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EGYPT OIL&GAS NEWSPAPER

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Egypt's Unrealized Potential: Underused Refineries

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Editor's **Note**

As Egypt gets ready for the Economic Summit in Sharm El-Sheikh this March, the industry has witnessed a lot of action this February with the ministry signing for the import of new LNG shipments from Vitol and Noble Group and EGAS announcing their new bid round.

This month, Egypt Oil & Gas delves into the specifics of Production Sharing Agreements (PSAs) with a three-parts special file on the agreement model.
We also take a closer look at the downstream sector, investigating Egypt's refineries and the reasons to why they are not utilizing their full capacities.

On a more sensitive topic, this issue we try to explore further the possibilities of Egypt importing natural gas from Israel in an ironic reversal of fortunes, and discuss how that might be one of the country's best available options.

Our political review addresses the Middle East's ongoing concern: the Islamic State. We try to understand how the Caliphate finances its operations and what role does oil really play in that.

Last but not least, this month we also have an article by PWC and a case study by one of SUCO's very own, Mr. Saber Selim.

Your feedback and comments are always a delight; please do not hesitate to contact us at any time.

Enjoy.

Editor in Chief **Passante Adel**
padel@egyptoil-gas.com

Prices

Bullion Market

GOLD	SILVER
1196 USD/BBL	16.26 USD/BBL
-6.26%	-5.41%

Oil Prices

BRENT	CRUDE
58.83 USD/BBL	49.15 USD/BBL
9.92%	-1.14%

EGYPT OIL&GAS NEWSPAPER

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Fitch Upgrades Egypt to a 'B' IDR Rating for Subsidy Reform and Low Oil Prices

Fitch Ratings announced that Egypt's subsidy reforms and low oil prices contributed to the recent upgrading of the country's credit rating to 'B', reported The Cairo Post. In December, Fitch Ratings boosted Egypt's long-term foreign and local currency issuer default ratings (IDR) to a more promising 'B', as compared to its former 'B-'. Fitch stated that the fall in oil prices narrowed the gap between the ratings of energy exporters and importers in the MENA region.

Apache to Stay in Egypt

Apache Corporation no longer plans to sell some of its businesses in Egypt and the North Sea. The sales had originally been considered as a measure to generate cash thanks to the slump in the international oil market. "Clearly in this price environment it would not make sense to monetize them as they complement things very nicely; so at this point, there are no plans to sell or spin them," Reuters reported CEO John Christmann as saying. However, the executive did add that Apache is considering a possible sale of its non-LNG assets in Australia.

Dana Gas Hosts Several Events in February

Dana Gas has played a vital role in the Egyptian energy sector this February by sponsoring and hosting an array of events. The Emirati company hosted an informal networking business dinner in Katameya Heights Club House late this February. The event was attended by key figures and chairmen of the oil and gas industry and banking sector. Dana Gas has also sponsored a number of events recently organized by the American Chamber of Commerce. The first of which was an event on "The Suez Canal Area Development Project: Master Plan – Nearly Accomplished," while the second event addressed the topic of education with guest speaker H.E. Dr. Mahmoud Abul Nasr, Minister of Education. The last event organized by the American Chamber of Commerce and sponsored by Dana Gas in February was about the reasons for investing in Egypt with guest speakers Mr. Muhtar Kent, Chairman of the Board and CEO of Coca-Cola. He was accompanied by H.E. Khaled Hanafy, Minister of Supply and Internal Trade.

Egypt, Cyprus Sign MOU for Gas Pipeline and Imports

Egyptian Minister of Petroleum Sherif Ismail signed a memorandum of understanding (MOU) with Cyprus to import and develop natural gas discoveries in the next six months. The MOU represents the beginning of cooperation between the two countries concerning natural gas imports. The price of the imported gas remains subject to negotiation between EGAS and Cyprus CHC Company during the six month period. The deal allows for both parties "to examine technical solutions for transporting natural gas, through a direct marine pipeline, from the Aphrodite field to Egypt," reported AFP. The Aphrodite field, first discovered by US firm Noble Energy in 2011, is thought to contain between 102-170 bcm of natural gas.

Kuwait Invests $6.8 billion in Egyptian Energy Projects

Egypt signed agreements worth $6.8 billion for petrochemical projects with Kuwaiti companies. The projects are expected to begin in three to five years, said Egyptian Prime Minister Ibrahim Mahlab. Egypt plans to invest $14.5 billion in its petrochemical sectors over the next five years, reported Reuters, with Kuwaiti companies including Egypt Kuwait Holding Company, Kuwait Gateway Holdings and Boubyan Petrochemical Co. The country has been propped up by billions of dollars of aid from Persian Gulf states since Egyptian President Abdel Fattah El-Sisi was elected this past June.

Egypt Signs Nuclear Power Plant Deal with Russia

Egyptian President Abdel Fattah El-Sisi and Russia's Vladimir Putin announced an agreement for the construction of a nuclear power plant, reported official state paper Al Ahram. With increasing energy demand, Egypt is attempting to explore alternatives for power generation besides natural gas. The power plant is part of a larger collaboration between the two countries, as agreed in president Putin´s two-day visit to Egypt. Once decisions are finalized, construction of the power plant will begin, said Putin at a press conference. Since the ouster of former president Mohamed Morsi, Egypt's relations with the United States have been strained. Putin's visit to Egypt is part of a larger effort to strengthen ties with Russia. "The cooperation never ended and never will end," Al Ahram reported El-Sisi saying. "We see in Russia a strategic friend and a real asset to balanced foreign relations for Egypt," he finished. Egyptian-Russian cooperation aims to extend beyond the energy sector and into the fields of education, security and tourism. Putin's visit follows his last one in 2005.

Petroleum Ministry to Announce 12 New Projects at the Egypt Economic Development Conference

The Ministry of Petroleum will announce the development of 12 projects in the upcoming Egypt Economic Development Conference (EEDC) scheduled for March, reported Youm7. The projects aim to establish oil processing companies, high-octane gasoline production units, biofuel production from rice straw, and others. Two major projects include a $4.1 billion refining petrochemicals deal and nearly $2 billion in crude products and mineral wealth projects. The Minister of Tourism Hisham Zaazou also announced future projects of $690 million, intended to revive the country's sluggish tourism industry. The Egyptian government is receiving a total of $10 billion from other state governments such as Saudi Arabia, Kuwait and the United Arab Emirates.

Egypt Finalizes Deal for 33 LNG Shipments from Trafigura

Egypt finalized a deal with Trafigura for 33 LNG shipments in efforts to meet the country's increasing power demand. The agreement resulted from a $2.2 billion tender launched by Egypt's EGAS to secure 75 LNG cargoes from international investors. Interfax Global Energy reported that Abhishek Kumar, an energy and modelling analyst, said the deal shows flexibility in the supplier's portfolio regarding fuel sourcing. "Egypt is making full use of oil-indexed LNG contracts in the low oil-price environment," continued Kumar. "The country is securing supplies to make use of the full capacity of their FSRU – which is expected to be installed by the end of the first quarter of 2015 – this year and next." However, EGAS is aware of the risks behind long-term supply contracts due to oil price volatility, he finished.

EGAS: Production Not Expected to Increase in 2015-16

Gas production in fiscal year (FY) 2015/2016 will not increase said a senior official at EGAS, reported Daily News Egypt, adding that maximum production will be 5 bcf/d, just below the average for FY 2014/2015. He explained that foreign companies postponed linking several new wells to production, waiting for re-pricing with the Egyptian government. He also said that the cost of drilling declined by roughly 50% as a result of the current lower rates for drilling rigs. This was the result of slow demand abroad. The number of wells to be drilled annually declined thanks to the drop in international raw material prices. Projects from international firms that have been postponed would have increased production in Egypt by about 1 bcf/d. As a consequence, most oil companies working in Egypt are linking wells to make up for the decline; versus increasing production. The official added that gas consumption of other sectors is expected to rise to 3 bcf/d. This is compared to the 2.7 bcf/d required during FY 2014/2015. The EGAS official expected gas exports to halt completely next summer given that average consumption of power plants during FY 2015/2016 is expected to be about 3.5 bcf/d, compared to 3.2bcf/d during this current year.

EGAS

StoryBoard

BG Increased Production in Fourth Quarter of 2014 from West Delta Deep Marine

BG Group's Egyptian oil and gas production increased to 68,000 boe/d during the fourth quarter of 2014, up from the previous two quarters, reported Penn Energy. This was chiefly thanks to the impact of new wells from the West Delta Deep Marine Phase 9a development in the Mediterranean Sea. However, the figures are still 33% below the production seen in the fourth quarter of 2013. While eight of the nine Phase 9a wells are now onstream, this will only temporarily offset E&P declines for BG in Egypt.

EBRD Loans $28 million to Egyptian Oil Services Company

The European Bank for Reconstruction and Development (EBRD) announced in a press release that it will provide a $28 million loan to Advanced Energy Systems SAE (ADES), an independent Egyptian oil services company. This loan is intended to support a company that applies the best environmental, health and safety (EHS) standards in the local oil and gas industry - through certification to international ISO and OHSAS standards - and help to address the shortage of drilling equipment in Egypt. Riccardo Puliti, EBRD Managing Director, Energy and National Resources, said: "We are very proud to sign this package with ADES today. The combination of financing and policy dialogue will allow us to improve people's lives in Egypt by minimizing energy shortages and raising environmental standards." Dr Mohamed Farouk, CEO of ADES said, "The enhancement within ADES of EHS processes and corporate governance will be central to these plans and will have a positive impact on the market performance and competitiveness of ADES." The loan will be complemented by a comprehensive policy dialogue program to insure the adoption of these standards across the wider oil and gas sector in Egypt. The introduction of offshore drilling equipment is also intended to help boost domestic natural gas production.

Naftogaz Expands Production, Plans to Build New Energy Infrastructure in Egypt

Naftogaz Ukrainy increased oil production in Alam El Shawish East in Egypt's Western Desert by 11.5% (by 200,000 barrels) in 2014, compared to 1.9 million in 2013, reported Hellenic Shipping News. According to the Ukrainian state holding company's data, total oil production in Egypt since the beginning of the company's work in 2009 has exceeded 5.3 million barrels. Since its launch in September 2014, gas production has amounted to 50.9 mcm. The company has also drilled 42 wells in Egypt; 30 of which are in production (24 oil and six gas condensate wells), and another is being tested. As of January 1, 2015, the holding is operating 18 wells – 14 oil and four gas condensate - and has commissioned six new wells in 2014. It has also developed deposits, commissioned six new wells in 2014 and built 14 gas pipelines 37.5 km long that have allowed them to increase the extraction of natural gas to the amount of 400,000 cm/d, and gas condensate to 600 b/d. Naftogaz plans to complete building new infrastructure and new pipelines in 2015 to link the remaining productive wells to reach a new production level of 7,000 barrels of oil and 700,000 cm/d of gas per day.

Egypt Joins Eurasian Free Trade Zone, Expands Energy Cooperation with Russia

Egypt has joined the Eurasian Economic Union, a Russian-led free trade zone which includes Russia, Armenia, Belarus, and Kazakhstan, reported Russia Today. President Abdel Fattah El-Sisi of Egypt announced the decision at a joint news conference with Russian President Vladimir Putin. "We have reached an agreement to establish a free trade zone between Egypt and the Eurasian Economic Union," the Egyptian President said. There was already over $4.5 billion of trade between Russia and Egypt in 2014, which represents an increase of more than 80% from the year before, said president Putin. Russian businesses have stakes in more than 400 Egyptian companies. Russia and Egypt will also work jointly on new investment projects, especially in transport, manufacturing, and energy – both oil and nuclear. The two countries also agreed to create a Russian industrial zone near the Suez Canal.

Energy Sector a Major Focus of March Summit

Half the projects Egypt will propose at the March investment summit in Sharm el-Sheikh will be in the energy sector, said the Egyptian Minister of International Cooperation Naglaa El Ahwany, reported Trade Arabia. Egypt's energy sector has seen an increase in foreign investment in past months thanks to the country's willingness to push forward fuel subsidy reforms and maintain an aggressive debt repayment plan. At the same time Ahwany said the government did not want the energy sector to divert attention from other potential investment opportunities such as transport, agriculture, and transforming the Suez Canal into a logistics hub. "Energy is very important, but we would also like to diversify the investments in the country," she said. She declined to specify how many projects would be presented, or the dollar amount of investment that Egypt hoped to attract. "The main objective of this conference is to send a strong message to the whole world that Egypt is back," she explained.

Shuffling of Positions in Egypt's Petroleum Sector

The Egyptian Minister of Petroleum and Mineral Resources, Sherif Ismail, announced in a press release the following promotions and transfers for Egypt's petroleum companies: Osama Elbakly, EGAS Vice Chairman for Production and Field Development, has been made Chairman of Agiba Petroleum Company; Mohamed Abdel Fattah, Chairman of the General Petroleum Company, has been made EGAS Vice Chairman for Production and Fields Development; Tahir Al-Zafzaf, BAPETCO's Assistant Chairman for Exploration, has been made Chairman of EGPC; Mohamed Al-Masri, Chairman of Rashpetco, has become EGAS Vice Chairman for Operations and Networks; Hisham Al-Attar, Chairman of Mansoura Petroleum, has been made Chairman of BAPETCO; Hassan Ahmed, General Manager for Exploration at GUPCO, has been made Chairman of Mansoura Petroleum; Sabri Sharqawi, Chairman of the Pharaonic Petroleum Company, has become Chairman of El Wastani Petroleum Company; Hassan Abadi, Chairman Assistant for Borollos Projects at Rashpetco, has become Chairman of the Pharaonic Petroleum Company; Adel Ali Fahmy, Chairman Assistant for Exploration at Petrobel, has become Chairman of Gemsa Petroleum; Hanafi Hussein Khabir, EGAS Vice Chairman for Production and Field Development, has become Chairman of Petrosannan.

CHOICE Words

If we can reach final terms [on nuclear power plant], then we can create a new sector in the Egyptian economy based on the construction of the plant, the training of technical staff and development of scientific research

Vladimir Putin
Russian President

I agreed with the Russian President [Putin] that the terrorism challenge Egypt is facing knows no borders

Abdel Fattah Al-Sisi
President

Eni plans to increase its investments in Egypt in the next phase. The company believes in the promising opportunities in the Egyptian economy

Claudio Descalzi
Eni CEO

Egypt's stability is an important element in the stability of the countries overlooking the Mediterranean Sea

Sedki Sobhi
Defense Minister

CARTOON

Egypt News

Petroleum Minister Holds Meeting with Oil Leaders in Egypt

The Minister of Petroleum and Mineral Resources in Egypt, Sherif Ismail, hosted a meeting with the heads of various oil companies to speak about progress made so far in the current challenging circumstances, the government announced in a press release. Dr. Sherif Susa, the First Undersecretary for Gas Affairs at the Egypt Petroleum Ministry, attended the meeting, along with Tarek Al Mulla, Chief Executive of EGPC, Chairman of EGAS Khaled Abdel Badie, Mohamed Saafan, Chairman of ECHEM, and Abu Bakr Ibrahim, Chairman of GANOPE. During the meeting the minister presented solutions to the obstacles facing the petroleum sector, highlighting things such as efforts to increase crude oil and natural gas production as well as the steps being taken to resolve the growing gap between rates of production and consumption. Ismail urged companies to be vigilant in their respective fields and to communicate constantly with their foreign partners to follow-up with projects that are being implemented and to make sure that they finish on time. The meeting also covered the challenge of upgrading basic infrastructure such as pipelines, storage tanks, and refineries. He also reaffirmed the need to stay up to speed with debt payments. Minister Ismail added that oil companies should look into alternative forms of energy such as solar; and invest in solar energy power stations in Egypt. Finally, the minister also called on firms to pay attention to the mid and lower level employees and cultivate the most promising among them for leadership positions.

Egypt Made 14 Oil Discoveries in 2014

Egypt struck 14 major oil discoveries in the Mediterranean Sea and Nile Delta in 2014, according to EGAS Chairman Khaled Abd El-Badie. The discoveries also added 3 tcf to the country's natural gas reserves as the pressure to meet growing domestic demand increases. Another nine new projects started production in 2014 with $500 million invested, and 10 other projects are scheduled to start production in fiscal year 2014-2015, reported Zawya. Furthermore, EGAS finished four high pressure natural gas pipelines to power its energy stations and extend the national network of natural gas pipelines to 37,000 km long. The new discoveries aim to boost production rates and compensate for the decrease in well productivity. They are also expected to help close the gap between production and consumption.

Noble Group To Supply 7 LNG Shipments to Egypt Over 2 Year Contract

The Oil Ministry of Egypt announced that Hong Kong-based Noble Group signed a deal to supply the country with 7 LNG shipments over the next two years, reported Reuters. The shipments are intended to alleviate the country's current energy woes as decades of increasing demand and declining production are straining infrastructure. The deal is scheduled to begin in April. This effort to bolster the national supply follows previous agreements with Algeria's Sonatrech for six LNG shipments and with Trafigura for 33. The president of EGAS, tasked with managing natural gas deals in the country, said that more deals would be announced soon as a result of a recent public tender.

BG Defers Decision on Linking Wells Until 2016

British Gas (BG) has deferred a decision about linking two 9A wells for production to 2016 instead of this year, reported Daily News Egypt. The planned linking is expected to add approximately 150 mcf/d. A senior official at EGAS clarified that they will be linked in mid 2016 with the wells of phase 9B. He added that BG deferred linking the two wells for production until next year, till the decision on the new price of oil currently being negotiated with the Egyptian government is implemented. EGAS chairman Khaled Abdel Badie also noted that the plan agreed to by the Ministry of Petroleum and BG originally intended for the phase 9A wells to be linked and ready for production by October 2014 at the latest. BG had linked one of the 9A stage wells for production in January, he added. However, foreign firms have delayed readying several wells for production, he explained, as the cost of drilling had declined by nearly 50% as a result of the current decrease of rental rates for drilling rigs. An EGAS official explained that the rental rates of drilling rigs decreased thanks to weak demand in other countries. The number of wells drilled annually has declined, corresponding with the global drop of oil prices.

Ex-Minister Acquitted over Corruption Charges

Former Minister of Petroleum of Egypt Sameh Fahmi and five co-defendants were acquitted of a 15 year prison sentence in a Mubarak-era corruption case, reported Daily News Egypt. Fahmi was accused of squandering public funds and exporting gas to Israel at prices below standard market-rates. The six defendants appealed their sentence and were granted a retrial after being tried on grounds of costing Egypt over $714 million in revenue losses through the "unfair contractual conditions," Daily News Egypt wrote. Fahmi's acquittal is one out of a series of high profile acquittals of Mubarak-era cronies. Others include former president Hosni Mubarak, former Interior Minister Habib Al-Adly, former Prime Minister Ahmed Shafiq, and others. All have been acquitted in recent retrials.

