feet of gas. Pemex will make a total investment of USD 104.95 million.

AMLO announces investment in coquizadora de Tula – *El Economista*

AMLO announced the investment of $60 bn pesos in the construction of a coker plant in the refinery of Tula to supply the fuels demanded by the domestic market and, together with the production of the six existing refineries, the new one in Dos Bocas and bought from Shell in Texas to stop importing gasoline in 2023.

Pemex regaining sales to gasoline stations on government moves to stifle competition – *S&P Global Platts*

Retail fuel station owners in Mexico who over the past few years opted for alternative suppliers to Pemex are slowly going back to the state company, as government permitting and compliance measures have begun to hurt their ability to compete, according to market participants and observers. The government has increased inspections of import facilities as it continues President AMLO quest to reduce competition to Pemex and has so far suspended import permits held by Trafigura and Windstar. The inspections are being conducted by the Energy Regulatory Commission, or CRE, together with law enforcement and the tax authority SAT. Recently, the government suspended activities of the reception terminal operated by Glencore in the port of Dos Bocas, Tabasco state, according to a person close to the situation.
"Glencore has continued to supply the market with imports from another terminal in the neighbor state of Veracruz and purchases from Pemex," the source said.

The Dos Bocas region is one of the areas in the country with the highest number of service stations that have decided to leave Pemex, according to data from PetroIntelligence a provider of local retail prices and intelligence. "The high level of migration is partly explained by the presence of Glencore's terminal. Before, Pemex was the only supplier," Montufar Helu, PetroIntelligence CEO said. The strategy from the government, which officially is aimed at reducing fuel contraband and tax evasion, does not include only supervising large import terminals. Increased inspections have occurred in transloading facilities along Mexico's railway system and at the border with the United States.

The increased government intervention in recent months has resulted in a 50% reduction in the total amount of delivery terminals for fuels, Kansas City Southern said in October during its Q3 call with analysts. Most recently, the government has begun limiting the distribution of fuels through trucks, requiring terminals to only service distributors who show transportation permits for individual tank trucks, which most of the distributors do not have, said one importer.

CNH approved to Pemex to spud Actul-1EXP and Tlacame-101 wells – *CNH*

CNH approved Pemex's proposal to spud the Actul-1EXP exploratory well, part of the AE-0135-M-Cuichapa designation. Pemex will invest USD $11 in total on a program of around two and a half months, beginning on Nov. 26. In addition, Pemex asked CNH to approve plans regarding the spudding of the Tlacame-101 exploratory well, located in Tabasco's Uchukil assignment. Pemex aims to invest USD $43.6 million in order to find 11MMboe of prospective resources.

Hard questions at Deer Park go unanswered – *George Baker*

DEER PARK -- Guy Hackwell, the manager of the Shell-operated refinery here, has worked for Royal Dutch Shell for 30 years. His employment at Shell may come to end in fewer than two weeks. "As of December 1st, I will no longer be a Shell employee," he recently told residents and officials of this city of 35,000 southeast of Houston. "I will be a Pemex employee."

Shell expects regulatory approval by November 29 from the Committee on Foreign Investment in the United States. In three recent public meetings (one online), Hackwell said the handover of operations from Shell to Pemex has already begun. He assured residents that the jobs of Shell's 900 refinery workers are safe and the emergency response team would be transferred to Pemex along with the refinery. "There will be job gains, as new positions will be created to meet the needs of two companies," he added.

But Hackwell left unanswered many critical questions, skirting them when pressed by residents, reporters, and me: How realistic is it to imagine that all of the refinery's output could be sent to Mexico, as Mexico's president, Andrés Manuel López Obrador, says he wants?

What evidence is there that Pemex is qualified to operate the refinery? Pemex was merely an observer of refinery operations in Deer Park. In Mexico, Pemex's refineries operate on average at less than half their capacity.

The refinery has reported losses of $360 million this year. What is the outlook for profitability? Would the U.S. company set up by Pemex be able to cover the costs of a major safety or environmental incident? When the time comes for the decommissioning of the refinery and environmental remediation, who will be financially responsible for a possible billion-dollar expense?

