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ISRAEL'S OIL & GAS INDUSTRY NEWSLETTER

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Lebanon launches first offshore licensing round

Lebanon officially launched its first offshore licensing round on Thursday. All 10 blocks will be "open for nomination" by the 46 companies prequalified to participate in the auction and "after that we will decide which blocks are open for bidding in the first round", a senior adviser to the energy minister told *Interfax*. The ministry plans to award a maximum of four licenses in the first round, which is scheduled to close in November.

The coordinates of the blocks to be put up for tender and the details of the exploration production agreement (EPA) still need to be sanctioned by Lebanon's Council of Ministers, following the resignation of Prime Minister Najib Mikati in March. A draft map of the blocks and an outline of the EPA terms are available on the Lebanese Petroleum Administration's website, but could be subject to change.

It will be possible to extend the bidding round beyond the minimum six months stated in the Offshore Petroleum Resources Law if the decrees are not ratified by 2 September, caretaker Energy Minister Gebran Bassil told journalists this week.

However, there is some dispute as to whether the minister would actually have the authority to extend the auction. "Legally, the first round expires on 1 October and any extension of the round should be decided by a decree issued by the Council of Ministers," said Fadi Nader, a partner in Beirut-based Levant Law Practice.

Should the political deadlock continue and Prime Minister Designate Tammam Salam fail to form a new government within the next four months, it will also be possible for him, President Michel Sleiman and Parliamentary Speaker Nabih Berri to authorize the caretaker Council of Ministers to pass the necessary decrees – if it is considered a matter of high national interest – Bassil said.

However, there is no precedent whereby a semi-resigned government has met to authorize such a contract, Roudi Baroudi, chief executive of Doha-based Energy Consulting firm, told *Interfax*. "The Council of Ministers of a resigned government does not really meet except in cases of extraordinary circumstances – such as an act of war, an earthquake, peace talks, things that are considered of national emergency, which is not the case here."

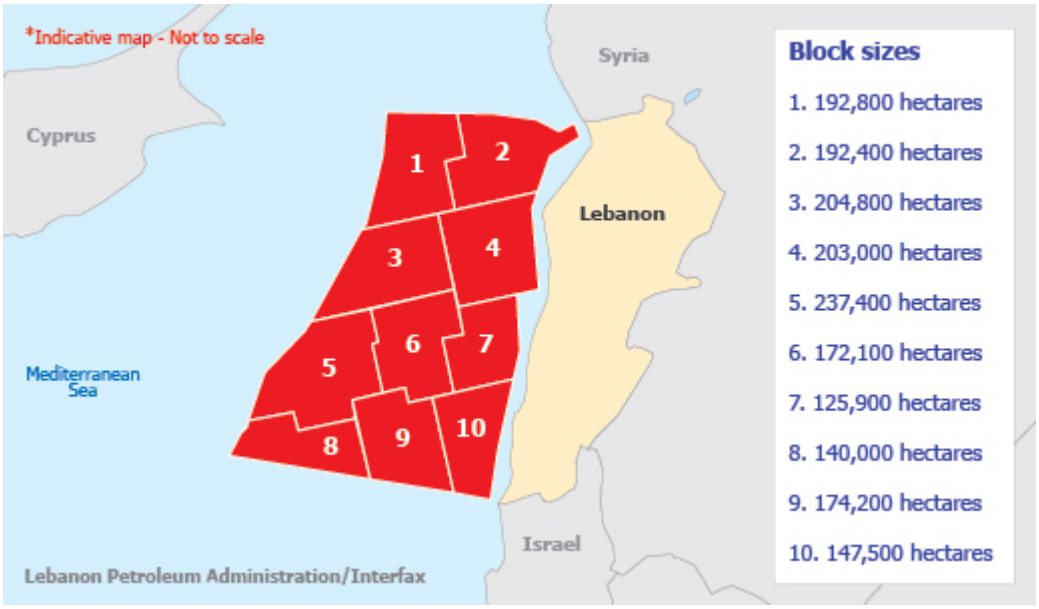
However, a source close to the government told *Interfax* in Beirut last week that Salam has made positive steps towards forming a cabinet and an announcement on the new government could be made within the next few weeks, "although you never know in Lebanon", he conceded.