EGAS Signs Contract With Vitol for 9 LNG Shipments over 2 Years

EGAS has signed a two-year deal with the Swiss-based company Vitol to import nine LNG cargoes starting in June, reported The Cairo Post. "The deal with Vitol comes in light of the bid offered [by EGAS] for providing part of natural gas supplies needed to run power plants in preparation for the coming summer," said EGAS chairman Khaled Abdel Badie in a ministry statement. The energy-starved nation of Egypt has recently signed other LNG import deals in an attempt to alleviate strain on its national infrastructure. This announcement comes on the heels of a similar agreement the ministry recently agreed upon with Hong Kong-based Noble Group. Noble promised deliveries of seven LNG shipments. These shipments will start in April, and have a duration of two years. The chairmen of EGAS and Vitol signed the deal with Minister of Petroleum Sherif Ismail in attendance, along with other top ministry officials.

Drilling News

AGIBA Drills New Well

AGIBA, a joint venture company between EGPC and IEOC, has completed drilling a new oil-development well in its concession area in the Western Desert. The production rate of AGIBA was 1,905,644 barrels of oil in January 2015.

MEL-91
The new well was drilled at a depth of 6,300 ft. utilizing the PDI-92 rig. Investments surrounding the project are estimated to be $1 million.

QARUN Drills New Well

QARUN, a joint venture company between EGPC and Apache, has completed drilling two new oil-development wells in its concession area in the Western Desert. The production rate of Qarun was 1,185,360 barrels of oil in January 2015.

K-17
The new well was drilled at a depth of 8,220ft. utilizing the EDC-49 rig. Investments surrounding the project are estimated at $1.262 million.

WON C-30
The new well was drilled at a depth of 8,840ft. utilizing the EDC-63 rig. Investments surrounding the project are estimated at $1.254 million.

SUCO Drills New Well

SUCO, a joint venture between EGPC and RWE Dea, has completed drilling a new oil-exploration well in its concession area in the Delta. The production rate of SUCO was 459,341 barrels of oil in January 2015.

SSSE 3-1
The new well was drilled at a depth of 9,255ft. utilizing the RDI-94 rig. Investments surrounding the project are estimated at $3.122 million.

KHALDA Drills New Well

KHALDA, a joint venture company between EGPC and Apache, has completed drilling two new oil-development wells in its concession area in the Western Desert. The production rate of Khalda was 4,256,276 barrels of oil in January 2015.

OLYMPIC-1X
The new well was drilled at a depth of 11,260ft. utilizing the ST-10 rig. Investments surrounding the project are estimated at $2.953 million.

TUT-111
The new well was drilled at a depth of 12,970ft. utilizing the EDC-11 rig. Investments surrounding the project are estimated at $1.949 million.

BAPETCO Drills New Well

BAPETCO, a joint venture company between EGPC and Shell, has completed drilling two new oil-development wells in its concession area in the Western Desert. The production rate of BAPETCO was 1,232,757 barrels of oil in January 2015.

QADR-1A
The new well was drilled at a depth of 4,659ft. utilizing the EDC-72 rig. Investments surrounding the project are estimated at $1.509 million.

AL FADL IAG
The new well was drilled at a depth of 4,855ft. utilizing the EDC-72 rig. Investments surrounding the project are estimated at $1 million.

PETROSILAH Drills New Well

PETROSILAH, a joint venture between EGPC and MERLON, has recently completed drilling a new oil-developmental well in their concession area in the Western Desert. The production rate of PETROSILAH was 204,253 barrels of oil in January 2015.

WARD 1-1
The well was drilled at the depth of 8,650ft. utilizing the TANMIA-1. Investments surrounding the project are estimated at $2.520 million.

PETROBEL Drills New Well

PETROBEL, a joint venture between EGPC and ENI, has recently completed drilling a new oil-development well in their concession area in Sinai. The production rate of PETROBEL was 3,331,257 barrels of oil in January 2015.

BLS-16
The well was drilled at the depth of 10,785ft. utilizing the WF-797. Investments surrounding the project are estimated at 2.726 million.

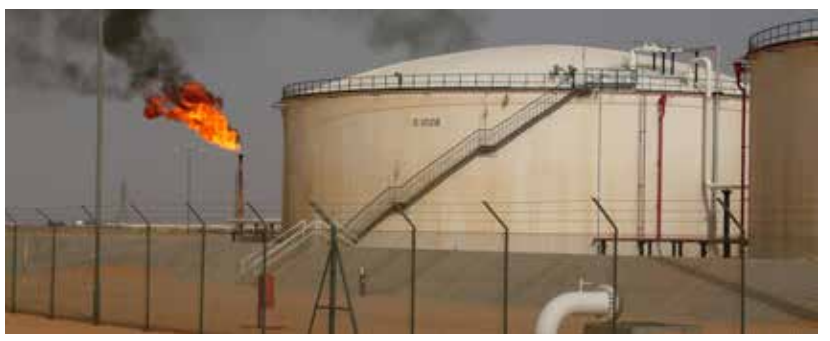
Low Oil Prices Affect Italy's Eni

Eni made the list of big energy companies to be hit by crumbling oil prices, experiencing a 33% drop in operating profits late last year. Operating profit fell 33.8% to €2.3 billion during the same period a year prior, surpassing analysts' expectations of €1.9 billion, reported the Financial Times. The Italian oil group plans to reduce spending in a move that follows other major oil companies. Eni's Chief Executive Claudio Descalzi revealed plans for significant cuts of 10-13% to take place at an industry-wide level for 2015. "In the context of lower oil prices, in 2015 Eni's management plans to implement capital project optimization and rescheduling which will reduce expenditure compared to the 2014 levels," said Descalzi. Capital spending in 2014 was €12.2 billion, already 5% lower than the year before.

Spain's Gas Natural Fenosa Annual Profit Misses Forecast

Spanish utility Gas Natural Fenosa saw a 1.2% rise in full-year net profit, despite pressure stemming from new regulatory measures. A power generation tax and subsidy cuts are part of a larger industry overhaul and have increased costs for Fenosa. Even though core profit was 0.1% higher than expected, the company's net profit was €1.46 billion, slightly lower than analysts expectations of €1.53 billion. A significant portion of Gas Natural's gains came from the sale of its telecoms arms, as well as reducing the accounting value of its Damietta Gas Plain in Egypt by €485 million, reported Reuters. Despite the impact of tighter regulation of the gas industry in Spain, the company seeks to strengthen its international operations, which account for 45% of its core profit.

Gunmen Storm Oil Field in Libya



Gunmen stormed Libya's secluded Al-Mabrook oilfield, killing 12 people, among them two Filipino and two Ghanaian nationals, reported Reuters. Partially owned by France's Total, the Al-Mabrook oilfield lies 105 miles south of Sirte on the Mediterranean. A French diplomat and a Libyan official have accused the Islamic State militants as being responsible for the attack. The attack of Al-Mabrook follows the assault on a hotel in Tripoli that resulted in nine casualties, including five foreigners. Due to violence and instability in the region, Total had already evacuated staff from the site in 2013. Consequently, Al-Mabrook, which used to produce 40,000 barrels a day, closed in December due to clashes between the recognized government of Abdullah Al-Thinni and Islamist militants. Both fronts have been fighting for control of Libya´s biggest oil ports, Es Sider and Ras Lanuf, on the Mediterranean coast, wrote Reuters. The identity of the assailants remains contested as government officials in Tripoli denied the claim that Islamists are responsible for the attack and have opted to blame "Gaddafi loyalists."

Weather, Maintenance Shut Down Algerian LNG Plant

Algeria's Skikda plant was shuttered in early February as rough weather battered the area and ships were unable to dock safely, reported Reuters. The plant has also shut down a major LNG processing unit (capable of 4.7 million tonnes-per-year) for scheduled maintenance. The maintenance might take up to two months to complete. "The oil port is closed for bad weather, but also because the LNG unit has been shut down for maintenance, which started about two weeks ago, and will last two months," said a source at state-owned energy company Sonatrach. The plant is situated on the Algerian coast and is a major gas supplier to Europe, with most of its exports going to Spain, Italy, and France. According to another shipping source, stormy seas have recently also prevented tankers from operating from the Algerian port of Arzew.

Algeria Signs Equipment Manufacture Memorandum With GE

Sonatrech and GE signed an MOU to start a joint venture manufacturing equipment for the oil and gas sector, TradeArabia reported. The Algerian government relies heavily on the oil and gas sector; earning 60% of the state budget from industry revenues. Government-owned Sonatrech has invested 51% in the tool and equipment project, with GE retaining the remaining 49% stake. Hydrocarbons account for nearly 95% of national exports in the country.

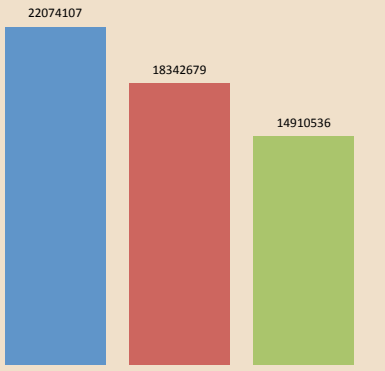
Reggane Nord Starts Drilling for Algerian Natural Gas

The Groupement Reggane-Nord (GRN) partnership has started drilling at a large gas development project in the Algerian Sahara, with 26 initial wells planned for the first drilling phase, reported Oil and Gas Technology. Drilling for the first development well was started at the end of January, with a KCA Deutag Rig T-211, and gas is expected to be produced from the well by the summer of 2017. "We are delighted to reach this next stage in the project, after detailed preparation work with all partners over recent months," said Christoph Schlichter, Senior Vice President of Production in North Africa of RWE Dea AG. "We are looking forward to a successful drilling campaign. The expected reserves of the project will make a significant contribution to the growth of Dea's gas production in the years to come. That is why we are pleased that the project is in time for start of production in summer 2017," he added. Once production starts, the timeline is planned to continue for over 25 years. The GRN partners include RWE Dea AG, Sonatrech, Repsol, and Edison. The concession area includes the gas fields of Reggane, Azrafil, Sud-Est, Kahlouche, Kahlouche Sud, Tiouliline, and Sali.

Mediterranean STATISTICS

Production (barrel)

Oil		
January-13	January-14	January-15
2358012	2371731	2214092
Equivalent Gas		
January-13	January-14	January-15
22074107	18342679	14910536
Condensate		
January-13	January-14	January-15
1214914	1019915	810692
Liquefied Gas		
January-13	January-14	January-15
411918	372013	308599



Mediterranean Rig Count February 2014

Total	Percentage of Total Rigs
6	5%

Ratio Wins 2-Year Exploration Contract from Malta

The Government of Malta recently awarded a concession block of approximately 8,700 square km named Offshore Area 5 to the Israeli oil company Ratio Malta Limited, reported Malta Independent. The deal was signed to authorize an exploration study agreement. The Malta Minister for Transport and Infrastructure Joe Mizzi signed the agreement with Ratio on the behalf of the Maltese government. Ratio Malta is an affiliate of Ratio Oil Exploration Limited, an E&P company based in Tel Aviv, Israel. Its Israeli operations include the offshore Leviathan gas field, the single largest gas discovery ever found in the Mediterranean Sea. The new agreement will take place over two years and will require a minimum exploration cost of $1.5 million. The first year is expected to mostly consist of reprocessing and modifying existing data to place all available information into a single geographical information system. The second year will see the company acquiring at least 1,200 km of 2D seismic data as well as gravity and magnetic data. Technical studies are also expected to be conducted to better integrate all data into one system. Ratio Malta Limited has the option to extend the agreement by an additional year if the company decides to pursue a 3D seismic survey. This new agreement is governed by Maltese law and therefore stipulates that regular meetings occur between the government and Ratio Malta Limited to review and discuss current results.

Seaway Installs PEMEX Topsides in Gulf of Mexico

Seaway Heavy Lifting successfully completed the installation of four topsides and one jacket in the Gulf of Mexico for Protexa/PEMEX, reported Offshore Mag. The first topside installed was in December 2014 and weighed 1,800 metric tons (1,984 tons). The three other topsides were lifted into place in one week, utilizing the Oleg Strashnov crane vessel. They weighed in at 2,033 metric tons (2,241 tons), 2,800 metric tons (3,086 tons), and 3,130 metric tons (3,450 tons). The jacket weighed 1,430 metric tons (1,576 tons). Seaway is a Subsea 7 joint venture and was exhibited at booth #1120 at the Topsides, Platforms & Hulls Conference & Exhibition in February. The conference was held at the Moody Gardens Hotel and Convention Center in Galveston, Texas.

Petrobras Confirms Wells to Be Drilled in Farfan Basin

Petroleo Brasileiro SA (Petrobras) announced that the drilling of a third extension well in the Farfan area in the ultra-deep-water Sergipe basin confirmed the extent of the 2013 light oil and gas discovery, reported Penn Energy. Also discovered was a shallower, 68-meter reservoir holding light oil as well. Well 3-SES-186 was drilled 103 km from the city of Aracaju, Brazil, and 10 km from the discovery well in 2,467 meters of water. The well will be drilled to 6,060 meters as part of the exploratory project in the deepwater Sergipe-Alagoas basin. Petrobras operates the consortium with IBV-Brazil, with shares respectively standing at 60% and 40%.

Faked Evidence Kills Texas Firm's $1.4 Billion Suit Against Gazprom*

Moncrief Oil International had to drop its billion-dollar lawsuit against OAO Gazprom in a Texas, Fort Worth court after lawyers with Baker Botts discovered fabricated evidence, reported Forbes. This concerned a document supposedly produced in 2004 about a proposed LNG project, yet it contained material that had been downloaded from the web from a much later date - a slide from a presentation in 2012. "You could hear either a pin drop or the lawyers scurrying to move to keep the evidence from coming in," said Baker Botts partner Van Beckwith about the courtroom scene as Moncrief's financial officer took to the witness stand. The man behind the lawsuit, R.W. 'Dick' Moncrief, is the son of noted W.A. 'Tex' Moncrief. This was the latest in a line of international lawsuits by Moncrief which left him with the $1.37 billion suit for damages in state court in Fort Worth.

Unmanned Platforms to Streamline Statoil Offshore Operations

Oil and Gas Technology reported that Statoil and its license partners have picked an unmanned wellhead platform for the Oseberg future development Phase I project in the North Sea and the choice came as the result of three concept studies of the platform. The platform has no living quarters, helicopter deck or even lifeboats, which makes it highly competitive. It is to be controlled from the Oseberg field center itself. "The alternative was to place the wells on the seabed, but the costs of subsea wells have been tripled during the last decade. We have therefore chosen a jacket-based unmanned wellhead platform that will reduce costs by several hundred million NOK," said Anders Opedal, Senior Vice President of Projects at Statoil. "Based on prognoses the costs of subsea systems are still rising. We challenge the industry to cooperate with us so we can turn this trend and develop smart solutions, both above and below water," said Ivar Aasheim, Senior Vice President of Field Development at Statoil. "The platform will have high-quality equipment to reduce the need for maintenance during the operations phase. Consequently we are planning for only two short maintenance campaigns per year, which will be carefully planned and performed in good-weather seasons," said Aasheim. The actual investment decision is expected next winter following more deliberations and tests.

Petrobras Elects New CEO, Executive Officers

As reported in Offshore Magazine, the Board of Directors for Petrobras elected Aldemir Bendine to replace outgoing Maria das Gracas Silva Foster as CEO. Additionally, the board chose Ivan de Souza Monteiro as the new CFO and Chief Investor Relations Officer. The state-owned Brazilian energy firm has been hit in recent months by a multi-billion dollar bribery scandal and an oil platform explosion that killed five workers.

InterOil Secures Arbitration Victory Over Oil Search in Papua New Guinea Dispute

According to Oil and Gas Journal, InterOil Corp. won an arbitration hearing at the International Chamber of Commerce in London in a dispute with Oil Search Ltd. over preemptive rights in the Elk-Antelope gas field in retention license PRL 15 onshore Papua New Guinea. The dispute began in February of last year when InterOil sold interest in Elk-Antelope field and proposed LNG project to France's Total SA. Total bought the InterOil subsidiary that held 40% stake in the field rather than buying the interest directly. Oil Search subsequently disputed the purchase, arguing that the deal was invalid since, as a partner with almost 23% interest in the project, it should have been able to preempt the purchase by Total. Oil Search issued a statement saying that the decision was both "nonunanimous and complex" as the court declared Total had no rights in PRL15 or the Elk-Antelope joint venture unless and until InterOil and Total comply with relevant transfer clauses with the joint operating agreement.

Emergency Declared in W. Virginia Following Oil Train Crash

15 tankers caught fire after a 109 car-long oil train derailed near a West Virginia town, causing a state of emergency to be declared in two counties, reported Bloomberg. it was Governor Earl Ray Tomblin who issued the emergency for Kanawha and Fayette counties. CSX Corp., the train's operator, worked with emergency responders at the scene in the freezing weather. By the next day 85 people had taken shelter at two locations after the fire broke out, said Lawrence Messina, a spokesman for the West Virginia Department of Military Affairs and Public Safety. Local emergency responders had initially put the number of evacuated residents at 1,000, he said. "Unfortunately the severity of the fire is such that it's been difficult to assess the situation in sufficient detail," said Messina. "We still do believe that there is oil in the water from at least one leaking tanker." "The U.S. Coast Guard is on the scene with booms to try to control the crude oil," White said by phone. The Red Cross was involved too, to facilitate precautionary evacuations. Consequently, operations were suspended at the Cedar Grove and Montgomery water-treatment plants, the company said. This followed a similar accident in Canada, when a Canadian National Railway Co. train carrying oil derailed near Gogama, Ontario. This and other incidents have caused U.S. and Canadian regulators to look into rail industry practices and propose new a set of rules to avoid further tragedies.

Husky Energy Developing Indonesia Offshore Gas Field Cluster

Husky Energy says it is pushing forward with development work on four shallow-water gas fields in the Madura Strait off the coast of Indonesia, reported Offshore Mag. Gas extraction is planned for 2017 once the wellhead platform and pipeline infrastructure, currently under construction, are fully installed. Husky has a 40% interest in the field and it was awarded a contract to build and lease an FPSO vessel to develop the BD field. Its partners in the MDA and MBH natural gas fields have likewise received government approval while a gas sales agreement is under regulatory review. Development drilling has started at the South White Rose field as well. That field is due for its first oil in mid-2015. North Amethyst is also expected to come online this summer.

FPSO-Petrobras Offshore Brazil Explosion Kills Five

Five people were killed after an explosion on the FPSO Cidade de Sao Mateu, operated by BW Offshore on behalf of Petrobras off the coast of Brazil, reported Oil and Gas Technology. Additionally, ten were injured and two remain in critical condition. "It is with deep sadness that we learned that an explosion occurred onboard the FPSO Cidade de Sao Mateus which we operate on behalf of Petrobras in Brazil," said Carl K. Arnet, CEO of BW Offshore. "Based on the latest information we have, five fatalities have been confirmed. Four of our men are still missing. All others are accounted for and receiving medical care where needed, with two in critical condition, and for safety reasons, the crew have all been taken off the unit. Next of kin are informed and crew and families are now receiving support from our local response team. Production has been stopped and the unit has been shut down. We will keep this website updated with the latest accurate information. Our thoughts and focus remain on the crew and families." All of the five fatalities were BW Offshore employees. The company had a special support team to attending to the personnel. The FPSO is in the Camarupim and Camarupim Norte fields in the Espirito Santo littoral. It is located approximately 120 km from the coastline.