Such questions were also raised in Mexico following the out-of-the-blue announcement by AMLO in late May. And it's disheartening that elected politicians, business leaders and community activists are not demanding answers to these and other hard questions before this deal gets approval from the Committee on Foreign Investment in the United States and goes through. Consider:

AMLO has a record of hands-on involvement in executive appointments and procurement. Marcos Herrería, the number 2 executive in Pemex, is an in-law of the president. It would be naïve to suppose that AMLO would not appoint his people to jobs in Deer Park and replace local contractors with his favorites. Having Pemex as the full owner of the refinery would increase Mexico's energy security, AMLO asserts. Specialists tell me that refineries serve markets with the best margins--not countries, and Deer Park as a refinery dedicated to Mexico makes no economic sense.

CFE outlines USD $4.5bn initiative to boost natgas use in Baja, Yucatán – *Bnamericas*

CFE is once again looking to back projects to supply natural gas and generate energy with private partners in the geographically isolated Yucatán and Baja California peninsulas. CFE has earmarked USD $4.5bn in investments to increase natural gas supply from 120Mf3/d (million cubic feet per day) to 400Mf3/d in the Yucatán, in an agreement made with energy ministry Sener and federal gas authority Cenagas.

A presidential decree issue ordered regulators and other entities to provide automatic provisional authorization on any procedure tied to “priority and strategic” projects in Mexico. The wording of the CFE statement suggests that officials are looking to advance on the perennially discussed gas supply and gas-to-power projects and cut through red tape keeping them on the back-burner for years.

The move also comes just weeks after tenders on the 1.5GW Mérida plant failed to attract bidders, leaving momentum on the project in decline.

New infrastructure “will allow the CFE to transport natural gas from the southern basins of the US to the Yucatán Peninsula, supplying both existing and new plants in Mérida and Valladolid, as well as the new trans-Isthmus gas pipeline, and providing redundancy and operational flexibility to the Dos Bocas [Olmeca] refinery in Dos Bocas, Tabasco,” CFE stated. In the Baja California Peninsula, generation capacity with low emissions has been strengthened thanks to a contract to supply up to 20Mf3d of natural gas.

CFE awards USD $900 million tender for hydro modernization – *Bnamericas*

CFE has awarded a $18.5bn-peso (USD $890 million) contract for the first batch of hydroelectric plants to be modernized under a plan to overhaul the firm’s entire hydro generation park.

The winning bid was submitted by a consortium comprising local firms Generadores Mexicanos (Genermex), Sistemas de Energía Internacional and Hydroproject de México, and Austria’s Andritz. The winning group will be responsible for modernizing nine of CFE’s 60 hydroelectric power plants, all of them built between 1960 and 1995. The list includes several of the company’s biggest dams.

The units are the 600MW Caracol plant in Guerrero state, the 90MW Adolfo López Mateo plant in Sinaloa (also known as Humaya), the 220MW La Soledad plant in Puebla (also known as Mazatepec), the 1,120MW Infiernillo and the 300MW La Villita plants, both straddling Michoacán and Guerrero, the 420MW Peñitas, the 900MW La Angostura (also known as Belisario Domínguez) and the 1,080MW Malpaso (also known as Nezahualcóyotl) dams in Chiapas, and the 292MW Zimapán plant (also known as Fernando Hiriart Balderrama) straddling Hidalgo and Querétaro states. Contracts will be signed on November 30, CFE said, while the calendar shows works are expected to start by the end of 2021 and finish in December of 2026 at the latest, varying widely according to the specific project.

GM flags concern over renewable energy in Mexico, sees investment risk – *Reuters*

General Motors raised concern about the future of renewable energy usage in Mexico, saying that without a solid legal basis for it, automotive investment in Latin America's no. 2 economy would suffer. Francisco Garza, chief executive of GM Mexico, spoke as debate rages over a Mexican government proposal to give priority to the state-run power utility in the electricity market at the expense of private investors, particularly in renewable energy.

GM, which has been one of the top investors in Mexico since the start of the North American Free Trade Agreement in 1994, earlier this year, said it planned to invest $1 billion to build electric vehicles in the northern state of Coahuila. After Garza spoke, GM Mexico spokesperson Teresa Cid told Reuters that GM was "at no time threatening" not to make the investments it had pledged for Mexico. "GM must meet its (zero emissions) vision and we must follow that path," she said. "So that's where the risk would be."