The exploration phase

Under the draft EPA, companies have five years to explore the license, divided into a two-year and three-year period. The exploration period can be extended by up to 10 years with the approval of the Council of Ministers, but Lebanon's Offshore Petroleum Resources Law states

the "right holders will relinquish a minimum of 50% of the awarded acreage if they ask for an extension", energy ministry adviser Wissam Chbat said.

In the event the right holders do not request an extension of the exploration phase, or if the Council of Ministers does not approve the extension, the right holders must relinquish all the awarded acreage.



New seismic studies

Spectrum has started acquiring data for another 2,200 square km (220,000 hectare) 3D seismic survey of Lebanon's offshore in an area falling within licensing blocks 1, 3, 5 and 6, just north of a shoot carried out in late 2012. The Norwegian company expects to complete the survey in June and to offer the data to clients by mid-July, with full data sets released in September in time for the auction's November closing date.

Although Lebanon has not started any exploration within its exclusive economic zone, huge gas finds elsewhere in the region have given rise to optimism. "The exploration success rate in the offshore Nile Delta of Egypt, for example, is about 85% – which is very positive for offshore Lebanese exploration potential as well as the Israeli and Cypriot successful results," said Baroudi.

Initial surveys by the United States Geological Survey suggests there could be up to 700 billion cubic meters of gas offshore Lebanon, as well as the potential for oil.

Editor's Note: This article was amended on 7 May at 09.41. The article previously stated that Roudi Baroudi is the secretary general of the Lebanon Member Committee of the World Energy Council; however he resigned from the position earlier this year.

Published by Globes, Israel business news on April 30, 2013

Consumers will subsidize energy tycoons

Private power producers will benefit big business and the power station owners but not consumers.

Today, small electricity consumers are subsidizing the power producers for their back-up and grid management costs - costs that the producers do not have to pay.
Azrieli malls, Intel's fabs, the Ministry of Defense, the banks, Mekorot National Water Company facilities, Fattal Hotel Management Ltd., Tnuva Food Industries Ltd., Strauss Group Ltd. (TASE:STRS), and many other large electricity consumers will soon switch from government-owned Israel Electric Corporation (IEC) (TASE: ELEC.B22) to independent power producers. They will buy their electricity from the first private power stations, which will come on line this year: Dorad Energy Ltd's plant in Ashkelon, and Israel Corporation (TASE: ILCO) unit IC Power Ltd's OPC Rotem plant near Dimona.

The entry of independent power producers is good news for Israel's electricity sector, big business, and especially for the power stations' owners. But the private consumer will not benefit, at least not in the short term. On the contrary, unless the Public Utilities Authority (Electricity) does not change the current situation, households will indirectly subsidize the independent power producers, by financing the costs of the back-up systems they currently receive from IEC for free.

For 20 years, there has been talk in Israel about the need to establish independent power producers, but the major legislation allowing them only came into effect in 2005 when MK Binyamin Ben-Eliezer (Labor) was minister of national infrastructures. In the background was the threat of commercialization of electricity. The government, which banned IEC from building more power stations by law, found itself with no choice but to consent to the construction of power stations under emergency plans at much higher costs.

"There was a critical need for independent power producers to boost the electric production capacity," said Shahar Harari, an energy consultant, who was an IEC director at the time. "We wanted the private companies to bring capital and skill and build efficient power stations. No one talked about lower electricity prices for the small consumer."

The monopoly of IEC controls Israel's electricity sector. Opening the market to competition requires giving start up protection or government incentives to minimize the independent producers' risks on one hand, and maximize their returns on the other.

The main risk, which materialized, was the exhausting approval process the company had to undergo to obtain the permits to build the power stations. Dalia Power Energies Ltd., which is building a power station at Tzafit on the Coastal Plain, estimates that it burned NIS 200 million from the moment it began planning until it secured the bank financing and obtained the green light to begin construction. "No one believed that it would take ten years to build a power station here," said Harari.

But once the financing is secured for building the power station, the bonanza begins. For example, Dalia Power Energies is using a fixed availability model, which means that the government will assume 97% of the power station's operating risk. For example, the company will receive a full refund from the government for any financial loss caused by the purchase of natural gas to generate electricity, failure in the gas pipeline, or force majeure. The government also assumed market risk, or finding customers to agree to pay a good price. The government undertakes to pay the company the full price in exchange for availability, or willingness to generate electricity.