Biggest Oil Workers Strike in US since 1980

The United Steelworkers, which represents 30,000 U.S. oil workers, called on four more plants to join the biggest strike since 1980 as talks dragged on with Royal Dutch Shell Plc, reported Bloomberg. The USW has members at more than 200 refineries, fuel terminals, pipelines and chemical plants across America, representing workers at plants that together account for 64% of U.S. fuel output. "The industry's refusal to meaningfully address safety issues through good faith bargaining gave us no other option but to expand our work stoppage," said USW International President Leo W. Gerard in a statement. The union said that Shell's seventh offer failed to address safety concerns in a meaningful fashion. Ray Fisher, a spokesman for the Netherlands-based Shell, said in an e-mail that Shell was "extremely disappointed" that the USW issued additional strike notices. It sets the "wrong tone" for both parties to move forward, he said. In the strike of 1980, work stopped for three months. Currently the oil sector has been under pressure thanks to the oil price slump, with increased US production contributing to a 49% fall in oil prices in the second half of 2014.

Uganda Offers Oil Bid Round, Ending a Nine-Year Hiatus

Uganda's decision to launch an oil-exploration licensing round for six blocks in its Lake Albertine Rift basin was met with enthusiasm by IOCs in the region. The bid round ends a nine-year hiatus on new licensing in Uganda's emerging energy sector, reported The Wall Street Journal. The blocks on offer show high potential, including at least four discoveries, said Energy and Minerals Minister Irene Muloni. New licenses will be issued by the end of this year. "We have an estimated 6.5 billion barrels of oil in place from exploration work in less than 40% of the Albertine Graben. However, less than 10% of the Graben is currently licensed and the six blocks targeted for this maiden licensing round have good data coverage," Ms. Muloni added. Companies will submit bids for the blocks in the upcoming three months. The decline in global crude prices is not a hamper to Uganda's efforts to commercialize its crude reserves "Low prices will not stop us from continuing with our preparations," Ms. Muloni said in a statement. "Oil prices are usually cyclical, hopefully by the time we start production, the trend will be upward." Uganda has made it to the list of top three sub-Saharan African countries with the largest reserves, behind Nigeria and Angola, with 6.5 billion barrels of crude. In past years, East Africa has attracted oil and gas exploration after an upsurge of discoveries in Uganda, Kenya and Tanzania. Analysts speculate the region could rival West Africa's spot as the continent's energy hub. "The industry has been bottled up for long, we cannot afford to lose more time" added Elly Karuhanga, country manager of the Chamber of Mines and Petroleum. "Our members are now very pleased with the government's decisions. This is very encouraging," he finished.

Gulf News

GE Oil & Gas Signs Kuwait Memorandum for R&D Collaboration

GE Oil & Gas signed a Memorandum of Understanding with the Kuwait Oil Company (KOC), reported Oil and Gas Technology. "This agreement underlines our commitment to working in true partnership to promote the development of local human capital including technical skills of young engineers," said Santana. Jeff Immelt, Chairman and CEO of GE, and Lorenzo Simonelli, president and CEO of GE Oil & Gas, were also present at the signing ceremony that took place in Florence, Italy; as well as Nizar Al-Adsani, CEO of Kuwait Petroleum Corporation. Hashem Hashem of KOC said: "As we go forward, realizing success will hinge on collaborating with local and international institutions. The parties, KOC and GE Oil & Gas, shall together promote cooperation in research and development and technology innovations, education and training and the development of KOC employees."

Total Wins Massive Abu Dhabi Concession for $2 Billion

Total's CEO Patrick Pouyanne praised the renewal of his Paris-based company's oilfield concession in Abu Dhabi. Total had exerted pressure on its rivals when it became the very first oil major to sign a deal for a 10% stake in the emirate's biggest oilfields with the Abu Dhabi National Oil Company (Adnoc). Pouyanne was asked about the rumored $2.2 billion deal. His response was: "I won't reveal the secrets of this contract. But $2 billion for 2 billion barrels, it's just $1 per barrel, that's not very expensive." The fields in Abu Dhabi produce 1.6 million b/d and are expected to reach 1.8 million b/d starting 2017, which would account for 6% of Total's output. "We didn't hesitate one second. The impact of this signature goes well beyond the price of this asset, it was widely noticed and has raised our reputation in the Middle East," Pouyanne said. ExxonMobil, Royal Dutch Shell, Total and BP each held 9.5% equity stakes in the ADCO concession, while nine Asian and Western firms bid for stakes too. A source said the oil companies did not have any indication from Adnoc on the status of their revised bids after they were asked to raise their signature bonus. "The ball is in Adnoc's court now. But in the current climate, no company would agree to pay such a high price as being reported that Total has paid," another source said.

Iran Launches World's Largest Oil Terminal

Iran launched an FSU oil terminal with the capacity to store 2.2 million barrels of oil, reported Mehr News. Called the 'Persian Gulf,' the giant tanker has started operation in the west Persian Gulf Behregan region, and is meant to store and directly export oil from nearby massive oil fields such as Nowrouz and Soroush. The tanker attracted a lump sum of $300 million for investment and utilizes the latest metering technology. Saied Hafezi, the directing manager of Offshore Oil Company, a subsidiary of NIOC, announced that "loading of oil produced in Nowrouz and Soroush oil fields into the newly inaugurated giant tanker has been started, and currently, a daily load of 70,000 barrels of crude is transferred into the tanker."

Circle Oil Expanding its MENA Gas Production

Circle Oil has agreed with KGL Investment Company (KGL) to extend its $30 million convertible loan maturity date for two years to July 2017, reported Oil and Gas Technology. The hope is that this will help their operational and financial flexibility, along with the progress they have made in exploration in North Africa and the Middle East. "Circle continues to perform well in what is a challenging environment for oil and gas companies," said Circle chairman Steve Jenkins. "This has been partially mitigated by favorable, stable gas pricing for our Moroccan gas production and the improved payment schedule in Egypt. Steady progress is being made on all our license areas which includes a continuous exploration drilling campaign in Morocco and development drilling in Egypt. Corporately, we are taking the steps needed to ensure the future growth of the business, widening and strengthening the skill set of the board and ensuring we have sufficient financial resources to allow the company to grow to its full potential." Circle is expanding and deepening its reserve base and reviewing its accounts and capital commitments as part of its plan to tackle the current period of oil price volatility. The company anticipates being able to incrementally expand its gas sales, selling both to existing and to new customers over same two year period. Circle has also announced the start-up of drilling of the Shisr-1 in Block 49 well in southern Oman.

Saudi Aramco Sets Platform Lifting Record with 7,500-ton Crane

Saudi Aramco's heavy lift barge has set a new record by lifting the heaviest oil platform ever completed by a mobile barge, reported Oil and Gas Technology. Using a 7,500-ton crane, Aramco completed lifting and fitting a tie-in that weighed around 5,000 tons. This was to complete the Arabiyah-Hasbah Offshore Gas Fields Project, meant to produce 2.5 bcf/d of natural gas through the Wasit Gas Plant. The barge Lan Jing has also completed the installation of the Arabiyah field tie-in platform (4,600 tons) and the intermediate injection platform (1,800 tons).

Unconventional News

Gazprom Neft to Start Hydraulic Fracturing in Siberia

Shale oil exploration and production has been making progress in Russia, reported PennEnergy, as JSC Gazprom Neft announced the start of shale oil production from the Bazhenov formation following tests of two wells in the southern Priobskoye field in central western Siberia. Tests are also planned for two other wells. The company has been analyzing 3D seismic data and well-core data from the Bazhenov-Abalak formation, also located in southern Priobskoye. Four directional wells are planned for the first stage. The company is also working on the Palyanovsky reserve in the Krasnoleninsky field in the Khanty-Mansiysk Autonomous Region, with one already drilled well there earmarked for multistage hydraulic fracturing.

Sinopec Invests in Shale Oil R&D

China's National Energy Administration has approved a new national shale oil research and development center for state energy group Sinopec, reported Reuters, citing the official paper China Energy News. Preliminary industry estimates say that China may hold 10-20 billion tonnes of shale oil resource, and Sinopec has been searching out central China's Qinyang and east China's Jiyang basins since 2011. Chinese oil firms have been after the oil locked in shale rock formations since the 1960s. These include the Songliao in the northeast, Turpan-Hami in the northwest and the Bohai Bay area in northern China. Sinopec Corp is also building the country's first large commercial shale gas project at Fuling in the southwest, to enjoy a planned capacity of 5 bcm of gas a year by the end of 2015 and 10 bcm in 2017.

Oil Prices Force BHP Billiton to Cut US Shale Rig Count by 40%

In response to the significant drop in oil prices, BHP Billiton announced that it will be cutting its onshore rig count in an attempt to curb costs. In an interview with Oil & Gas Financial Journal, the Anglo-Australian firm's CEO Andrew Mackenzie said that the company plans to reduce its rig count from 26 to 16 and is actively marketing its Fayetteville acreage in Arkansas. He added that the company will for now focus on the Black Hawk region of The Eagle Ford Shale formation in Texas.

Congressional Democrats Dissatisfied with State Authorities over Fracking Regulations

According to PennEnergy, Democrats in the US Congress's oversight committee are investigating whether individual states are properly regulating shale oil and gas production. The process of hydraulic fracturing, commonly known as fracking, has drawn criticism from various environmental groups. The lead Democrat for the health subcommittee, Representative Matt Cartwright, said he would be probing environmental agencies in Pennsylvania, Ohio and West Virginia in particular to see if enough inspections are taking place. Among the various public concerns, most prominent is whether the technique of hydraulic fracturing, in which high pressure water mixed with sand and chemicals is used to break up rocks rich with oil and gas, is contaminating waterways. The announcement by House Democrats comes as Pennsylvania's new Governor, Democrat Tom Wolf, reinstated a statewide ban on natural gas drilling in state parks and forests.

North Dakota Shale Oil Production Increases to Record Levels Despite Rig Drop

The US state of North Dakota set a record in the number of barrels of oil produced per day, despite a decrease in the number of rigs in operation. According to PennEnergy, the state's Mineral Resource Department released its December statistics showing that over 38 million barrels were produced, or 1.23 million b/d. The production beats the previous record of 1.19 million b/d. This is despite the fact that the number of rigs dropped from 188 in November to 181 the next month. The December statistics are the latest estimates as it usually takes two months to compile accurate production numbers.

Chevron Pulls Out of Romanian Shale Gas Exploration

US oil company Chevron decided to pull out of shale gas drilling in Romania, shortly after finishing business in Poland, Penn Energy reported. Chevron began drilling for shale gas in 2014 with exploration well I, located in northeastern Romania. In addition, the oil company also plans to end three other concessions in the country. The reasons for Chevron's departure from Romania are part of a business decision. "This project in Romania does not currently compete favorably with other investment opportunities in our global portfolio," Chevron said. The company will also cease shale gas exploration in Poland after it abandoned drilling for conventional gas in eastern Ukraine.

Partial Shutdown Planned for Second Quarter of 2015 at Indonesia BP Plant

A BP company spokesman said that the company's LNG train-2 at its Tangguh facility in Indonesia will shut down for routine maintenance in the second quarter of 2015, reported Reuters. The spokesman, however, did not provide details about when the shutdown would begin nor how long it would last. The Tangguh project produces 7.6 million tonnes of LNG a year from its two existing liquefaction trains. It is Indonesia's third LNG hub, and supplies customers in both Indonesia and abroad in South Korea, China, Japan and the United States.

BP Downstream to Use PAS inbound Alert System

PAS Inc has signed a new multi-year contract with BP Downstream for BP to use the PAS inBound, reported Oil and Gas Technology. "BP is an oil and gas leader, and we are honoured that they have chosen to expand their use of PAS alarm management products with inBound," said Mark Carrigan, Senior Vice President of Global Operations at PAS. "Automating boundary management within a plant is considered an industry best practice today. BP joins other PAS customers who utilise these advanced methods of plant safety controls." The alert system works by visualising, analysing and alerting operators on boundary data within plant operations. Boundary data includes process alarms, safety instrumented and environmental trip points, mechanical design limits, normal operating zones, and safe operating envelopes.

Russian Defense Subsidiary Wins Uganda Refinery Contact

Uganda announced that the Russian firm RT Global Resources, a subsidiary of Russian defense company Rostec, leads the consortium that was chosen to build and operate Uganda's $2.5 billion Hoima oil refinery project, reported Oil and Gas Technology. "We have confidence that we will execute the project agreements [with RT] and go ahead to develop Uganda's refinery," Irene Muloni, Uganda's Minister for Energy and Mineral Development, said in a statement. The project is located in the western part of the country near Alberta Lake and will be carried out in association with the government of Uganda that will hold 40% of the equity capital. "RT Global Resources' consortium won the tender… as a result of tough, transparent competitive struggle with global companies," said Sergey Chemezov, CEO of Rostec. "Implementation of the project will benefit in strengthening Russia and Uganda relations, and it will be a sound basis for advancing Russia's interests in all of Eastern Africa," he added.

$1.8 billion Contract for Kashagan Field Project Goes to Saipem

The North Caspian Operating Company (NCOC) awarded Saipem's subsidiary ERSAI Caspian Contractor LLC, an engineering and construction contract for the Kashagan field project, reported Oil and Gas Technology. "This is a very important contract working for some of the most important oil companies in the world in a key region for Saipem," said Umberto Vergine, Saipem CEO. "It also represents another relevant contribution to our backlog in this low price market environment." This is located in the Kazakh waters of the Caspian Sea and is valued at approximately $1.8 billion. Specialized subcontractors are going to be brought in to to carry out many facets of the project on the two 95 km pipelines that will connect D island in the Caspian Sea to the Karabatan onshore plant in Kazakhstan. The work will include engineering, welding materials, the conversion and the preparation of vessels, dredging, and installation as well as the burial and the pre-commissioning of the two pipelines. The pipelines have a diameter of 28 inches and are made of carbon steel, internally clad with a corrosion resistant alloy layer. Each will have an underwater length of about 65 out of the total 95 kilometres. The construction should be completed by the end of 2016.

LNG Tankers Idle In Port of Singapore

Over a dozen LNG tankers lie anchored in and around Singapore as a sign of the world gas market crisis. Singapore's port is the world's largest trading hub for LNG. Asian spot LNG prices have decreased by nearly two-thirds since February 2014 and combined with slow demand and rising output, have led to the tankers waiting idly at anchor. Ship brokers estimate that one-tenth of the global fleet of 400 LNG tankers is being used at the moment, reported Reuters, of which 15 ships dot the coasts of Malaysia, Indonesia and Singapore. For ship owners, idle tankers represent a loss of $60,000 in daily chartering fees per vessel while their cost exceeds over $200 million in current market rates. Over a year ago, the same amount of LNG would have been worth almost $600 million, wrote Reuters. The collapse in demand in Asia poses a risk to the entire LNG industry, as "The weakness in energy markets is threatening to derail LNG's emergence as the pre-eminent energy source," stated ANZ bank. The precipitous fall of LNG prices –in Asia prices have fallen from $20 million per Btu to $6.9– and rising freight costs are made more accentuated by slow demand and rising output.

Shell Launches Maintenance Work at Pearl GTL in Qatar

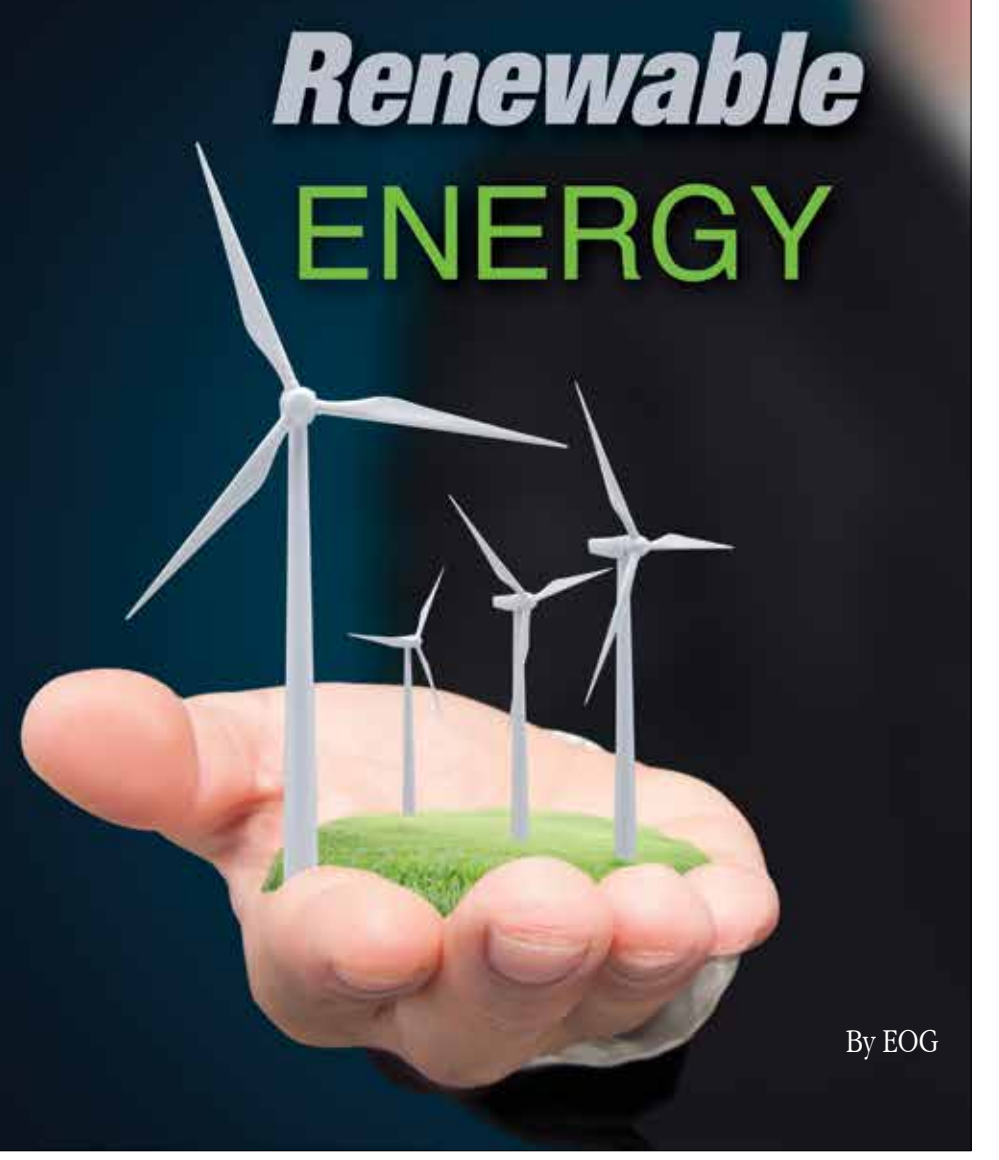
Pearl GTL, composed of two identical GTL 'trains', with a total capacity of 140,000 barrels per day of GTL products plus 120,000 barrels per day of natural gas liquids and ethane, will take one of the trains offline for maintenance wrote Oil and Gas Technology. One train, comprising half the facility, recently began a planned 'turnaround' maintenance program, which will be carried out for a period of about two months. The Pearl GTL project took place in two phases. The first phase began in 2011 and exported the first commercial shipment of gasoil in June 2011. The whole plant reached full production at the end of 2012. Pearl GTL produces cleaner-burning diesel and aviation fuel, oils for advanced lubricants, naphtha used to make plastics and paraffin for detergents. It produces sufficient diesel to fill over 160,000 cars a day and enough synthetic oil each year for car lubricants for more than 225 million cars. The products reach the international market through Shell's global retail network.