1.5GW combined cycle project in Mexico receives no bids – *Bnamericas*

CFE did not receive bids from private players to build two large-scale combined cycle power plants in Yucatán state. According to the company's tender management, 69 companies, including Siemens, General Electric and Abengoa, signed up for bidding. But the minutes of the technical bid opening ceremony show that offers were not submitted. The tender's timeline also shows CFE extended the schedule to receive offers by one day each on October 25, 26, 27 and for seven days on October 28. Óscar Ocampo, energy coordinator at local competition think tank IMCO, told BNamericas a combination of a lack of transparency regarding the resources CFE will use to pay for the power plants and an unrealistic construction schedule were likely contributing to the lack of investor interest in the tender.

As a package, Mérida and Valladolid form the largest combined-cycle project in CFE's near-term pipeline, with combined installed capacity of 1,546MW split into a 1,037MW plant (Valladolid) and a 509MW one (Mérida). Total investment was estimated last year at USD $1bn. Operation of the plants was originally expected to start in November 2023 for the open cycle and in September 2024 for the full combined cycle, according to the tender documents. Ocampo said the master trust fund CFE is using to pay for the plants was highly opaque and the strategy it will use to acquire enough financing for the six combined-cyle units resources should be used for. The fund was created with present and future profits of affiliate company CFEnergía and capital accumulated by the company through its Fibra E trading instrument.

The construction tender was launched together with that of four other large-scale combined cycle projects that were to make up the brunt of CFE's installed capacity growth over the next three years. These are the 327MW Baja California Sur and 1,086MW Tuxpan phase I (whose bids will be opened on November 30), the 680MW San Luis Río Colorado (bids due January 12), and the 205MW González Ortega, which received bids on November 10 and should be awarded on November 30.

Mexico bill puts $22 bn in clean energy contracts at risk – *Bloomberg*

Mexico President AMLO's proposed electricity reform could derail more than $22 billion of solar, wind and other renewable-energy installations owned by major foreign companies such as Iberdrola SA and Sempra Energy. The bill proposed to lawmakers would cancel some electricity-generation permits granted to foreign operators and give priority to the aging hydro, nuclear and natural gas-fired plants run by state-owned power utility CFE. Wind and solar projects would be pushed toward the bottom of the list, beating out only gas- and coal-fired generation from non-state providers. The bill seeks a constitutional guarantee that CFE holds 54% of the market compared with 38% currently.

Although non-state companies would maintain as much as 46% of the electricity market under the proposal, current contracts are expected to be reviewed. As much as 15,000 megawatts of clean-energy generation are at stake and $22 billion of renewable projects.

Company	Country of Origin	Capacity (MW)*	Investment ($M)**
Iberdrola SA	Spain	1,336	956.2
Enel SpA	Italy	1,163	3,515.8
Sempra Energy	U.S.	987	1,692.7
Acciona SA	Spain	926	2,191.7
State Power Investment Corp Ltd	China	807	1,136.5
Caisse de Depot et Placement du Quebec	Canada	742	N/A
CKD Infraestructura Mexico SA	Mexico	713	N/A
Abdullatif Latife Jameel Group LLC	Saudi Arabia	638	282.0
Heolios EnTG (ENGIE-Tokyo Gas JV)	France-Japan	410	243.5
Energia Eolica del Sur	Mexico	396	N/A
Impala 1 SNC	France	375	330.0
Cubico Sustainable Investments Ltd	UK	369	227.5
Electricite de France SA	France	349	321.6
Others (143 companies)	N/A	5,707	11,180.4
Total	**N/A**	**14,918**	**22,077.8**

** Capacity as of November 2021 **Companies' share of publicly disclosed investment, does not include non-disclosed financing.*

Oil & Gas - LATAM

Argentina-to-Chile oil pipeline to start in 2022, boosting Vaca Muerta exports – *S&P Global Platts*

A pipeline for delivering up to 100,000 b/d of crude oil from Neuquen, the largest source of crude in Argentina, to Chile is poised to start operations next year, boosting expectations of an increase in crude exports as production rises in the Vaca Muerta shale play, Neuquen Governor Omar Gutierrez said. The Transandean Pipeline, "will be operational next year, according to the information that we have," Gutierrez said. A project to refurbish the pipeline after 16 years of disuse has started.