The price set gives Dalia Energies a return of at least 15% on the project's capital. As for equity, interestingly, the company's innovative financing model allows its shareholders extraordinary leverage: they only had to provide NIS 240 million in equity out of the NIS 4 billion needed to build the power station, and they raised the remaining NIS 3.75 billion through issues of bonds and preferred stock.

"The fixed availability model effectively guarantees the developers the risk of government bonds with a 15% yield," said an independent power producer.
Government bonds with a 15% yield sounds like a good investment, but this is small change in the private electricity market. For the developers, the fixed availability model is only a default option; their real objective to switch to a variable available model, where the really big money lies.

Under the variable available model, the government assumes "a mere" 80% of the venture's operating risk, even as it directly challenges IEC. But this competition is not powerless. To find customers, the independent power producer has to offer its electricity at a price that is a few percent less than the electricity tariff. The electricity tariff reflects IEC's costs, which include employing 13,000 workers, interest payments on its huge debt, the construction and maintenance of the national grid, planning units, and grid management.

Competition is not equal in the electricity market: IEC is required to keep a reserve, or power stations which only operate as back-up, and are shut down most of the year. IEC is required to use a range of fuels to generate electricity, because of the national risk of relying on only one fuel, even if it is the cheapest. IEC also operates old power stations, some of which are almost 40 years old.

The resulting numbers look more or less like this: the marginal cost of generating one kilowatt/hour at an independent power producer which uses natural gas is NIS 0.20-0.30. A power station, such as Dorad's, which was designed to operate at peak hours when rates are higher, receives an estimated NIS 0.65-0.85 per kilowatt/hour. The return on capital under this operating model is 18-21% a year.

The Ministry of Finance says that, naturally, the first players entering the electricity market and which face high entry barriers should benefit from the highest returns. Lower electricity rates for small consumers will only be seen when there are seven or eight independent power producers in Israel and there is real competition.

Meanwhile, the Ministry of Finance hopes that the small consumer will benefit indirectly through lower power generating costs for big business, either through economic growth, which

will create jobs, or through lower prices of end products. But Moshe Tzur, a former top official at the Public Utilities Authority says that this is not enough. Currently, small electricity consumers are subsidizing the power producers for their back-up and grid management costs - costs that the producers do not have to pay. "I do not envy the industrialists who will profit from the cheaper electricity, but it is unacceptable that I, a small consumer, will pay the extra," he says.

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Energy Minister: Gas export decision in 2 weeks

Silvan Shalom said the government will decide on gas exports when Prime Minister Benjamin Netanyahu returns from China.

The government will decide on the subject of gas exports after Prime Minister Benjamin Netanyahu returns from China in two weeks, Minister of Energy and Water Resources Silvan Shalom believes. During a tour of the Israel Electric Corporation (IEC) (TASE: ELEC.B22) Gezer power station Shalom said, "We will submit a proposal that will be right economically and take into account future generations, and the need to bring more investors, and which will be right socially."

Shalom was asked if the amount of gas that will be permitted for export will be lower than the recommendation of the Tzemach Report. He said, "There could be a certain gap that would benefit the whole thing. The question is for how many years do we need to preserve the reserves and all this will be taken into account, and we are really close to the moment of decision. When the prime minister returns we'll go to him and we can form a decision."

Regarding the IEI reform, Shalom said, "The situation in which IEI has run up a debt of NIS 76 billion sets off red lights and must be changed."

Shalom visited the Gezer power station to examine from close-up the damage caused by the breakdown of one of the station's generators. IEI will procure an alternative generator from a power station in Holland, which should reach Israel in June. The breakdown of the generator is reducing the IEC's production capacity by 370 megawatts and increases the risk of power outages in the summer.

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"Leviathan does not need onshore gas terminal"

Development of the Leviathan natural gas field does not require construction of an onshore terminal, SBM manager Cobi Loper told "Globes."

Development of the Leviathan natural gas field does not require construction of an onshore terminal, SBM manager Cobi Loper told "Globes". SBM is a partner in the drawing up Leviathan's development plan, and participated in a seminar on energy organized by the University of Haifa.

Loper's remarks will strengthen the opposition of Hefer Valley residents against the building of an onshore terminal in the area.

Energy market sources said in response that there was no connection between the two things. They said that that the gas terminal is critical for improving the advantages and security of Israel's gas pipeline network, which currently depends on just one pipeline and one terminal, and that the future terminal was also intended by other gas fields which will seek to deliver gas to the domestic market. The sources added that the government's plans call for much of the process to be carried out at sea.