Ministry of Finance Invests to Convert Hotels in Marsa Alam to Renewable Energy

Egypt allocated EGP 20 million to convert six hotels in Marsa Alam to renewable energy, reported Daily News Egypt. Adviser to the Minister of Tourism for Energy Emad Hasan stated that the project will be implemented during the first half of 2015, with the end goal of switching the entire sector to new and renewable energy. In response to Egypt´s energy crisis, the Ministry of Finance designated EGP 1.250 billion in loans last year to ease the hotel´s transition to renewable energy. "Hotels that will convert to new energy will be a trial phase which will decide on transformation in all hotels for the coming period," Hasan said. To further the transition to renewable energy, the ministry will abstain from collecting loan interest from the hotels. Adel Rady, Chairman of the Investors Association in Marsa Alam revealed that the association is hesitant to make the switch, as they expect solar power to be more expensive than power generated by fossil fuel. However, in an attempt to reduce the budget deficit to 10%, the price of diesel increased from 80 piasters to 180 piasters in July, raising the incentive to switch to solar. In addition, the government aims to increase petroleum fuel prices in 2016 and to continue lowering the budget deficit to 8% within the next three years.

Gamesa Beats Bidders for Gulf of El-Zayt Wind Power Project

Gamesa was awarded a contract for a 120MW wind power project on Egypt's Gulf of El-Zayt by the New and Renewable Energy Association (NREA), reported Wind Power Monthly. According to NREA, Gamesa's wind farm is located around 80km north of Hurghada on the Red Sea Coast and it is scheduled for commission in 2016. Gamesa is in the process of signing a contract with NREA this month for 220MW in the same region, competing against Vestas and Acciona. Gamesa has a strong hold over Egypt's renewable energy market, which has supplied 405MW of the 550MW installed capacity, with another 200MW under construction on the Gulf of El-Zayt. Vestas and Nordex have also installed 77MW and 63MW respectively.



By EOG

PRODUCTION SHARING AGREEMENTS: OVERVIEW

By: Nicholas Linn

Production Sharing Agreements (PSAs) are one of the most common structures used to regulate exploration and production of oil and gas reserves. PSAs are often used across the developing world as they strike a balance between full nationalization of a country's oil industry and other structures where royalties are assessed and taxes paid. In this issue of Egypt Oil & Gas, we will explore the subject in depth, giving particular attention to contracts' length and benefits and limitations of cost recovery.

Many countries are stuck. As they do not have the expertise to exploit reserves themselves, they are forced to bring in foreign firms with the necessary equipment and experience to do so for them. While these international firms are capable of developing the resource without outside assistance, governments also have a significant interest in controlling aspects of production in the field, making sure that taxes and environmental regulations are enforced. PSAs are a way to satisfy the differing requirements between international oil companies (IOCs) and nations.

History and alternatives

The PSA system was first introduced in the mid-1960s in Indonesia. The contract was developed as a way to uphold national ownership of natural resources while still allowing IOCs to develop them. As these contracts are simple and place much of the cost and risk of E&P squarely on IOCs, they rapidly grew in popularity. They quickly became the predominant type of contract used in South America, Asia, and the Middle East. Egypt is no exception, and since the early 1970s the country has operated most of their concessions using the PSA model.

Previously the most popular contract type used internationally was the simple Concessions Contract. First developed in the 18th century during the American Oil Boom, these contracts are based on land ownership. Entities (generally governments) grant concessions –essentially ownership– to tracts of land or geographic areas. Whatever resources found below are the property of the concession-holder. This type of contract is attractive for its simplicity, and for IOCs they can be quite lucrative. However, when these contract terms are agreed on, actual reserves present are generally unknown. This results in more cautious bidding by IOCs for exploration blocks, and as such, the state ends up with lower revenues.

Two other types of contracts used instead of PSAs are Service Contracts and Participation contracts. In Service Contracts, the oil companies never actually own the resources they are extracting, but instead are simply paid a fee by the government for their work. Participation contracts are used when the state and an IOC develop the resources together. While they have the advantage of jointly sharing all risk in E&P, they require agreement on all aspects of the E&P process that can lead to lengthy delays if one party disagrees with the other.

Model of stability

Egypt has a long history of utilizing PSAs for developing concessions. Maurizio Coratella, General Manager of Edison Egypt –an Italian energy firm– said that the industry has remained committed to Egypt as the country has remained quite stable over the last 50 years of development. One way that Egypt has distinguished itself as an attractive place for development is because when firms come and invest, their PSA agreements are enacted into law. "Investors have always found Egypt to be a country they could rely on as one with a stable legal framework. This framework has always given a lot of confidence because PSAs are laws," said Coratella. Corporations and international firms have confidence that their investments and agreements with Egypt are protected and upheld by national law. Even as neighbors such as Libya or Algeria have experienced (and are currently experiencing) years of unrest and economic disquiet, Egypt has proactively worked to insure that the oil and gas industry —a major contributor to GDP at 15.3% according to the Oxford Business Group— is insulated as much as possible from disruption.

"PSAs are the best model agreement for countries like Egypt; according to the country's mineral resources law, all the country's mineral resources belong to the state," said Nasser Wali, Deputy Assistant CEO for Agreements at EGPC.

In Egypt, IOCs typically set up a Joint Venture (JV) with the government to begin the process of negotiations for concessions and bidding. They then use the JV as a vehicle to pay taxes on earnings, while a PSA is signed to regulate specific aspects of production. The contract model has a long and successful history in Egypt.

PSA challenges

While PSAs are common, they are not without challenges. As PSAs in Egypt are enacted into law, IOCs can be certain that their investments in the country are safe and secure; these laws supersede previous agreements. However, this same structure can make it very difficult to negotiate or change specific terms of the contract later on as it requires the approval of the minister of petroleum and the parliament.

Contracts can be comprehensive, but due to the changing nature of oil production, they are never complete. This challenge exists within any type of contract, but it is especially cumbersome within PSAs in Egypt.

Another challenge facing PSAs is the financial risk carried by IOCs under the structure. According to PSA contract terms, all financial risk involved in exploration of potential resources is carried by IOCs. This structure works well for states as they never carry any risk when auctioning off blocks to be developed, thus avoiding public outcry if the block does not prove profitable. Generally the state assumes that the financial rewards for a discovery are lucrative enough to encourage development despite the risks. However, when the state artificially adjusts the market (i.e. oil subsidies, etc.) or when prices for Brent crude are too low, IOCs find the system restrictive.

During a time of depressed markets, financial risk carried by IOCs for exploration operations might need to be shared with the state. The Brent crude price can radically change the E&P environment for IOCs. Profit projections based on $100 a barrel quickly break down when oil drops to the lows recently seen (around $60 at time of printing). In such a market, risks carried by firms prove too prohibitive to be feasible for exploration.

A more flexible model

Within the last few years the Egyptian government has been more flexible with IOCs regarding specific terms of PSA contracts. The energy-starved nation is doing all it can to increase investment in the sector, and according to leaders in IOCs like Maurizio, it has worked hard to build mutually beneficial relationships with IOCs.

In order to increase production, the state has offered more generous percentages for profit and cost recovery, and has shown signs of willingness to change the price paid for natural gas, which is currently fixed and not competitive with international markets.

The fact is, the state and IOCs want different things. The Egyptian government wants to maximize production and revenue –especially as the nation is experiencing a shortage of natural gas; while IOCs want increased profitability. However, they both have to negotiate and work together because in the end, they both need each other. The state needs the expertise and capital of the IOC, while the IOC needs access to natural resources.

It is in periods of price instability that these different interests come to the forefront. But this is an opportunity to address them fully; making sure that the state is taking full advantage of its resources while IOCs are compensated fairly for their work.

Working to improve the system

On the whole, PSAs are a structure that works very well for Egypt and for those investing in the nation. The contract structure has a long history of success for all involved. All who have been interviewed for this article (and the articles following this overview) were quick to state that for the most part, the system works quite well.

Egypt's energy sector is arguably the most important sector for foreign direct investment (FDI) in the country. A recent report released by the US State Department stated, "The petroleum industry is one of the most dynamic industries in Egypt, and hydrocarbon production is by far the largest single industrial activity."

Improvements and adjustments are always necessary for a field as important as energy to the Egyptian economy. Continually applying a critical eye to the way the sector operates will not only improve production and government-IOC relationships now, but will encourage further investment from additional foreign firms in the future. Recent efforts to reduce fuel subsidies and pay down foreign debt have instilled increased confidence in the Egyptian government. Continuing on the same track will undoubtedly lead to greater investment and production. As the US State Department says, "Should Egypt undertake these reforms, prospects for the industry will be bright, with untapped oil and gas resources and promising potential reserves."

COST RECOVERY:
TEDIOUS OR NECESSARY?

By: Passante Adel

What is cost recovery?

Oil and gas exploration and production are costly processes. In several countries –including Egypt– where a Production Sharing model is implemented, operators are left to bear all costs and risks of their exploration, development and production operations. However, once production of oil or gas starts, these operators have a chance to recuperate their costs and make some profit on top.

Cost recovery is considered a cornerstone of Production Sharing Agreements (PSAs); as operators of the concession or international oil companies (IOCs) bear all operation and capital expenditures in a new concession as well as the risks, cost recovery has become a main mechanism through which the contractors are to recover their costs and generate profits.

"Cost recovery can be a very time consuming mechanism, but at the end of the day it is one that works," expressed Maurizio Coratella, General Manager of Edison Egypt. "Cost Recovery mechanism is fit for purpose in low risk, mid-size investment, straight forward projects. In addition, it does provide a hedge for over-run costs," stated Ali Hassan, Regional Tax Manager at British Petroleum (BP).

A certain percentage of oil or gas produced from a said concession is allocated for the costs in any PSA, according to Nasser Wali – Deputy Assistant CEO for Agreements at EGPC– that percentage typically varies between 25%-40% in Egypt. A report published by Apache in February 2104 puts the company's cost recovery ceiling at 40% and allocates 70% to 80% of the profit oil or gas to EGPC and 20% to 30% to the company; these numbers varies on a sliding scale based on production from a given concession.

Profit oil or gas is the remaining of the production after deducting the share allocated to cost recovery. "EGPC's share of profit oil typically varies between 60% to 80% or even sometimes 90%," explained Wali. For state entities like EGPC and EGAS, the main aim is to maximize the government's profit.

TransGlobe Energy –an E&P company based in Alberta, Canada– reveal on their website that the cost recovery ceiling for the company in different concessions in Egypt vary between 25% and 35%. TransGlobe also highlights that company's share of profit oil is based on a threshold mechanism determined by the actual production. For example, if the company produces 5,000 b/d of oil from their West Gharib concession, their share of the profit oil is 30%; while if the production increases to 10,000 b/d, the company's share reduces to 27.5% of the profit oil.

How does it work?

Companies can recover exploration costs –including the cost for seismic acquisition, geological and geophysical studies, well drilling, and leasehold, development costs of both wells and infrastructure, as well as operating and overhead costs.

Time frames for the recovery of these costs are decided by EGPC and EGAS. While operating costs are recovered over the course of the same year, development costs are amortized over a period of four to five years.

"Cost recovery is an ongoing process; operators redeem their operating costs in the same year of occurrence, but they redeem the development cost over four to five years," explained Wali.

According to Apache's report, the company's exploration and development costs are amortized at 20%-25% per year.

As companies recover their cost, in some cases the ceiling for the cost recovery is not reached. The excess cost recovery oil or gas is then added to the profit oil, and is shared between EGPC or EGAS and the contractor. However, in some cases excess cost recovery oil may go directly into the government's share.

In case the operator's costs exceed the limit or ceiling set for cost recovery, the extra cost is then carried forward for recovery in subsequent periods.

Justifying the cost

The contractor of any given concession or the IOC is bound to justify all its expenditure to EGPC or EGAS. All costs that are recovered should be approved by EGPC and EGAS. "According to the concession agreement, the contractor is not to take any measures with the approval of the respective entity," explained Wali, "the contractor and EGPC would meet and discuss the procedure or the technology the contractor would like to employ, and in most cases they reach an agreement."

Contractors normally have to tender for services or technologies used for a concession, some sources in the industry expressed that the process is sometimes very time consuming and there is a risk of the expenses not being regarded as necessary by EGPC or EGAS.

As all expenses and costs need to be justified and approved before hand, the process might be lengthily and somehow tedious. IOCs operating a concession need to find common grounds with EGPC. "Cost recovery is a time consuming and tiring process; you need to convince one's counterparts that such choices are working for all parties interest," explained Mr. Coratella.

"If a contractor wishes to go for a technology other than the usual one employed in similar circumstances, all they need to do is justify the use of that technology, and then EGPC would not oppose it if it is for the best," stressed Wali when asked about the risk of government entities not recognizing expenses.

"The way [cost recovery] is calculated, audited and implemented is very transparent, no one has any surprises," Mr. Coratella replied to whether it is hard sometimes to justify exploration or development costs to EGPC or EGAS. "The current cost recovery process highlighted in PSAs leaves enough room for IOCs to select the proper technology and to recover all their costs," added Coratella.

According to Wali, the Egyptian petroleum public sector has lots of experience and know-how on different techniques and technologies used for exploration and production of oil and gas in different locations across the country, they have the capabilities to judge whether a cost is truly necessary or not, "Justifying the costs is a logical process. The Egyptian petroleum sector has a deep understanding of the processes of exploration and development, and has the sufficient expertise –and knowledge of the nature of all areas in which the operators would be drilling –to judge what would be a necessary cost and what would not be justifiable."

Operators need to obtain an approval by EGPC or EGAS for even production enhancement technologies they wish to employ such as IOR or EOR, Wali explained. "EGPC needs to approve even technologies for enhancing production, we need to make sure any technology employed is safe for the reservoir and will not cause it any damages." He recalled the technologies employed by Israel for oil recovery during the occupation in Sinai, which resulted in destroying the hydrocarbon reservoirs through a condition referred to as 'fingering'. It is defined by Schlumberger as a condition whereby the interface of two fluids, such as oil and water, bypasses sections of reservoir as it moves along, creating an uneven, or fingered, profile. Fingering is a relatively common condition in reservoirs with water-injection wells. The result of fingering is an inefficient sweeping action that can bypass significant volumes of recoverable oil and, in severe cases, an early breakthrough of water into adjacent production wellbores.

Cost recovery optimization

The government has recently adopted a different approach to the sector, with more transparency and efficiency. Cost recovery is one of the processes that have been highly affected by that change. Once regarded as inefficient or time consuming, cost recovery now is seen by most operators as a well orchestrated process where cooperation with government entities such as EGPC and EGAS is proven fruitful with efficient communication.

As PSAs have proved to be the most suitable model for countries like Egypt, cost recovery stays one of its main pillars that will continue to need incessant improving for optimal results.

FINDING COMMON GROUND ON PSA'S AND THEIR LENGTH

Production Sharing Agreements (PSAs) in Egypt govern the relationship between the government and international oil companies (IOCs) for the exploration and field development of oil and gas. The agreements seek to strike a balance between Egypt maintaining sovereignty of its natural resources and the IOCs interests to maximize profit.

By Lorena Rios

The PSA model is more than a game of give and take. Once the cards are laid on the table, the interests of 82 million Egyptians are at stake. Therefore, the flexible nature of PSAs are an indication of how the government and IOCs adapt to the country's current political and socio-economic times and how they ultimately manage the oil and gas industry during tumultuous times.

Length of contracts

Time is money, and in the Egyptian oil and gas industry, that quintessential adage acquires an even more pressing tone. The oil and gas industry is a capital intensive, long-term investment for IOCs. "It´s a process that takes time and that has to mature," said Maurizio Coratella, the General Manager of Edison Egypt, an Italian energy company. The development and production phase of oil blocks under PSAs is between 20 to 25 years, with the possibility of a five-year extension. The Egyptian government's main concern is to maximize production to meet growing domestic energy demand and continue to repay its debt owed to IOCs. The government's appeal for increased production adds pressure for IOCs to develop a field faster. However, the contract's length may not always act as an incentive to produce faster, nor do the agreements´ legal implications.

The exploration phase of a new concession is typically two and a half years, with extensions of up to five years. Once an IOC makes a commercial discovery, they must notify the government of the discovery within a period of time; 1-12 months for oil, and up to 24 months for gas. In case of a commercial discovery of oil or gas, the IOC must submit a development lease application to the government within one year (or three years for offshore blocks), otherwise it must surrender the oil or gas reserves back to the state.

PSAs in Egypt are enacted into law, providing legal security for IOCs and sanctioning a level of transparency for the public. PSAs differ from traditional contracts in that the terms of the agreement cannot simply be changed by the parties involved. Instead, any changes necessary require the approval of parliament and the president. PSAs are inflexible in the sense that any amendments constitute a legal procedure that takes time. Nonetheless ratifying PSAs as laws adds a level of accountability to an otherwise private contract between two parties. Once it becomes a law, the PSA shifts responsibility from the government to the IOCs.

Exploration and production in Egypt (E&P) is past the era of easy hydrocarbons. Deep drilling is more expensive and requires more sophisticated technology. This is problematic when IOCs expect a speedy cost recovery process. In the past, foreign counterparts received "the so called 'easy money'" before the government received anything, says Magdi Nasrallah, professor in the Department of Petroleum Engineering at the American University in Cairo. Once past the easy hydrocarbons stage, "the sharing process tends to be more complicated and not as profitable as expected," Nasrallah said.

The problems of expediency that PSAs exhibit with their legal framework is made up for by the government's willingness to extend the terms of a concession. Contract extensions of up to five years are not unusual in the oil industry. If more gas is discovered in an oil field during the 20-25 years allowed for the development lease, extensions of up to five years are permitted. However, the total period for the development lease does not exceed 30 years. This is limited by the Egyptian constitution and also applies for oil discovered in a gas concession.

"When you increase the length of the contract it means you are getting into the secondary recovery operations," said Nasrallah. The secondary stage requires more effort and higher spending; "it requires more sophisticated technology to pump out the reserves which no longer come out under their own pressure," he added. Once the contract ends, the field is usually depleted and the current IOC, or a new one, is invited to step in at the tertiary recovery stage and extract what is left.

To guarantee a sufficiently equitable hydrocarbon wealth share, "PSAs usually have a clause that restricts the expenses included by the foreign counterpart [IOCs]," explained Nasrallah. "In the past, this was left open-ended. Foreign counterparts would spend what they wanted on the field, "usually depleting the resources before the government got its share," he said. Now, a regulatory authority has been set up to monitor spending. The budget and spending of IOCs are scrutinized throughout the E&P process. All the changes made to the budget must be approved by EGAS and EGPC. All expenses are documented periodically by the aforementioned entities.

Field development and oil recovery are costly operations that represent great financial risk to IOCs. However, the Egyptian government is energy hungry and exploring as many different alternatives as possible to satisfy demand. They are eager to encourage IOCs to boost oil and gas production.