The pipeline revamp has been on the cards for several years, as rising output from Vaca Muerta uses up existing pipeline capacity to deliver supplies to the domestic market and to ports on the Atlantic coast for export.

On Jan. 26 this year, Argentina and Chile reached a deal to refurbish the Transandean Pipeline. The state oil companies of Argentina and Chile, YPF and ENAP, respectively, built the pipeline in the 1990s to supply the Bio Bio oil refinery to the south of Santiago from fields in Neuquen. But flows stopped on the 100,000 b/d line in 2006 as production declined in Argentina from a peak of more than 840,000 b/d in the late 1990s to less than 450,000 b/d in 2020, leaving it in need of refurbishing to restart deliveries. With production recovering in Argentina, led by the development of Vaca Muerta, companies have been looking for new outlets for the crude beyond the domestic market, and the Transandean has gained attention because it can be used to sell to the Asian market. Argentina already supplies all of its 450,000 b/d to 510,000 b/d of demand, meaning that for production to continue growing then infrastructure must be built to widen exports.

Three firms competing for Petrobras' well stimulation contract – *Bnamericas*

Baker, Halliburton and Schlumberger are participating in a Petrobras tender to contract well stimulation services.

The process includes chartering well stimulation vessels (WSSVs) and chemical products. The auction is public, but Petrobras has not yet published the details of the commercial offers made by the suppliers. However, Baker submitted the lowest prices in the four lots of the tender, according to the source. In lot A, the company's bid was 932 million reais (USD $166 million) with the Blue Marlin vessel, compared with Halliburton and Schlumberger's bids of 1.22bn reais and 1.31bn reais with the Stim Star Brasil (pictured) and Kudu WSSVs, respectively.

The same bids and vessels were offered in lot B. In Lot C, Baker Hughes submitted 859 million real and 866 million real bids with the Blue Orca and Blue Angel vessels, respectively, followed by Schlumberger (1.3bn reais/Kudu). The same bids and vessels were offered in lot D.

Baker, Halliburton and Schlumberger are also competing for a contract involving well construction at Petrobras' Búzios field, in the Santos basin pre-salt. The oil company's procurement website Petronect states that Halliburton and Schlumberger offered 1.5bn reais and 1.6bn reais, respectively, in lot A and 840 million reais and 917 million reais in lot B. Baker's bid has not been disclosed.

Petrobras discovers hydrocarbons in latest Santos Basin well – *Offshore Energy*

Petrobras has identified the presence of hydrocarbons in the Santos Basin pre-salt, in a pioneer well in the Aram block off Brazil. The well 1-BRSA-1381-SPS (Curaçao) is located 240 km from the city of Santos-SP. According to Petrobras', the oil-bearing interval was verified through wireline logging and fluid samples, which will be further characterized through laboratory analysis. This data will allow evaluating the potential and directing the next exploratory activities in the area.

The Aram block was acquired in March 2020, in the 6th Bidding Round of the National Agency for Petroleum, Natural Gas and Biofuels, under the Production Sharing regime, with Pre-Sal Petróleo as manager. Petrobras is the operator of the block and holds an 80% share, in partnership with CNODC 20%.

Petrobras to sell shale refinery to F&M Resources for USD $33 million – *Offshore Technology*

Petrobras has signed a contract to divest Shale Industrialization Unit “Six” to Canada’s Forbes & Manhattan Resources (F&M Resources) for USD $33million.

The sale price includes USD $3 million as a guarantee, which has been paid. The remaining USD $30 will be paid at closing, subject to certain adjustments. The contract also anticipates contingent payments. SIX will be the third refinery to be sold under a divestment strategy, which aims to sell a total of eight refineries.

Located in the city of São Mateus do Sul in Paraná state, SIX has 5,800t per day of shale processing capacity. It focuses on the production of LPG, fuel oil, fuel gas, naphtha, and sulphur. The sale is contingent on precedent conditions, including approval by the National Agency of Petroleum, Natural Gas and Biofuels and the Administrative Council for Economic Defense.