The Tamar gas field, located 90 kilometers west of Haifa, delivers gas to Israel via an undersea pipeline and a production terminal offshore from Ashdod to an onshore terminal near the port. The Leviathan field, located 130 kilometers offshore, will be developed differently. Under the plan being drawn up by the well operator Noble Energy Inc. (NYSE: NBL), production will be carried out by floating production, storage and offloading (FPSO) ship, which could be 300 meters long.

Loper says that the ship is big enough to hold all the facilities needed to handle the gas. "All you need to put onshore is a Petroleum Resources Management System (PRMS) to lower the gas pressure," he said. Hefer Valley residents are waging a public battle against plans to approve two 100-dunam (25-acre) sites in the area for the construction of a gas terminal. The National Planning and Building Commission has approved an environmental survey to be carried out at the two sites, which are proximate to the Meretz Sewage Treatment Plant by Kibbutz Ein Hashoresh and the Hagit power station near Yokne'am. The residents are demanding that the government find an alternative solution for handling the gas at sea.

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Knesset lobby seeks to block gas exports

A meeting of the environment-social lobby called for the decision to be made in the Knesset, not the government.

The environmental-social lobby in the Knesset has held an emergency meeting with the aim of blocking the export of natural gas. A letter was sent to Prime Minister Benjamin Netanyahu signed by more than 60 Knesset members demanding that the decision on whether to permit the export of gas should not be made in the government but should be referred to the Knesset.

The letter, initiated by MK Dov Khenin, states, "The decision on the question of the export of gas from the reserves discovered offshore from Israel has far reaching economic, social, and environmental consequences. Such a weighty matter ought to be discussed, and ultimately decided, by the Knesset, amid a professional, comprehensive, and transparent public debate. We the undersigned, members of Knesset from various parties, call on you to take steps to bring the matter before the Knesset in a format that will allow such a debate and decision."

The emergency meeting was attended by Knesset members Moshe Gafni, Moshe Mizrahi, Reuven Rivlin, Yifat Kariv, Merav Michaeli, Stav Shafir, Dov Khenin, Nitzan Horowitz, Michal Rozin, Eitan Cabel, Micky Rosenthal, Avishay Braverman, Environment Minister Amir Peretz, Shelly Yachimovich, and Tamar Zandberg, who were joined by members of various environmental and social organizations, such as Green Course, Adam Teva V'Din Israel Union for Environmental Defense, the Israel Energy Forum, and dozens of activists.

Khenin opened the meeting by saying, "There is a clear majority in the Knesset behind the demand to bring the question of gas exports for discussion and decision by the Knesset. This is a question of huge significance. It cannot be decided behind closed doors, in proceedings that are not open to the public. In my view, a decision to allow gas exports will be a mistake in every respect. Economically, it will cause a rise in the price of gas to industry and for production of electricity in Israel. Socially, it is clear that higher prices will fall on Israel's citizens, with all the harsh consequences of that. Environmentally, the decision will hit the transition to cleaner production processes and will bring in train air pollution and health hazards. We call on the public to make its voice heard and to show here too that the era in which secret coups can be carried out in favor of tycoons is over."

Amir Peretz said that in calculating the needs of the economy, the needs of medium and heavy industry and of transport had been underestimated, and that the Ministry of the Environment was demanding that a larger quantity of gas should be retained for the benefit of the citizens of Israel.

Avishay Braverman said that the matter would shortly be discussed by the Knesset Economics Committee, and that the gas should be exploited to create an industry around gas products. "A natural monopoly has been formed in Israel on gas. Shall we commit the same sin we committed in relation to the resources of the Dead Sea? Instead of developing derivative products, Israel Chemicals sells the resources. An industry should be created around the gas."

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Leviathan deal will be finalized in next few months

Woodside CEO Peter Coleman tells "Globes" he is concerned about government foot-dragging in approving gas exports.

"We expect the Leviathan agreement will be finalized during the next couple of months," Woodside Petroleum Ltd. (ASX: WPL) CEO Peter Coleman told "Globes" in his first interview with the Israeli media. He expressed concerns over the government's delay in deciding on a natural gas export policy, and over calls to change the Tzemach Committee's recommendations on gas exports.