The fact that PSAs are laws helps maintain the delicate balancing act between the government and IOCs. The stakes are high for both parties, as IOCs hefty investments are in limbo due to depressed Brent crude prices, even as Egypt struggles to accelerate gas production. PSAs attempt to be practical, flexible and lucrative for all involved. However, IOCs still aspire for greater leverage once they acquire a concession.

Egypt's long history in the oil industry has established the legal infrastructure for PSAs to be a successful model. However, a game changer would consist of the government freeing some of the restrictions imposed on IOCs and fostering a regulatory authority that continues to secure the government's best interests. Currently, EGPC and EGAS are active observants in the development of oil and gas fields. One idea recently put forward by the Minister of Petroleum is for the creation of a separate regulatory department within EGAS to assist with regulating natural gas concessions during their first six months.

The degree of government control and involvement in E&P is contested among IOCs and industry experts. The extensive length of PSAs renders the need for stabilization clauses to guarantee the protection of IOCs against adverse changes that could be made to the contract during that period. The clauses seek to reassure stakeholders that Egypt will meet and adhere to the fiscal commitments included in the original agreement. By taking these measures, the government does its best to ensure stability and predictability, especially when it pertains to a period of 20 to 25 years.

Under PSAs, the government still holds the power to terminate a contract or bring in another IOC if their partner does not meet the necessary terms. To absolutely ensure the development of fields, the PSA allows IOCs a grace period to begin production from the point of discovery. If production fails to take place, IOCs must surrender the fields. The concessions are subjected to periodical revisions every three years to guarantee the development of blocks.

"We really enjoy mutual trust with the authorities, which is extremely important, said Coratella. "We always see authorities delivering what they were promising or anticipating." "At the moment, the government is more receptive to provide IOCs with enough room to work," he continued. It is in the government's best interest not to have IOCs with their hands tied behind their backs.

Egypt possesses great potential for oil and gas because it stands on a prime location, surrounded by industry intensive neighbors. The government is aware of the urgent need to boost economic growth and guarantee Egyptians sufficient energy to meet their demand. IOCs are also willing to invest in Egypt and eager to uncap the potential of the rich East Mediterranean, the Nile Delta and the Western Desert.

PSAs are not the biggest obstacle to E&P in Egypt. Larger challenges such as low international oil prices, a lack of foreign currency, devaluation of the Egyptian pound, and political stability after years of turmoil are all bigger issues. However, improvement in the PSA system would foster an environment of investment. It is the government's responsibility to create a safe environment for investment and aspire to present IOCs with a scheme that takes into consideration oil prices, viability of projects, profitability, and most importantly, the best interests of Egypt.

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EDISON EGYPT: A COMMITMENT TO EGYPT'S ENERGY MARKET

Egypt Oil & Gas sits with **Maurizio Coratella,** Edison Egypt's General Manager for an exclusive interview

By Nicholas Linn & Passante Adel

What are Edison's current operations in Egypt?

We have a portfolio of eight concessions, five of which we are operating. Our main asset in Egypt is the Concession of Abu Qir for which we sanctioned mid October 2014 a new platform worth circa $250 million of investment. This will allow us to unlock additional reserves that we expect to go on-stream at the beginning of 2017. As far as the new exploration block of North Thekah, we are about to launch a seismic data acquisition. We will start the acquisition by the end of March 2015.

What is Edison's share of Egypt's oil and gas production?

We are producing in the range of 250 - 300 mscf/d, which puts our production at circa 5% of the country's total gas production. We currently have a small oil and condensate production, but we are currently working on rebalancing our portfolio to have more oil production but this will come with the new concession we have signed, so it will take some time.

What are your best producing concessions?

Abu Qir concession, we have acquired the concession early 2009. Our oldest concession is Rosetta (Rashid), which we have acquired in the mid 90s. We have 20 years of presence in Egypt. We were also 50% partners with BG in the West Delta Deep Marine (WDDM) and 50% owners of LNG IDKU plant, which we then sold in 2005.

We always kept Rosetta as participation; we have a 20% participating interest in the concession with BG holding the remaining 80%, it has been our percentage since the start.

And why did you sell the WDDM concession?

The company was –at the time– conducting some restructuring of its activities with a focus on growing the power generation business.

How are oil prices affecting your operations in Egypt?

The oil prices are definitely affecting us because of a reduction in revenue, but we do not envisage any reduction of committed investments in Egypt. The current situation will require a containment of operation expenditure (opex) and capital expenditure (capex) by renegotiating with service companies when possible.

What are Edison's plans for E&P in the upcoming period in Egypt?

We will definitely focus on the East Mediterranean. We see the East Mediterranean as potentially replicating what happened in the neighboring countries, Cyprus and Israel. We believe there could be an extension into Egypt. In the most recent bid rounds we got awarded large blocks in this area

As far as our portfolio in Egypt we are looking to rebalance gas with more oil. That is why we acquired a concession in the Western Desert, North West el-Gindi, awarded to us in the latest bid round. We are also participating with 50% with RWE in North West el-Amal in the Gulf of Suez. We are trying to increase oil production in the country to counterbalance the gas. Oil is also easier in terms of transformation to cash liquidity.

Can you tell us a bit about your latest concessions?

We acquired North Thekah (Block 7) offshore the Nile Delta (Eastern Mediterranean), which we are operating. North Thekah is owned 50% by us and 50% Petroceltic. We also have South Idku, onshore West Nile Delta, as well as a 100% interest in North West el-Gindi in the Western Desert. We are operating North Port Fouad, and like North Thekah, we share 50% ownership with Petroceltic.

What are the setbacks Edison has faced in dealing with the government's oil sector?

We enjoy a very good relationship with the authorities; one based on mutual trust. The approach of Edison has always been extremely cooperative and we have enjoyed the results of this approach. We have always been treated fairly by the government and we have recognition [from their side] that we have been very cooperative as well.

An example of this is the sanctioning of the new platform we did in mid-October of 2014. The cash injection of the receivable amounts by the government did not come until the end of December 2014. But we were promised that this cash injection would have taken place and we always see authorities delivering on what they were promising or anticipating, so we made the decision to sanction the investments.

We don't have setbacks. We feel comfortable discussing issues with the government when they come up. (use as bold quote)

On the other hand, what is extremely concerning about Egypt is the currency issue; access to dollars is becoming very difficult. This is something that I do not see an easy solution to. All our contracts are denominated in dollars, so you cannot afford to be paid in Egyptian Pounds instead. This is something that needs to be seriously tackled by the government.

Can you give us an example of a fruitful cooperation with the government?

We really enjoy mutual trust with the authorities, which is extremely important. We recently promoted a new business model; we told the authorities that we would like to generate power and we wanted to use part of the (new) gas we would produce as a result of new upstream investments for power generation in a new power plant of 180MW capacity.

We signed an MoU with EGPC in November for the gas allocation to the power plant. They are very keen to support and sponsor ideas that are "out of the box" and promote energy growth.

It was the first time we approached government entities promoting a new model; we approached the government saying we will create a new customer. We will invest in power generation, which responds to the current need of Egypt in the light of the current power crisis. We will not ask the government for any guarantee whatsoever. We will invest in upstream to produce the new gas, of which we will subtract a little percentage, less than two digits, to feed the power station that will produce electricity at high efficiency level and will be able to pay the gas in US dollars thus allowing us to invest upstream. The Ministry of Electricity and Ministry of Petroleum were very supportive. There is a willingness to listen.

Out of current reserves, is any of the oil or gas Edison is working on inaccessible or stranded?

Of course there is always some stranded gas or oil out there that is just not feasible to produce, that is the situation with many wells. But there are opportunities out there for making better use of existing assets (infrastructures) thus making relatively small reserves of gas economic to produce. It is an effort that has to go in two directions: It must be less expensive to produce, (which is something the authorities are working on), and there is the size of the project and the investment associated to it. This was not a concept that was that well understood in the past. There is an effort to maximize existing assets offshore. This allows different economics. This will in turn unlock pockets of gas, that were previously not economical to produce as they were looked at as stand-alone investments.

Do you think Egypt has a similar potential for deep and ultra-deep water Mediterranean as neighboring countries have?

When it comes to these kinds of projections you can only rely on geological surveys and regional mappings, so it is hard to tell for sure, but we are quite confident that the Leviathan basin might extend into Egypt and that this might apply also to other plays in the Deep Water.

THE ISLAMIC STATE OF OIL

By: Alessandro Accorsi

There are thousands of politically alienated and radicalized militants joining its ranks. There is an army of its supporters active on social media spinning its messages. They are releasing videos as gruesome as they are stylistically and technically advanced. Most notably, the group is shocking the world with its ability to rapidly expand its territory. This is IS, the self-proclaimed Islamic State of Iraq and Levant, a terrorist organization born from the ashes of Al-Qaeda in Iraq that is seeking the establishment of a new caliphate.

Unlike other jihadist networks however, IS has set the tone for a somewhat different model of organization. Between distorted references to the Islamic golden age and modernity, it does not limit itself to dream of a global caliphate as Bin Laden used to do.

IS is actively seeking statehood, imposing laws, collecting taxes and financing itself. Its model, however, is closer to that of mafia-state than a country, as it is funding its activities with a mix of taxation and criminal activities. According to senior U.S. officials, the Islamic State is the "best funded terrorist organization in history."

Raqqa is Being Slaughtered Silently (RBSS); a Syrian activist collective secretly documenting life under the Islamic State, has recently released a report investigating the way the group finances itself. According to RBSS, the group fines smokers and even those late to prayers for minor violations of the strictly observed Sharia law, while commodities such as communications, fuel, electricity, and healthcare services are heavily taxed. Among the most profitable legal trades in the city are the hundreds of internet cafes that have, somewhat ironically, expanded under IS rule in Raqqa. The organization itself is the only provider of expensive satellite connections.

IS is differentiating its sources of income and funding, setting up trade routes for agricultural and manufactured products and offices to collect custom duties. At the same time, it allegedly produces and smuggles illegal drugs, turns a blind eye on alcohol consumption in exchange for bribes and is active in the trafficking of Syrian and Iraqi antiquities sold to art collectors around the globe. Kidnapping and extortion rackets are another major source of income.

The efforts to build an efficient administration and a modern state, however, would have likely been useless without the nearly $1 million a day IS is pocketing from selling oil and fuel on the black market - according to a report by the U.S. Treasury Department issued last October. Emirati experts have placed the figure much higher at nearly $3 million a day. It is thanks to this large stream of revenue that the caliphate has been able to pay hundreds of dollars a month in wages to its fighters and civil servants.

The exploitation of oil fields to finance military activities is not a new phenomenon in the chaos of the Syrian civil war. Jabhat al-Nusra, the Syrian branch of Al-Qaeda, along with other rebel groups managed to seize control of much of Deir Ezzor - an oil rich province in eastern Syria - in November 2013. The conquest of the region by Al-Qaeda-inspired militants was seen as a possible turning point in the war. In fact, without the Deir Ezzor fields, the embattled regime of Bashar Al-Assad was left with virtually no local oil to fuel its highly mechanized military campaign against the rebels.

Deir Ezzor took on the utmost strategic importance as armed groups competed for scarce resources. It did not take long before IS clashed with Al-Nusra to gain control of the oil fields between April and July of 2014. Soon after their victory, IS also moved to conquer fields and refineries in northern and eastern Iraq.

What has shocked even experts and engineers well-versed in working in the oil-fields now under IS control is the speed at which the organization was able to pump oil to neighboring countries. In the midst of war and destruction, and with civilians escaping the terrorist group's black flags, the Islamic State was able to quickly restart production and to re-activate smuggling networks from the era of Saddam Hussein.

The self-proclaimed Caliph Abu Bakr Al-Baghdadi first recruited engineers from Syria who were either previously working for Al-Nusra or for the regime of Bashar Al-Assad. In Iraq, the group coerced local staff to working in the fields by threatening to kill their family members if they did not collaborate.

However, these workers were not enough, and IS was forced to hire more skilled workers. Thus, in an audio message disseminated in early July of 2014, Al-Baghdadi called for skilled Muslim workers to immigrate to the Islamic State. "Judges and those who have military and managerial and service skills, and doctors and engineers in all fields" were particularly needed, he said.

This call probably did not produce enough skilled recruits, as in autumn 2014 IS allegedly posted a job offer for "an experienced and zealous manager for its seized oil fields" and was recruiting skilled professionals who were "ideologically suitable." According to The Times, they offered $225,000 a year to the manager.

Less than six months after seizing oil wells and refineries in northern Iraq and Syria, the terrorist organization was able to maintain a considerable level of extraction and to establish trade routes out of the territory it controls. Even though production is high, various experts and reports warn that it could climb higher. Currently it is not running at full capacity due to a lack of technology and personnel.

Louise Shelley, a professor at George Mason University and Director of the Terrorism, Transnational Crime, and Corruption Center, estimated IS production to be around 44,000 b/d a day in Iraq and 4,000 b/d in Syria. This oil, however, is "toxic" for established companies and governments, as no one wants to be accused of financing terrorists. The crude oil is thus sold at a discount price to middlemen, refined and then sold on the black markets on the other side of the Iraqi or Syrian borders. IS also earns money by charging fees to the middlemen and collecting taxes at checkpoints through which the oil passes.

In northern Syria, fuel is pumped through pipes hidden underground to middlemen in southern Turkey, who then pass it on to the larger market. In Iraq, one of Al-Baghdadi's lieutenants reached out to well known Saddam Hussein-era oil traffickers and Kurdish ruling families to reactivate the old, but very lucrative, smuggling network. In the south, crude oil is transported overland to Anbar province. It is then loaded on tankers bound for Jordan.

The thirst for cheap oil has drawn IS' own enemies into the business. Turkish, Kurdish, Jordanians, Iraqis and Iranians all take part in the trade. They work as middlemen or in oil refineries. The oil is then returned to the Islamic State for distribution in the areas it controls. The Assad regime has also allegedly arranged to buy oil from IS.

Despite the regional ramifications, the impact of IS' oil on the global economy has been minimal. Syria is not particularly rich in natural resources and the Syrian Observatory for Human Rights estimates that IS controls approximately 60% of Syrian oil. The bulk of Iraqi oil is in the Kurdish areas and the Shia-dominated south - out of reach of the Islamic State. The fields seized by IS in Iraq are considered marginal. The group has enough resources to sustain and finance its military and state-building efforts, but not to threaten the global economy. The most feasible way for them to influence the global market would be to secure the areas around Kirkuk, possibly pushing its production up to a million barrels a day. Kurdish forces hold these areas however, and it is unlikely that the Kurds would relinquish them without a fight.

It is not clear whether the plunge in global oil prices will affect IS. The Islamic State might be hurt by lower prices as it is forced to discount further to sell on the black market. At the same time, however, it has other significant sources of funding and about six million people living under its rule - thus allowing potential for an internal market.

In an attempt to dry up its sources of funding, over the past three months the US-led coalition has attacked energy infrastructure controlled by IS in Iraq and Syria. Alongside the military strikes, the Obama Administration has put pressure on Kurdish autonomous authorities and Turkey to better patrol border areas and crack down on notorious middlemen and smugglers.

"We have taken the production down, disrupted the trucking routes and made it more difficult to get the oil across the border. But more still needs to be done," said Amos Hochstein, the State Department's special envoy and coordinator for international energy affairs. However, Raqqa is Being Slaughtered Silently reported that IS is still extracting crude oil using primitive ways and technology and that the fuel trade is still highly profitable. As long as the Islamic State is in control of oil fields in Iraq and Syria, smuggled black gold will continue to fund extremism in the region.

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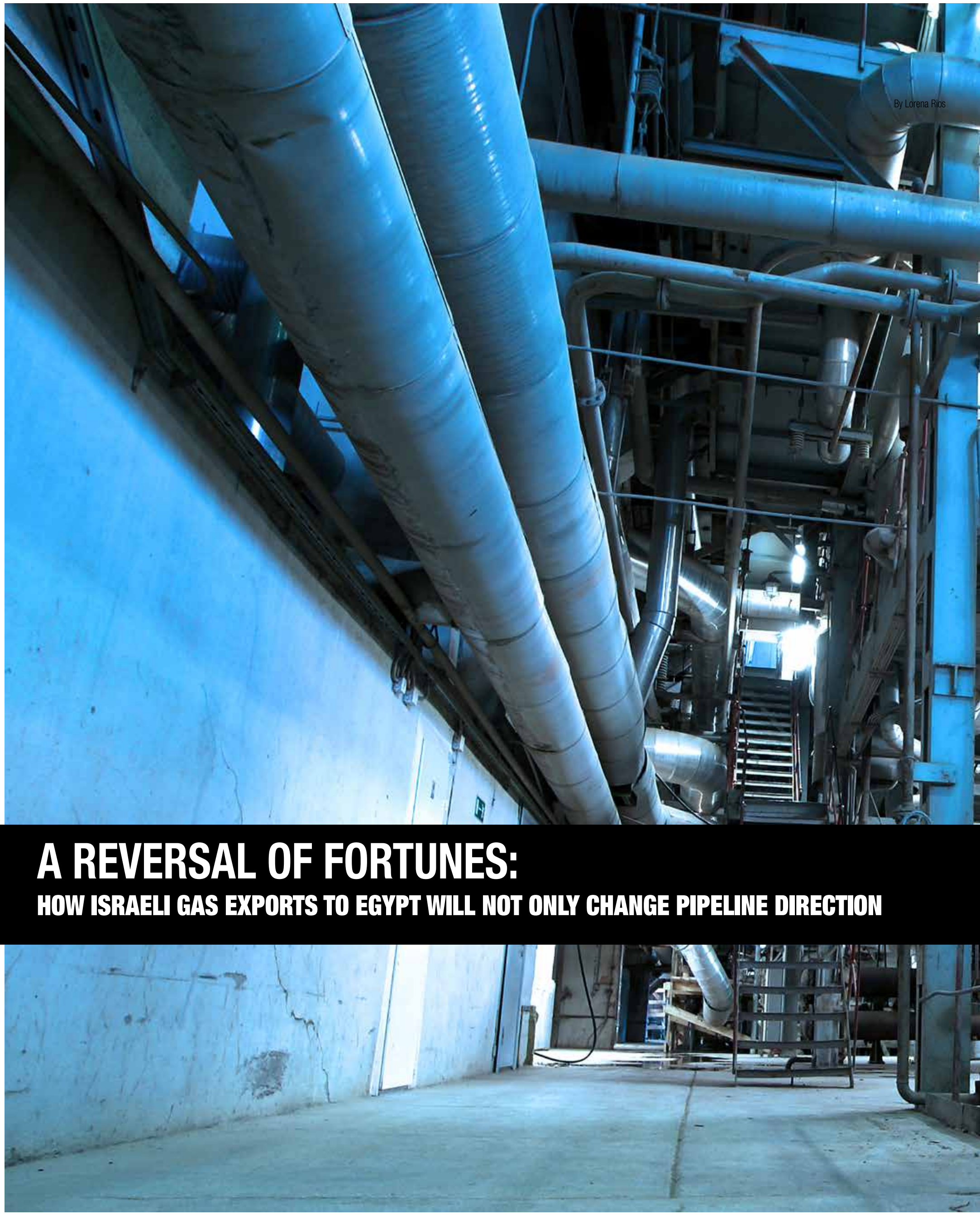

By Lorena Rios

A REVERSAL OF FORTUNES:

HOW ISRAELI GAS EXPORTS TO EGYPT WILL NOT ONLY CHANGE PIPELINE DIRECTION

Just a few years ago, it was inconceivable to think Egypt would ever look to Israel, or for that matter anyone, to import natural gas. Under a much criticized agreement with the Mubarak administration, Egypt, with copious amounts of natural gas reserves, exported gas to Israel via pipelines at a reduced market rate. Four years and two revolutions later, Egypt and Israel find themselves with reversed fortunes. While political and socio-economic instability has halted progress in Egypt's gas projects, Israel has enjoyed a gas production boom thanks to the discovery of fields offshore in the Mediterranean. Therefore, the circumstances have led to an intriguing prospect, Israel exporting gas to Egypt. The very pipelines that were infamously used to send Israel gas could now be reversed to help Egypt with their energy crisis. How much gas and at what price remains a mystery, but what is certain is that this recent development would mark a major shift in the dynamics of the region and potentially make Israel, who is also set to export gas to Jordan and Turkey, a major energy player in the Middle East.

For all practical purposes, the proposed gas deal should not come as a surprise. It is much easier for Egypt, facing an energy crunch and in desperate need to expand its imports, to obtain gas from Israel given the already existing infrastructure. Many in the energy industry believe that while it may not be politically appetizing, it is the most realistic option. An energy executive for a major oil and gas company operating in Egypt, speaking to Egypt Oil & Gas, said the proposed Israeli gas deal "makes economic sense" and that it is "very feasible from a business and technical standpoint." Irony aside, the existing pipelines offer an accessible remedy to Egypt's current gas shortage.

In mid February, EGAS, the government-owned gas company, announced the signing of an MOU for gas imports with US firm Noble Energy. The ministry of petroleum did not provide details as to where the gas will come from, with some reports suggesting it will come from Cyprus, where Noble Energy holds a 70% stake in the Aphrodite field. However, Noble Energy also holds a 36% stake in the Tamar field as well as 40% of the nearby Leviathan field offshore Israel. Whether the gas is coming from Cyprus or Israel remains a mystery but it is no secret as to what has prompted the Egyptian government to potentially look towards Israel for relief. Daily electricity blackouts, once rare during the winter, have become commonplace, which has caused concern for the summer when the electric load is even greater. The heavier energy burden and need for imports has coincided with a reduction in Algerian gas imports over the last few years. Algeria, going on its own consumption binge, has steadily decreased its exports to Egypt and is not seen as a long-term gas provider. Therefore, it is no wonder that a senior official, as revealed in the Middle East Monitor, confides that Egypt has agreed to pay more for the gas from Noble Energy then the deal with Sonatrach, Algeria's state-owned gas company.

So what does this gas deal hold for Israel? Since discovering the Tamar and Leviathan fields in the Mediterranean in 2010, Israel has seen its prospects dramatically shift from an energy importer to a potential net energy exporter. In addition to the proposed agreement with Egypt, Israel has also recently signed a gas export deal with Jordan and potentially with Turkey. These new developments could lead to what many would call petro-diplomacy, where relations between Israel and other countries in the region such as Jordan and Turkey could dramatically improve by means of energy trade. The agreement will most likely not transform all attitudes in the region towards Israel. Indeed, one of the most challenging tasks for Arab countries such as Egypt is handling public opinion in regard to any normalization of diplomatic or economic relations with the Israelis. Despite this feeling of ill will, the deal could ultimately produce a positive outcome. While the shift in policy will not be reshaped overnight, economic cooperation could provide a platform to build on for the political future of the region.

However, in addition to the international obstacles, domestic challenges still persist for Israel. The Leviathan field has been the target of Israeli antitrust regulators in recent months due to the fact that Noble Energy and Delek Group, an Israeli conglomerate, reportedly own a combined 95% of the offshore field. Israel's energy minister, Silvan Shalom, has already stated that both firms need to sell some acreage in the field in order to increase competition. Nonetheless, Shalom recognizes the difficulty in attracting other foreign energy firms, especially those with ties to Arab countries. Speaking at an energy conference in Tel Aviv, he stated, "The Israeli market is a small market. And the interests they [IOC's] have in Saudi Arabia and the Persian Gulf states... are much bigger... So to bring them here as competitors to other groups is not simple." Therefore, even though both Noble and Delek have started to auction off parts of their assets, Israel has to walk a fine line between increasing the number of players investing in the Leviathan field while also being realistic about the political limitations companies face with the project.

Regardless of political differences, the proposed gas deal with Israel should be seen in its economic context. Importing gas from its neighbor will provide Egypt with a relatively inexpensive alternative to importing LNG from hundreds or thousands of miles away, and it will enable already available infrastructure to be utilized. While the optimal scenario for Egypt would still be exporting gas, the energy sector in the country is currently undergoing a transformational period. Any gas import agreement, whether it be with Israel, Cyprus, or Algeria, could very well be a short-term fix and not a long-term solution. Indeed, as Egypt has demonstrated over the past few months, it has taken a two-pronged approach towards combating its dire energy situation. In addition to seeking imports from various neighbors in the region, Egypt has also issued a plethora of exploration licenses to major energy firms for projects in the Western Desert and Mediterranean. Therefore, despite the sensitivity surrounding the proposed gas deal, Egypt should look at the practical side...it may keep air conditioners running this summer.

EGYPT'S UNREALIZED POTENTIAL: UNDERUSED REFINERIES

By: Taher El Moataz Bellah

Egypt is the largest oil and natural gas consumer on the African continent. Its large population of 86 million –second only to Nigeria– consumed 20% of oil and 40% of natural gas in Africa in 2013. However, not all of the petroleum products used like gasoline, diesel, and jet fuel are refined domestically. According to OPEC's annual statistical bulletin, Egypt imported 170,000 b/d of petroleum products in 2013. A ministry of petroleum official in a statement to Reuters last August confirmed that Egypt imports $1-1.3 billion worth of petroleum products per month. Despite recent agreements with gulf countries such as the UAE to provide Egypt with petroleum products at discounted rates, grants, and credit arrangements, the imports are still a great financial burden on the state and they further reduce its foreign reserves. If those products were refined locally, this would result in a significant price reduction and would provide some measure of relief for the state budget. The main question now becomes: Can Egypt produce those petroleum products in local refineries? If yes, then why resort to expensive imports? Answering that question requires understanding both the current technical and economic standing of Egypt's refining industry.

Huge capacity; wasted potential

Egypt currently has the largest refining capacity in Africa, amounting to 704,000 b/d according to the Arab Oil & Gas Journal, and 726,250 b/d according to Oil & Gas Journal estimates. Despite being 27th globally, this refining capacity is underutilized and currently unable to meet the growing domestic demand for petroleum products. While the consumption of crude oil has increased by an average of 3% annually over the past ten years, reaching 770,000 b/d in 2013, refinery output has declined by 29% from 2009 to 2013, dropping to 445,000 b/d according to OPEC. This marks a utilization rate of 63%, far below the average global refining utilization rate set at approximately 80% in 2014 according to BP's statistical review.

The global energy consultancy firm, FACTS, explained this underutilization as being chiefly due to foreign companies not being repaid on time and the EGPC increasing its debt leading to foreign companies getting a higher share of crude oil as a form of in kind repayment of EGPC's debt, as it is financially unable to pay in cash. Their claim is supported by the steady export of crude oil despite decreasing crude oil production. Oil production, including condensates, dropped from 730,000 b/d in 2009 to 714,000 b/d in 2013 while crude exports remained virtually flat at 80,000 b/d as of late 2013. This results in a lower amount of crude oil available for refineries. Thus Egypt has to make up this difference with imports. This deficit can be attributed to shortage in crude oil supply and technical limitations due to aging refineries.

Refineries in Egypt and their history

El-Nasr refinery in Suez, Egypt's first refinery and the oldest in Africa, was built by the Anglo-Egyptian Oil Fields company that was co-owned by Shell and BP in 1913. The refinery was nationalized in 1964 along with all Shell interests, and its management changed to El-Nasr Petroleum Company. Since then eight other refineries were built in Egypt. All but one of them were owned and managed by EGPC subsidiaries. MIDOR was the only privatized refinery that was established as an Egyptian-Israeli co-venture before the Israeli Merhav group sold its 20% stake to the state owned National Bank of Egypt in 2001. Current Egyptian refining companies along with their capacities are as follows:

The average age of Egyptian refineries is 50 years old. Even though investments have been made to upgrade these refineries over the past years, their theoretical capacity is expected to have decreased over time.

Aging infrastructure

According to Dr. Alaa Idris, the Associate Chair of the Petroleum Engineering Department at the American University in Cairo, mechanical integrity limitations and technological redundancies result in capacity reductions over time. Dr. Alaa was a member of the Enppi engineering team that designed the Assiut refinery in 1987. "It was the first refinery to be totally designed in Egypt, however as all chemical plants, it needed constant upgrading. The lack of adequate financing due to the lack of foreign partners compared to the upstream sector, in addition to a mentality of 'As long as it is working, no need to change it,' has resulted in major technological redundancies in Egyptian refineries," said Dr. Idris. He further suggested that Egyptian refineries should be benchmarked against their counterparts globally to have a realistic evaluation of their current performance, and to decide whether or not they need further upgrading.

TABLE 1: EGYPT REFINING CAPACITY BY COMPANY, AS OF 2013

Refinery Operator	Location	Start Year	Capacity in b/d
El Nasr Petroleum Co.	Suez & Sinai	1913	100,000
Cairo Petroleum refining Co.	Cairo	1985	142,000
Alexandria Petroleum Co.	Alexandria	1975	115,000
Middle East oil refinery	Alexandria	2001	100,000
Ameriya petroleum refining co.	Alexandria	1972	75,000
Suez Petroleum Processing Co.	Suez	1921	68,000
Assiut Petroleum Co.	Assiut	1987	50,000
Cairo Petroleum Refining Co.	Tanta	1969	54,000
Total			704,000

Source: Arab Oil and Gas Journal& The Online Free Library

Osama Kamal, the former minister of petroleum, pointed out to Daily News Egypt that a joint plan between the ministries of petroleum and industry stipulated that a new refinery must be constructed every five years beginning from the year 2000. He warned that further delay in implementing this plan would result in disaster for Egypt's petroleum sector. The plan was set out to restore, renew, and construct refineries with total investments of $18 billion. During the FY 2012/2013 approximately $550 million were allocated for refineries.

According to the US Energy Information Administration (EIA), Egypt's refining capacity is expected to rise by 96,000 bb/d after the start of the Egyptian Refining Company (ERC) in 2016. ERC is a public-private partnership between Qalaa Holding and the EGPC to expand Cairo Oil Refining Company, 40 km north of Cairo. In 2013, Thomas Thomason, the CEO of ERC, told Mada Masr that by 2016 ERC would provide 50% of the diesel imported by Egypt. This would save the state about $300 million per year. Cairo Oil Refining Company will provide ERC with low-grade fuel oil to refine into lighter petroleum products such as diesel, gasoline, jet fuel, and LPG.

Creative solutions

Mr. Magdy Mahrous, Associate Vice President of EGPC for Refining and Manufacturing, says that despite lacking adequate finances, Egypt is finding solutions to overcome technical challenges. For example, refineries in Alexandria, closest to the Western Desert, are not equipped to process 42 API crude from there, as it is both lighter and sweeter than the 30 API Suez crude, upon which the refiners design criteria was based on. Mr. Magdy stated that this design limitation was overcome through adding additives and mixing the light crude with heavier crude to make it suitable for refining. He said that it was the global shortage of heavy crude along with a lack of finances that has recently prevented Egypt from being able to refine it. He also added that EGPC was unable to purchase crude from their foreign partners share recently to refine domestically.

Egypt has been taking actions recently to overcome this crude shortage. Last May, Mr. Tarek El-Molla, the Chairman of EGPC, told Daily News Egypt that the state would begin to export Western Desert crude to gulf countries in exchange for Arabian oil with 31 API, as required by Egyptian refineries. This will produce a profit margin for EGPC as Western Desert crude is both lighter and sweeter, making it higher quality. Besides securing supply for refineries, this exchange with lower quality Arabian oil is expected to yield a profit of $2 per barrel for the state, making the exchange economically viable.

In addition to previously mentioned steps to improve the performance of the upstream oil and gas sector in Egypt, establishing two refineries -one for light and the other for heavy crude- would help refine light crude from the Western Desert in addition to heavy crude from Ras Ghareb that is usually exported due to the inability to refine them locally. This would ensure higher refinery utilization leading to lower imports and stronger balance of trade. The contracting system also needs to be revised to ensure more inclusion of the private sector in the refining industry. This would provide capital required to acquire advanced technology needed for improved efficiency, higher quality, and increased profitability.

Even though lower crude prices will not affect contractually operated refiners, the money saved from cheaper imports and recent subsidy cuts that raised the prices of petroleum products by 70% should be used to reinstate Egypt as the main refining hub for the region. With so much potential, it is time to fully utilize it.

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CEOs Less Optimistic about Global Economy in 2015, but Confidence in Growth Remains Steady

Prepared By

pwc

PwC Egypt is pleased to announce its Global EU&M industry perspectives on the 18th Annual Global CEO Survey. As part of the Global CEO Survey research, PwC carried out 72 interviews with Oil & Gas CEOs from 39 countries, 73 P&U CEOs from 35 countries, and 25 Mining CEOs from 18 countries. PwC spoke face-to-face with the following CEOs:

Oil & Gas CEOs

Dr. Javier Genaro Gutiérrez Pemberthy, Chief Executive Officer, Ecopetrol, Colombia

Abdulrazaq Isa, CEO, Waltersmith Group, Nigeria

Power & Utilities CEO

H.E. Sim Sitha, Director General, Phnom Penh Water Supply Authority (PPWSA)

Mining

Andrew Mackenzie, Chief Executive Officer, BHP Billiton, Australia

Global Economy

Currently, CEOs are less optimistic about global growth prospects than they were a year ago, with only 37% of CEOs expecting global economic growth to improve in 2015. High hopes have decreased from last year's 44%. Furthermore, 17% of CEOs believe global economic growth will decline, a number that more than doubled since last year (7%). The remaining 44% expect economic conditions to remain steady.

Regionally, the results show wide variations. CEOs in the Asia Pacific are the most optimistic about the global economy, with 45% anticipating improvement, followed by the Middle East (44%) and North America (37%). On the other hand, only 16% of CEOs in Central and Eastern Europe expect economic improvement. CEOs in emerging economies like India (59%), China (46%) and Mexico (42%) are more optimistic about the economy than those in developed economies like the US (29%) and Germany (33%).

Revenue Growth

Despite the grim outlook of the global economy, CEOs remain confident of high prospects for their companies. A sweeping 39% of CEOs worldwide said they are 'very confident' that their company's revenues will grow in the next 12 months; slightly higher than the 36% figure in 2013.

What worries CEOs most?

Over-regulation tops CEOs' list of concerns, as reported by 78% of CEOs worldwide. This is up six points from last year and is now at the highest level ever seen in the survey. Other top concerns cited by CEOs are availability of key skills (73%), fiscal deficits and debt burdens (72%), geopolitical uncertainty (72%), increasing taxes (70%), cyber threats and lack of data security (61%) - going up rapidly from 48% last year – as well as social instability (60%), shifting consumer patterns (60%) and the speed of technological change (58%). CEOs concerns are high in all areas compared to last year, with the exception of energy costs where concerns have slightly decreased to 59%.

Working with the Government

CEOs say the government's top priority should be to maintain a competitive and efficient tax system, according to 67% of survey respondents, but only 20% of CEOs said their country has been successful in creating such a system. Likewise, access to a skilled workforce is valued by 60% of CEOs, but just 21% say enough skilled workers are available in their country. Other government priorities according to CEOs include physical infrastructure (49%), affordable capital (29%), and digital infrastructure (28%). The pressing issue of reducing the risks of climate change is not given sufficient priority, with only 6% or respondents considering it a relevant issue.

Oil & Gas CEOs are facing tough market conditions, but CEOs are striving to find prospects for growth by maximizing technology investments, improved utilizing partnerships and diversity strategies. The industry is facing an oversupply and lower prices – so it is not surprising that nearly two-thirds of oil and gas CEOs say their companies are facing more threats against growth than they did three years ago. For oil and gas companies, a rising tax burden, over-regulation and geopolitical uncertainty tops the list, followed by governmental response to fiscal deficit, debt burden and protectionist tendencies from national governments. Taxes are a particular issue for the sector. An internationally competitive and efficient tax system is rated as CEOs' top expectations from the government.

Power & utilities CEOs are cautious about the financial outlook; only 29% think the economy will improve this year, compared to 37% of the overall sample. The CEOs in the power and utilities sector are less confident of increasing revenues in the short or mid term than CEOs in other sectors.

What accounts for this wariness? Power & utilities CEOs are acutely conscious of how global megatrends are disrupting the entire business landscape and the profound implications on their industry. They are bracing themselves for shifts in the way customers behave, competition from new entrants, as well as traditional rivals and changes in their core production technologies. But it is the prospect of regulatory upheavals that worries them the most; 89% are weary in this regard, as compared to 66% overall. The fact that power and utilities are actively restructuring their operations is also revealing of such concerns. The percentages planned to in-source previously outsourced processes or functions and to exit major businesses or markets this year, is noticeably higher than the total sample – a clear sign that they're preparing for instability.

Mining CEOs are more hesitant about economic outlook than their counterparts in other industries. Only 16% of them believe outlook will improve in the coming 12 months, compared to 37% of the overall sample. But they are as confident of being able to generate higher revenues in the future. They're looking up to China to generate much of this growth, but they are also looking to the US and India. We see mining CEOs looking to simplify their business models and focus on their core properties. Maintaining a reign on costs is a key priority for mining CEOs; 72% say they will implement a cost reduction initiative over the next 12 months.

COMMENTING ON THE SURVEY RESULTS

Dennis M. Nally, Chairman of PricewaterhouseCoopers International, says:

"The world is facing significant challenges: economically, politically and socially. CEOs overall remain cautious in their near-term outlook for the worldwide economy, as well as for growth prospects for their own companies. While some mature markets like the US appear to be rebounding, others like the Eurozone continue to struggle. And while some emerging economies continue to expand rapidly, others are slowing. Finding the right strategic balance to sustain growth in this changing marketplace remains a challenge."

"CEO confidence is down notably in oil-producing nations around the world as a result of plummeting crude oil prices. Russia CEOs, for example, were the most confident in last year's survey, but are the least confident this year. Confidence also slipped among CEOs in the Middle East, Venezuela, and Nigeria".

We see the need for diversification more and more, especially a technologically oriented, knowledge-based, people-focused diversification, and it is tremendously important to know how to learn through that."

Dr. Javier Genaro Gutiérrez Pemberthy
Chief Executive Officer, Ecopetrol

There is quite a bit of volatility in the market. Because energy plays a significant role in the global economy and at this point in time, there is a significant shift in the oil price, the capacity of different economies in the world to absorb this price movement may cause some major economic upheavals for some countries.