In early December, Woodside signed a letter of intent to acquire 30% of the rights to Leviathan with its current owners, Noble Energy Inc. (NYSE: NBL), Delek Group Ltd. (TASE: DLEKG), and Ratio Oil Exploration (1992) LP (TASE:RATI.L) for $1.25 billion. The bulk of the payment will be paid when the deal is finalized, after the Tzemach Committee's recommendations are approved.

"Globes": You decided to sign the letter of intent even before the Tzemach Committee conclusions were approved by the government. Was it based on the belief that they will approved even though the elections were imminent at the time? Coleman: "Yes, it was. We actually felt that the process the Tzemach Committee went through was a very good one. They in fact spoke to us by telephone before they finalized their report, so we had have some input into that, but we felt that the recommendations were quite balanced, although the percentage of gas reserved for domestic use is high on a world scale. But we felt that we could put together an export project around the remaining quantity of gas. That gave us some confidence in moving forward at that point in time. We knew the government was going into elections, so we respected that process. Now a government's formed. It's time now for us to get back in and ensure our

voices are heard, so the government's considering whether to pick up the report as is, or whether, as some people would like, to make some modifications to it."

How much did your meeting with Prime Minister Benjamin Netanyahu influence your decision?
"We were pleased with the meeting we had with the prime minister. It did give us some comfort that Israel was looking very broadly with respect to the use of its gas resources and understanding what was the best way in the long term to ensure that it's utilized for the best of the Israeli people."

Four months have passed since the meeting, and nothing has happened. Are you in any way less certain about the final outcome that you had been previously?
"I don't think the length of time has been helpful at all. We felt the process was going to provide certainty. Now there are people questioning the outcome of that particular process."
Coleman added, "It's not helpful from the point of view that the world is moving on. It's becoming very, very competitive. If you look at the resources now in the US that are being developed around shale gas, if you look at what's happening in East Africa, and let's put it into context. A year ago people were just starting to talk about Africa. A year before that people hadn't - they're weren't talking about it at all. So two years ago, East Africa wasn't being spoken about, yet we now know that in Mozambique alone there's about a hundred TCF of gas and more gas being discovered.
"So it is a competitive world and whether it's LNG or other exports, they require certainty in the marketplace, because they are very long term investments. The design and engineering can take 3-4 years. If we're doing well, to be quite honest. And then it takes another 6-7 years to build it. So you're starting to talk about markets that are 8-10 years from now and trying to position yourself so you can enter that marketplace. That requires a lot of certainty." Coleman noted that the investments amounted to billions of dollars on projects that could take 40 years.

Criticism of the Tzemach Committee's recommendations began the day they were published. Since then, there has been a string of dry holes, which have led to calls for reviewing the recommendations and increasing the proportion of gas reserved for domestic consumption at the expense of exports.
"It's a fact that there is uncertainty in drilling exploration wells and I understand some people have questioned whether the reservation policy is too generous, given the fact of the recent unsuccessful wells. I would put to you a much different view on that. I would suggest quite strongly the best way to deal with that in fact is to encourage more exploration rather than discourage exploration… If the gas cannot be exported, then there's no clear path to monetization because the domestic market has enough gas for many, many years. The only way to monetize is through export contracts."
The Tzemach report advises the government to keep a reserve to meet Israel's needs for 25 years, and to export the rest. In the absence of new discoveries, there are calls to keep half of the gas reserves for domestic use.

"The range is typically around 15%. We say 15% here in Western Australia, and in fact I think we're a very good analogue for what Israel is dealing with at the moment. I have seen it go up to 30% in some places. 50% I have not seen before. Understanding Israel's quite valid concerns about preserving resources for the future, I could understand why 50% was arrived at in that regard. I would put back to people who are concerned about that, that the very best place to find hydrocarbon or gas is where you've already found it. And the best thing to do in fact is to encourage exploration and further exploration." He added that the Levant basin is full of natural gas, and exploration has only just begun.

Coleman says that the first offshore gas discoveries in Western Australia were made 30-40 years ago, and that for years, the state and federal governments invested heavily in laying pipelines and building infrastructures. Woodside brought in oil majors as partners for their capital and drilling know-how. "We're on the way to become the world's biggest LNG exporter, and we reserve 15% of gas for domestic use. I'm talking about a 40-year process, but for this happen, Israel must also encourage exploration and development," he adds.