Abdulrazaq Isa
CEO, Waltersmith Group

QPC - KARAMA FIELDS – POWER REQUIREMENTS PROJECT

By Lorena Rios

The Project

Increasing power generation by using MPUs turbines (Mobile Power Units) with ISO power of 8.4 MW to cover the required power at karama fields.

Benefits

1. Connecting all future wells to OHTL (Over Head Transmission Lines) to match drilling and production plan.
2. Achievement of the production plan by increasing power capacity to run the new production facilities.
3. Replacing the running Diesel Generators and using them to cover karama power at the remote areas which are not covered by OHTL.
4. The high efficiency of the turbines rather than using diesel generators to eliminate shutdown and decrease of the production loss.

The Egyptian Companies involved in this project:

-Enppi: Design

-EMC: Installation & Materials supply

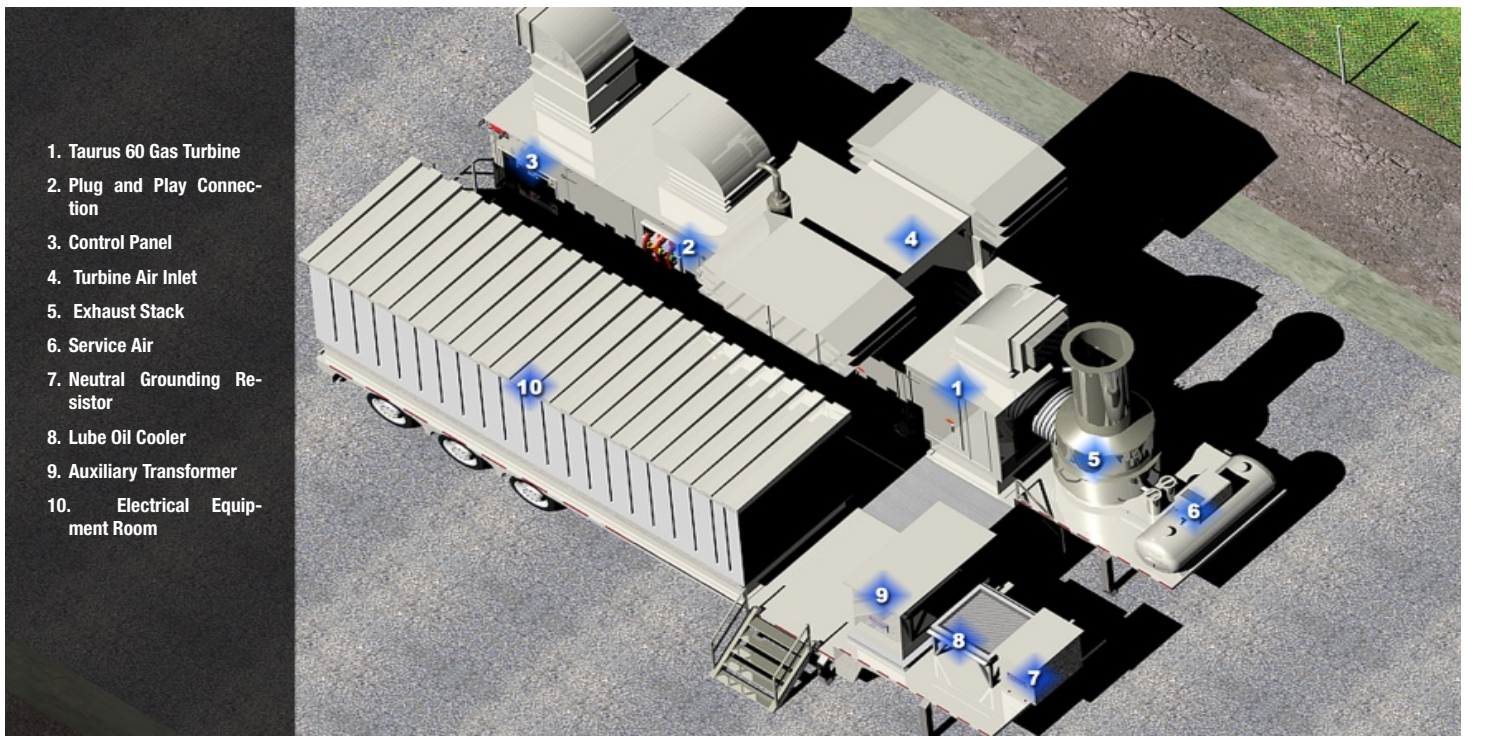
-Materials Supply: ElSewedy, ELMACO, ABB & Schneider.

Project Cost

Total cost of purchasing three MPUs (Taurus 60), Engineering & Construction and Cost of OHTL Connections is about $24.1M.

Project Time Frame

Construction of the facility is estimated to start in October 2015.



Role and Contribution of Pressure Regime Evaluation in Well Planning and Formation Evaluation Process, Zeit Bay Field – Gulf of Suez, Egypt

Saber Moustafa Selim, Suez Oil Company (SUCO), Cairo, Egypt

Summary:

The study aims to construct a simple and effective pressure regime model for Zeit Bay Field which can assist the well planner to predict the pore pressure for the upcoming wells to be drill in the field. It aims also to find out the relationship between the constructed pressure regime model and the geological setting of the field.

Introduction:

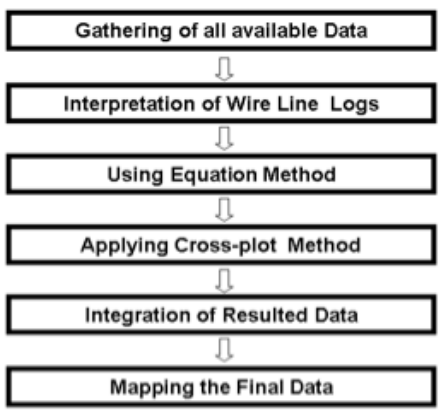
An adequate prediction of the Pore Pressure and better understanding for the Pressure Regime Model of any area are very important prior drilling any well. They can play a vital role at several stages of Exploration and Development Process.

- **In Exploration Phase, they help in:-**
  - Providing calibration to Basin Modeling.
  - Mapping Hydrocarbon Migration Pathways.
  - Assessing the "Seal" effectiveness.
  - Analyzing the "Trap" configuration and geometry for a Prospective Basin.
- **In Development Phase, they help in:-**
  - Anticipating the location and potential magnitude of possible formation pressure problems.
  - Providing suitable casing and mud program designs leading to Minimize Drilling Cost.
  - Avoiding Environmental Pollution, Loss of Reserve, Loss of Human Life …etc).

But it is worth mentioning that, it is very important to recognize and evaluate any changes in the Estimated Pore Pressure data during the drilling of a new well. The updated information can be used to implement the new well proposal.

Theory and Methodology:

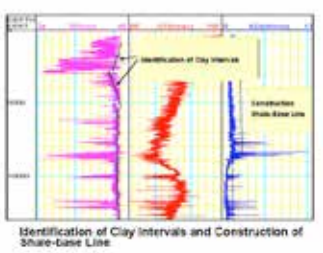
The authors follow this sequence to calculate the Estimated Pore Pressure and consequently, the Pressure Regime Model of Zeit Bay field



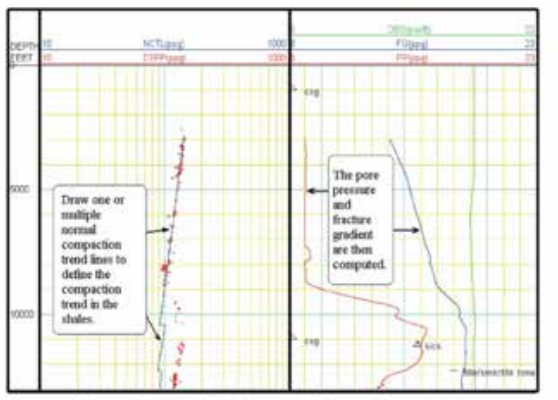
First, all available data of about fifty five wells had been collected. These data included formation tops, composite well logs, survey data, mud log sheets, wireline logs, various pressure evaluation logs and production tests. The geological setting of field and the different problems encountered while drilling these wells were taken into consideration while evaluation.

Second, since the Geopressure zones are mainly originated in Clay intervals as a result of dehydration process (Montomorillonite alters to Illite, water between layers is desorbed, liberated and transferred as free water and overburden pressure can then flush water from the sediment along with hydrocarbons) so, the Clay sections had been adequately identified.

This identification had been done by the assistance of CGR (Gamma Ray corrected for uranium content). A Shale baseline (which is more-or-less vertical lines) had been defined and a Normal Compaction Trend Line (NCTL) had been established.


Identification of Clay Intervals and Construction of Shale-Base Line

Relative porosities for each lithology had been calculated as the porosity varies with any change of lithology and pore pressure, which were noticed to be abnormally high and deviated from the Normal Trend Values in the hydrated Clay intervals. The porosity log values opposite Clay intervals (especially from the density logs) had been taken and Normal Compaction Trend had been established to calculate the Estimated Pore Pressure.



Calculation of Estimated Pore Pressure

Density and neutron logs had been used as porosity logs and Geopressure indicators. Decreasing in the observed density log values from the Normal Trend Values were interpreted as an indication to the presence of abnormal pressure.

However, the neutron logs showed the changes in the hydrogen index reflecting the Clay type where, Montomorillonite showed high hydrogen index values while Illite showed low hydrogen index values.

Sonic logs had been used as a reasonable Geopressure indicator as Interval Transit Time (Dt) is usually increased with depth in constant Clay intervals due to the increase in the porosity (Pore Pressure Gradient) and observed to be steadily moved to the highest values with depth in the transition zone. Increasing in the observed sonic log values from the normal trend values had been taken as an indication to the presence of abnormal pressure. Borehole rugosity was taken into consideration, as it is an indicator to Clay hydration where "cycle-skipping"was observed opposite Geopressure zones.

Resistivity logs had been used as another reasonable Geopressure indicator, where decreasing in the observed resistivty log values from the Normal Trend Values had been taken as an indication to the presence of abnormal pressure.

Third, the authors used two methods applying different software to calculate the Estimated Pore Pressure and consequently the Field Pressure Regime Model. These methods are summarized as follows: -

1) Cross-plot Method: -

The difference between the observed sonic log values and the Normal Trend Values had been computed to calculate the Estimated Pore Pressure in the Geopressure zones. Also, the observed resistivity log values were divided by the normal one. The values obtained from the comparison of the NCTL to the actual one were used in an empirical cross-plot relationship to determine the Estimated Pore Pressure. The cross-plot was entered from the X-axis and the pressure gradient value was determined from the pressure model.

2) Equation Method:-

Equation method has been formulated and applied by Eaton (1975, 1976) to determine the Estimated Pore Pressure in Geopressure zones. The equation has been formulated by dividing the Observed Resistivity and Sonic Log Values by the Normal Trend Value.

The general form of equation for predicting Pore Pressure from resistivity is:

P = S– [S - Po] [Ro / Rn] n

Where

P : is the Estimated Pore Pressure.

S : is the Overburden Gradient

Po : is the Observed Pressure Gradient.

Pn : is the Normal Pressure Gradient.

Ro : is the Observed Log Resistivity Value.

Rn : is the Normal Compaction Trend.

and n is an empirically derived exponent.

The general form of equation for predicting Pore Pressure from sonic is:

P = S– [S - Po] [Dt o / Dtn] n

Where

Dtn : is the Normal Compaction Trend

Dt o : is the Observed Transit Time

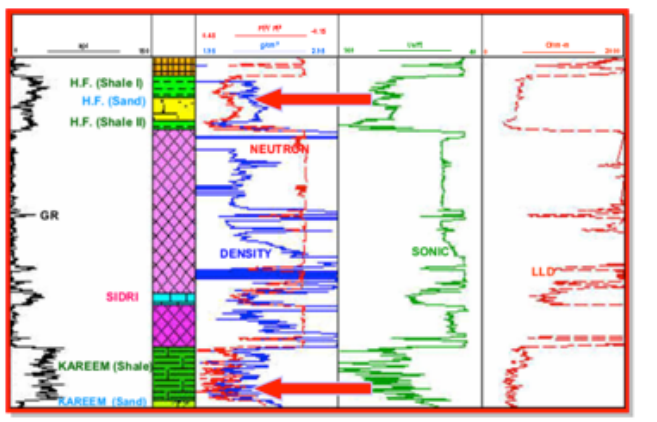
Finally, the obtained data were integrated and correlated with which was obtained either while drilling or from pressure measurement techniques. The integrated data had been mapped on top of the interested zones and the Pressure Regime Model for the studied area had been constructed.

Applications and Results:

As the applied technique to calculate the Estimated Pore Pressure depends on the presence of Clay intervals so; the Clay sections had been identified adequately.

In Zeit Bay field those Clay sections are well represented in Hammam Faraun member of Belayim formation and Kareem/Rudeis formation. Hence, data of thirty wells had been selected and analyzed. The authors emphasized on those two interested zones in this study.

CGR logs (Gamma Ray corrected for uranium content) had been used to detect the Clay interval and to determine the Hammam Faraun member and Kareem/Rudeis formation.



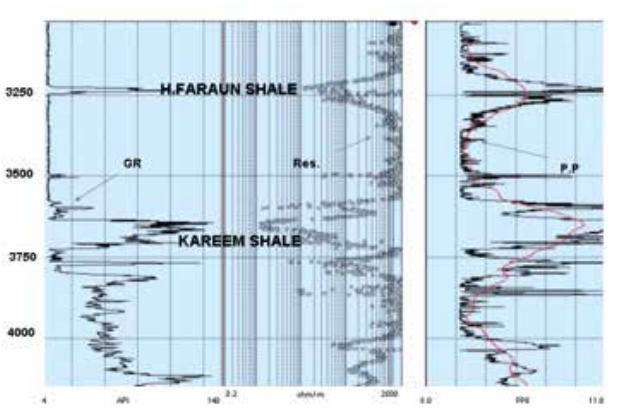
Log Responses Corresponding Shale section.

The resistivity log values opposite Hammam Faraun member and Kareem/Rudeis formation had been taken and the Estimated Pore Pressure had been calculated. The Normal Trend values had been determined by using this equation:

Rn = Ro ((S - Po)/ (S – Pn)) -0.833

The Estimated Pore Pressure had been calculated by using this equation:

Po = S – (S - Pn) (Ro / Rn) 1.2



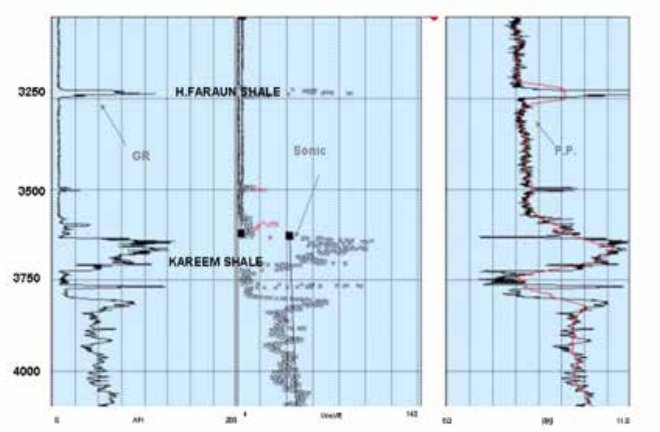
Estimated Pore Pressure From Resistivity Logs

The sonic log values opposite Hammam Faraun member and Kareem/Rudeis formation had been taken and the Estimated Pore Pressure had been calculated. The Normal Trend values had been determined by using this equation:

Dtn = Dto ((S - Po) / (S – Pn) 0.333

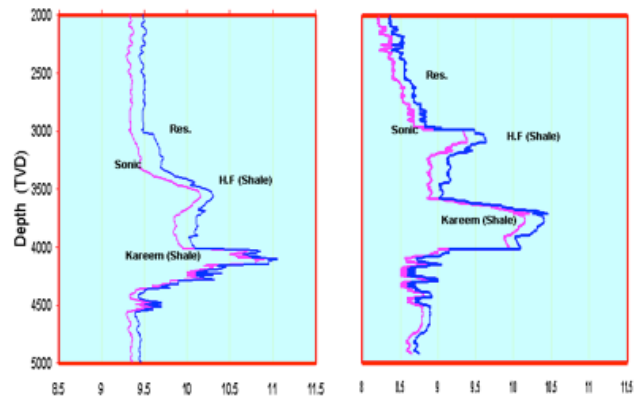
The Estimated Pore Pressure had been calculated by using this equation: -

Po = S – (S - Pn) (Dto / Dtn) 3.0

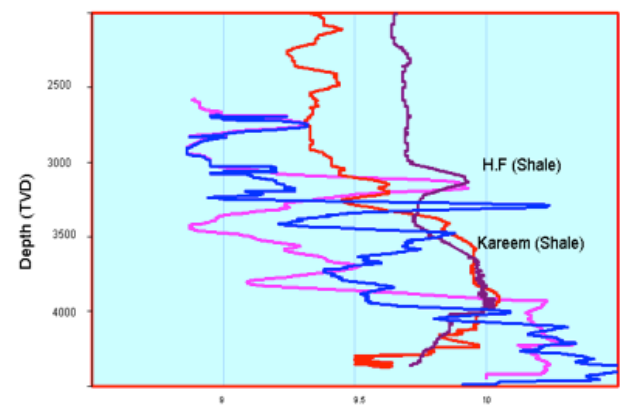


Estimated Pore Pressure From Sonic Logs

Eaton Equation and Cross-plot method had been used applying different software to calculate the Estimated Pore Pressure values from resistivity and sonic logs for the selected wells in the studied area.

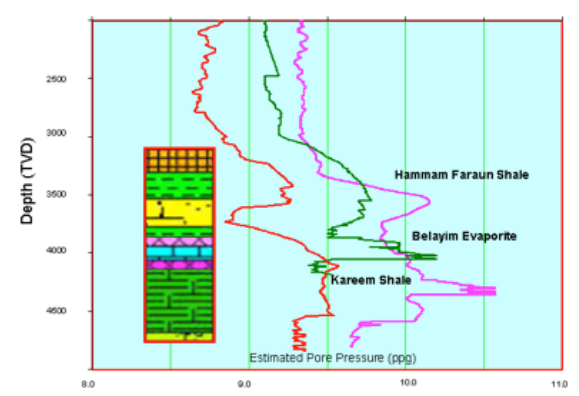


Estimated Pore Pressure From Resistivity/Sonic Logs (using Eaton Method)



Estimated Pore Pressure From Resistivity Logs (using Cross-plot Method)

The resulted Estimated Pore Pressure values were integrated and Cross-plots for these integrated values had been conducted

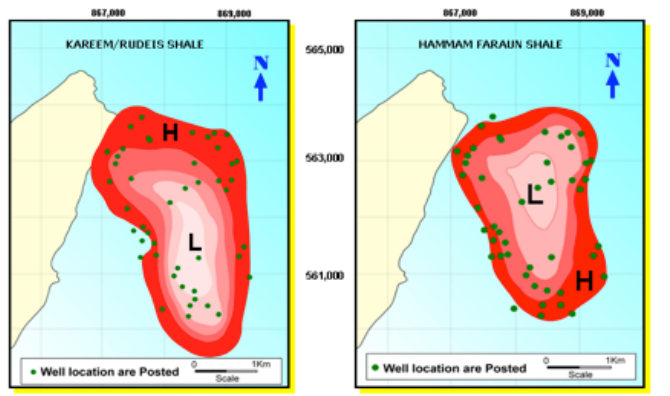


Simple Sketch for Estimated Pore Pressure (Zeit Bay Field)

This cross-plot revealed the following points:-

- The Estimated Pore Pressure values vary from well to another, but the general trend behaves the same.
- An increase in the values of the Estimated Pore Pressure is observed at top of Hammam Faraun Shale then dropped back again.
- The same phenomenon is repeated in Kareem/Rudies Shale where another increase in the values is observed at the top section and then dropped back again.
- The Estimated Pore Pressure of Hammam Faraun Shale is lower in values rather than of Kareem/Rudies Shale.

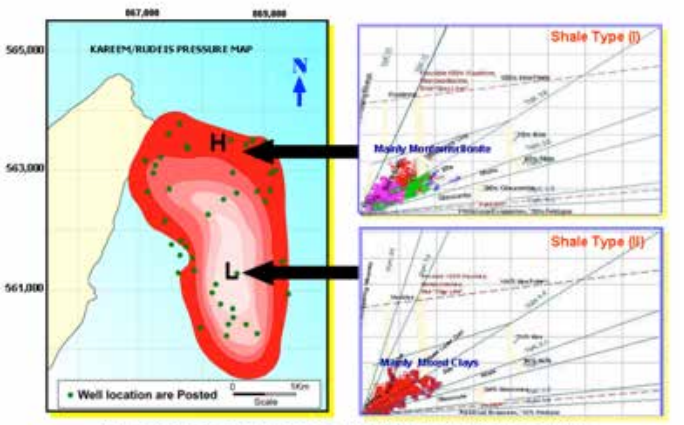
The Estimated Pore Pressure values were averaged, correlated with each others and mapped on top of Hammam Faraun member and Kareem/Rudeis formation .



Estimated Pore Pressure Maps For Interested Zones

The distribution of the Estimated Pore Pressure values on these maps exhibits considerable changes from the crestal part of the field structure and down dip position towards the flanks. The minimum Estimated Pore Pressure values are observed at the crest and increased towards the flank. Hence, Two Pressure Regime values are distinguished (One High at the Flanks and One Low at the Crest).

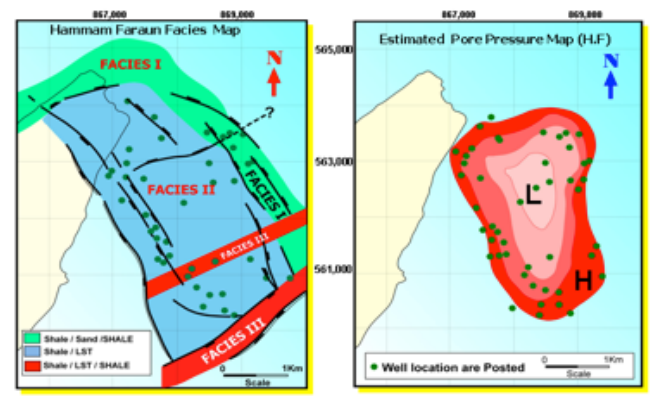
To support evidence and back-up for the resulted Estimated Pore Pressure maps, Potassium/Thorium cross-plots had been established and correlated with those maps.



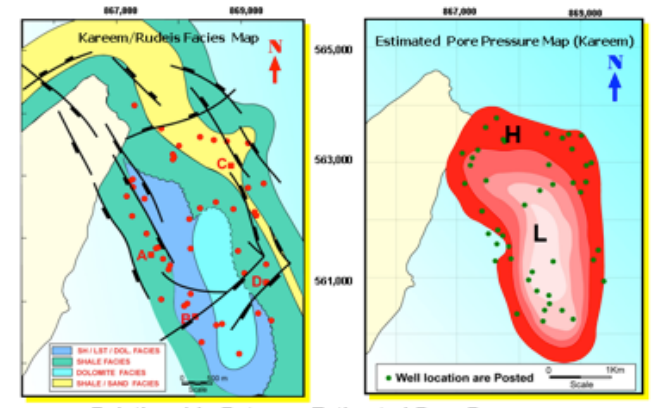
Shale Types from Potassium/Thorium Cross Plot

This geoscience's application explained the exhibition of considerable changes from the crestal part of the structure and down dip position towards flanks. The Shale of flanks is maily Montomorillonite while the mixed Shale is localized at the crestal part of the field.

To find out the relationship between the Constructed Estimated Pore Pressure maps and the geological setting of the field, facies change maps had been constructed for the interested zones.



Relationship Between Estimated Pore Pressure and Facies Change on Top Hammam Faraun



Relationship Between Estimated Pore Pressure and Facies Change on Top Kareem/Rudeis

The comparison between the maps revealed that the Estimated Pore Pressure values are matched with the field fault pattern and the lithological facies change of Hammam Faraun member and Kareem/Rudeis formation.

Also, the Miocene rocks are differentiated from stratigraphic point of view into two types. The first one is represented in the crestal part of the field and named as "costal facies". It is mainly deposited as Carbonates with thin Shale layers. The second one is represented by a deeper facies and distributed on the marginal of the field surrounding the costal facies in all sides. This type is named as "open shallow marine facies" and mainly deposited as Shale beds. This differentiation explains the presence of Two Pressure Regime values.

Conclusions and Recommendations:

1. The Pressure Regime Modeling for any area is an integral part of well planning and Formation Evaluation Process.
2. Better understanding for the Pressure Regime play a vital role prior drilling any well in:-

- Enabling the well planner to anticipate the location and potential magnitude of possible abnormal pressure problems for future drilling.
- Minimizing the drilling cost as it can be used as a guide to calculate the Estimated Pore Pressure and Fracture Pressure, so that the mud density can be optimized to provide sufficient overbalance and assure the suitable casing depth.
- Avoiding environmental pollution, loss of reserves and loss of life resulting from abnormal pressure problems.

3) The Constructed Pressure Regime Model of Zeit Bay Field revealed the following points:-

- The Estimated Pore Pressure values vary from well to another, but the general trend behaves the same.
- An increase in values of the Estimated Pore Pressure is observed at top of Hammam Faraun Shale then dropped back again.
- The same phenomenon is repeated in Kareem/Rudeis Shale where another increase in values is observed at the top section and then dropped back again.
- The Estimated Pore Pressure of Hammam Faraun Shale is lower in values rather than of Kareem Shale.
- The distribution of Estimated Pore Pressure values exhibits considerable changes from the crestal part of the structure and down dip position towards flanks.
- The minimum Estimated Pore Pressure values are observed at the crestal and increases towards the flank.
- The Estimated Pore Pressure values are matched with the field fault pattern and the lithological facies change of Hammam Faraun and Kareem formation.
- The geoscience's application explained the exhibition of considerable changes from the crestal part of the structure and down dip position towards flanks. The Shale of flanks is maily Montomorillonite while the mixed Shale is localized at the crestal part of the field.

4) The Pressure Regime of Zeit Bay field needs consultation and co-operation between Geologists, Drilling Engineers, Petroleum Engineers and Well Planners are vital to:-

- Modify the well profile prior drilling to help in reducing down hole problems.

Select the Suitable Mud and Casing Programs to drill wells safely and economically.

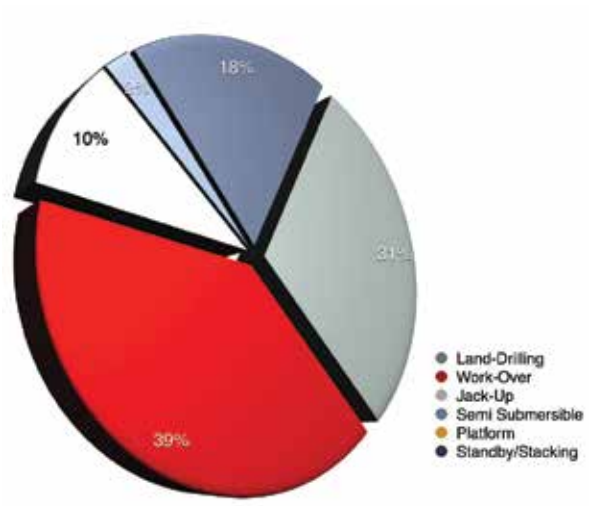
Acknowledgment:

The author sincerely thanks the management of Suez Oil Company (SUCO), the management of Egyptian General Petroleum Corporation (GPC) and the partner RWE Dea AG for their support to prepare and publish this work.

Also, the author sincerely thanks the management of Oil and Gas for publishing that work.

EGYPT STATISTICS

Rigs per Specification January 2015

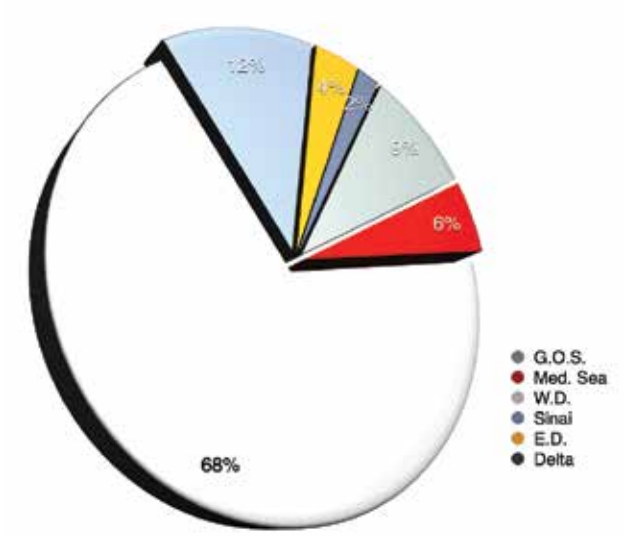


Egypt Rig Count per Area – February 2015

Area	Total	Percentage of Total Rigs
Gulf of Suez	10	9 %
Mediterranean Sea	6	5%
Western Desert	74	68 %
Sinai	13	12 %
Eastern Desert	4	4 %
Delta	2	2 %
Ganoub El Wadi	0	0 %
Total	109	100%

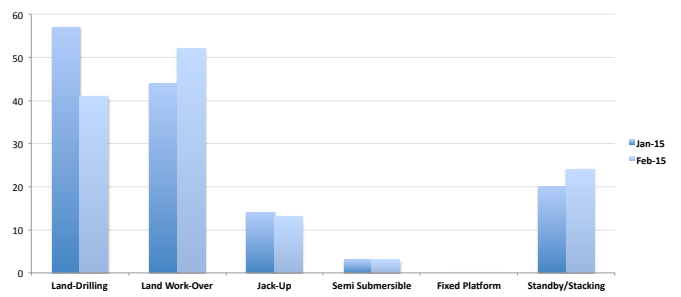
EGYPT OIL&GAS RESEARCH & ANALYSIS

Rigs per Area February 2015 (Total of 109 Working Rigs)

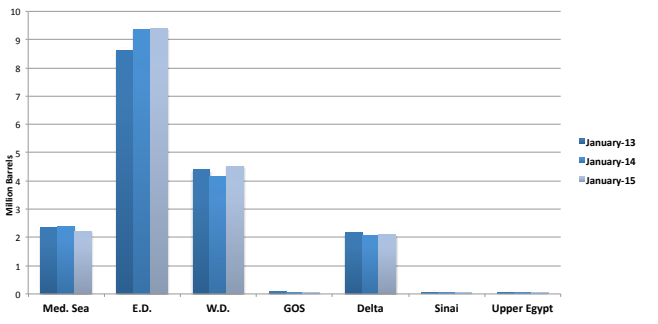


	Oil			Equivalent Gas			Condensate			Liquefied Gas		
	Barrel			Barrel			Barrel			Barrel		
	January-13	January-14	January-15	January-13	January-14	January-15	January-13	January-14	January-15	January-13	January-14	January-15
Med. Sea	2358012	2371731	2214092	22074107	18342679	14910536	1214914	1019915	810692	411918	372013	308599
E.D.	8621185	9364431	9388611		58214	35714		3057	2574		6648	5447
W.D.	4390881	4157944	4523324	7182143	7262143	7556786	1426752	1373998	1445750	788634	864133	716573
GOS	81127	62777	47326	236071	344464	521250	63773	61348	78406	195150	190096	248944
Delta	2164438	2080387	2091588	1613750	2010000	2247679	141816	201185	178151	94205	116304	112185
Sinai	11715	11712	9997	3929	10893	12143	30813	27346	27915	60409	70206	64869
Upper Egypt	10341	11884	9427									
Total	**17637699**	**18060866**	**18284365**	**31110000**	**28028393**	**25284108**	**2878068**	**2686849**	**2543488**	**1550316**	**1619400**	**1456617**

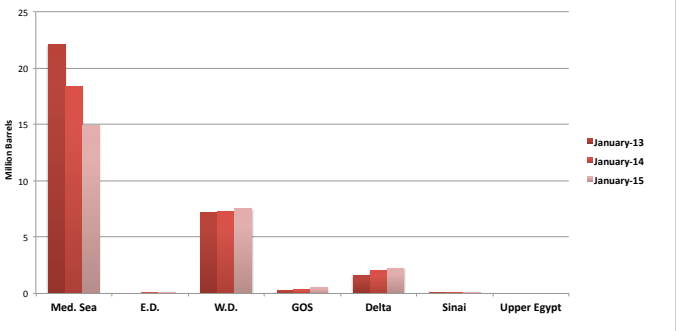
Rigs per Specification January 2015-February 2015



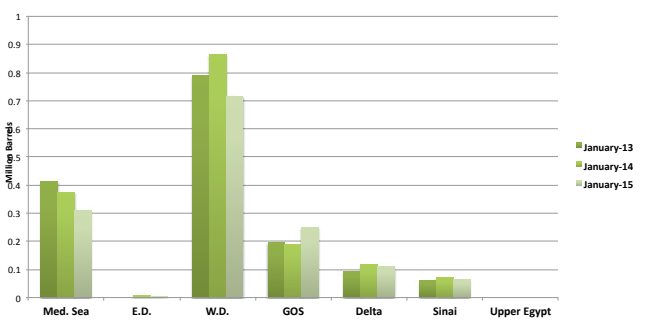
Oil Production January 2013 - 2015



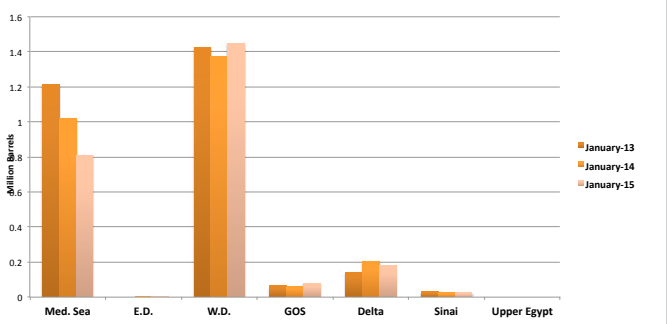
Equivalent Gas Production January 2013 - 2015



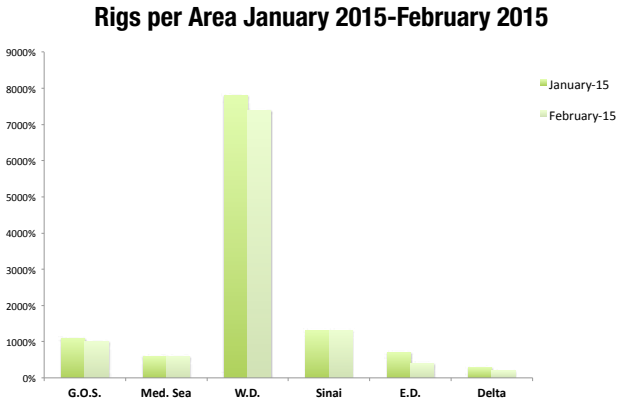
Liquefied Gas Production January 2013 - 2015



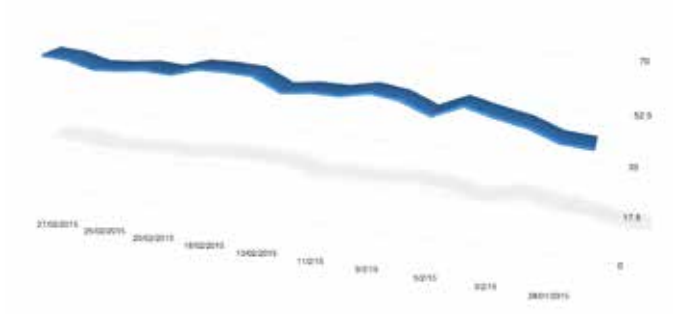
Condensates Production January 2013 - 2015



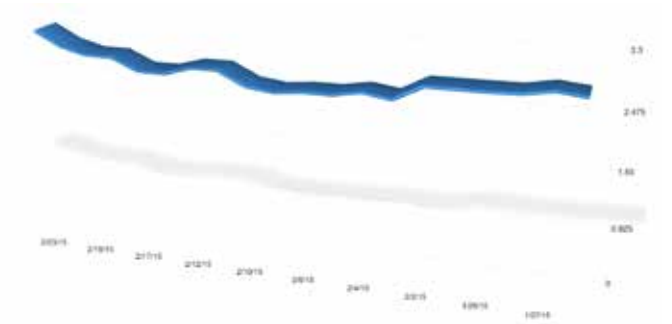
Rigs per Area January 2015-February 2015



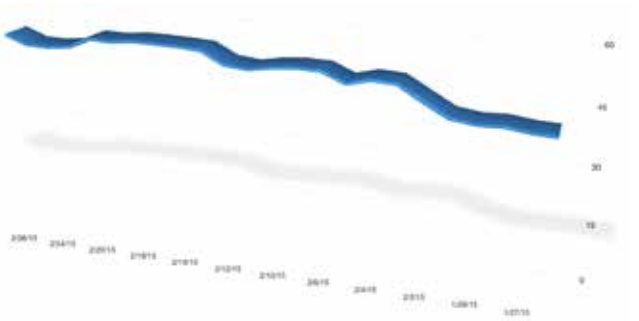
OPEC BASKET PRICE



NATURAL GAS



BRENT PRICE

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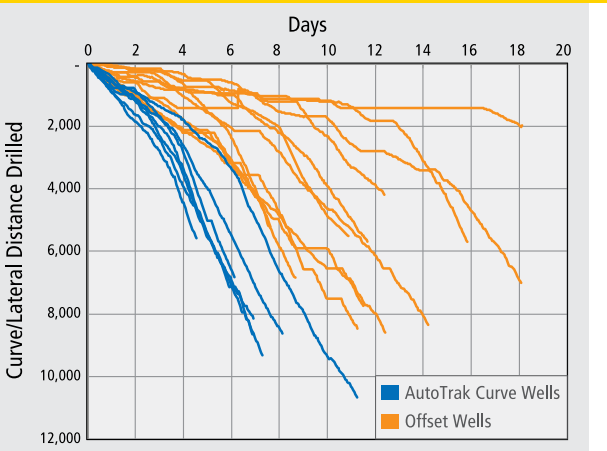

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