Why were you interested in the eastern Mediterranean for Woodside?
"We were looking for somewhere where we could bring our capabilities to create additional value to a joint venture, and so as we looked at Leviathan, we were also attracted by the quality of the Leviathan resource and it's a world-class resource by any measure. And we felt that given the potential for export from Leviathan, then Woodside had capabilities not only in development and production, but also in our marketing activities, and particularly in LNG and pipeline gas. So that was the attraction for us, and then of course with the partners in Leviathan that we felt we could work with very well, particularly Noble Energy and the local partners as well."

You believe that you can find markets for Leviathan even in East Asia, even though the distance is far greater than from Australia?
"I absolutely do. We think we can get Leviathan gas east of India, and certainly it could go into China. There are other options for it to go into Europe, but there's a lot of head-to-head competition in Europe. Our preference is to establish new relationships with existing Woodside customers in Asia and to continue to build on that. But there's a lot of competition out there. Leviathan will be competing with gas coming out of East Africa, and so the earlier that we can get certainty around our export options from Leviathan, the earlier we can get into market and secure those customers."
Australia Israel Chamber of Commerce executive director Tel Aviv Paul Israel, who has provided support for Woodside's Leviathan deal since initial talks began, said, "Woodside is a natural partner for the Israeli industry. They are one of the world's most experienced LNG operators; their involvement here increases the chance that the gas will be exported in a most effective manner ensuring maximum benefit to Israel and its citizens."

Woodside is Australia's largest energy company and the world's largest non-government liquefied natural gas (LNG) exporter, after the government-owned companies of Qatar, Indonesia, and Malaysia. The company has been developing huge offshore projects in Western Australia, centered on the Karratha LNG plant, which has an annual production capacity of 16.3 million tons. The company also began operating the 4.3-million ton capacity Pluto LNG plant last year, after an investment of AU$14.9 billion. The company also owns floating production, storage and offloading (FPSO) ships, which may be used at Leviathan. It is involved in the construction of the Sunrise floating LNG (FLNG) facility in East Timor; an FLNG facility is under construction for the Tamar gas field.

Earlier this month, Woodside cancelled plans to build a third LNG plant in Australia, Browse, after its cost escalated to $45 billion, rendering it not worthwhile. One energy expert believes that rising prices in Australia was why Coleman was interested in expanding the company's operations to new markets, including Israel.

Did you face political pressure to stay out of Israel?
"The answer to the question is in short: no. In fact there was encouragement to continue to strengthen the relationship that we have with Israel for many, many years now. Our relationship with Israel - as you're aware it's a very strong relationship and it's going back to the formation of Israel - and it's one that in fact the Australian people and the Australian government hold very dear. I would tell you from both sides of government in Australia, including current and former prime ministers, who made representations on Woodside's behalf to introduce us into the country."

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Published by Ministry of Energy on April 22, 2013

Natural Gas Flows North: Minister of Energy and Water Resources, Mr. Silvan Shalom, signed two licenses for the construction and operation of natural gas distribution networks in northern Israel

Minister of Energy and Water, Silvan Shalom: "The revolution is underway following the gas discovery and now we need to address distribution. We are taking action so that the consumer can enjoy better service and prices in addition to using cleaner and cheaper gas"

Minister of Energy and Water Resources, Mr. Silvan Shalom, signed yesterday (Sunday, April 21, 2013) two licenses for the construction and operation of natural gas distribution networks in the north - in the "Hadera and Amakim (Valleys)" and the "Haifa and the Galilee" regions. The distribution licenses granted today (Monday, April 22, 2013) pave the way to connecting industrial zones, plants and large consumers in the northern regions to natural gas, on the way to nationwide deployment of natural gas distribution and to implementation of Ministry of Energy and Water Resources policy to advance deployment of natural gas to all parts of the country and expand its use to varied consumers.

The licenses refer to winners of tenders for the fourth and fifth of the six natural gas distribution regions as approved by the Natural Gas Council of the Natural Gas Authority. The company awarded the tender to construct and operate the natural gas distribution network in the "Hadera and Amakim (Valleys)" region to SuperNG Hadera and the Amakim, a sister company of the licensee for distribution of natural gas in the central region which is owned by Supernaturalgas and Shapir Engineering. The tender winner committed to invest a sum of NIS 218M in the distribution network within a period of three years. The Hadera and Amakim region includes, among other locations: Netanya, Hadera, Zikhron Ya'akov, Migdal HaEmek, Afula, Nazareth, Nazareth Illit, Tziporit Industrial Zone, Tirat HaCarmel and Emek Hamayanot.

The tender winner in the Haifa and the Galilee region is Merimon Natural Gas Ltd., owned by Rimon Consulting and Management Services Ltd. and C. Mer Industries Ltd. which committed to invest NIS 225M in the network over a period of 7 years, of which more than NIS 148M will be invested within 3 years. This region includes, among other locations: Haifa, Haifa Bay and the Krayot area, Nahariya, Ma'alot-Tarshiha, Acre, Karmiel, Kiryat Shmona, Tiberias, Rosh Pinna, Safed, Katzrin and Tzemach.

In accordance with the tender terms, and in order to receive the license for 25 years, the winning companies provided guarantees for the amount of approximately NIS 10M and contracted with natural gas experts specializing in construction, operation, maintenance and planning.

In the aim of shortening timetables for connecting the first consumers to the distribution networks in the north regions, the Natural Gas Authority instructed Israel Natural Gas Lines Ltd., the gas transmission company, to commence planning and construction of Pressure Reducing and Metering Stations (PRMS) at the following sites: Deshanim in Haifa Bay, Beit Keshet, Hadera and Afula. Concomitantly, the Natural Gas Authority began statutory planning of distribution lines in the two regions.

The distribution network constitutes the low pressure (under 16 BAR) natural gas supply infrastructure for network consumers, enabling medium and small businesses as well as industrial plants that do not need high pressure natural gas supply (such as large plants and power stations) to connect to the natural gas system. The network is vital in that it will enable a wide variety of energy consumers (for example industrial plants, hospitals, office buildings and commercial centers) to convert their activities to natural gas which is a cheap and more environment-friendly source of energy compared to electricity and other fuels. The infrastructure will be established to meet the deployment needs of potential consumers in the specified regions.

The Minister of Energy and Water Resources has granted licenses to three regions to date: SuperNG in the central region, Negev Natural Gas Ltd. in the Negev region and Southern Natural Gas Ltd. in the southern region.

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Published by Globes, Israel business news on April 23rd 2013

Woodside is losing patience on Leviathan

Every month that passes increases Woodside's fears that the Leviathan deal was a mistake that will cost it better business opportunities elsewhere in the world.

Woodside Petroleum Ltd. (ASX: WPL) CEO Peter Coleman is under pressure. Reading between the lines of his Australian understatement, is real worry about the fate of the Leviathan deal. The global natural gas market is in turmoil. The US and China are threatening to flood the market by the end of the decade with cheap shale gas. There is a race against the clock to win the big gas fields and close long-term supply contracts before prices crash.

In the past two years, Mozambique has become the hottest place in the market, and Lebanon could become the next hot place in a year. All the energy majors are rushing there.

But the Israeli government has time. It is behaving as if it is alone in the world. Every month that passes increases Woodside's fears that the Leviathan deal was a mistake that will cost it better business opportunities elsewhere in the world. Coleman is the man who signed the deal.

On December 6, 2012, Woodside signed a letter of intent to acquire 30% of the rights to Leviathan for $1.25 billion in cash from its current owners Noble Energy Inc. (NYSE: NBL), Delek Group Ltd. (TASE: DLEKG), and Ratio Oil Exploration (1992) LP (TASE:RATI.L). Shortly before the signing, Coleman came to Israel and met Prime Minister Benjamin Netanyahu. Coleman wanted to know whether the

Tzemach report, which recommends natural gas exports, would be approved. According to a non-Australian source, Netanyahu told Coleman that the report would be approved within three months. Coleman decided to sign the letter of intent for Leviathan. The closing was scheduled for February. February has passed, and so has March, and April is almost gone, and government approval of the Tzemach report is nowhere in sight. With some delay, the Australians are beginning to realize that nothing in Israel is obvious. Keeping an official government report and oral promises by the prime minister depend on changing political circumstances and the ego of the new minister who wants to make his mark. Israeli politicians know how to talk about the importance of foreign investment, but they almost always act on the basis of personal interest.

The complacency that characterized Woodside and Coleman until now is over. Their confidence is beginning to crack. The big change occurred when Nobel Energy CEO Charles Davidson visited Israel last week. The Australians apparently heard from the Americans that something had made them anxious. Davidson apparently heard from new Minister Energy and Water Resources Silvan Shalom what Shalom told the Energy Conference yesterday: "The Tzemach Report is not sacred. It's possible to change anything, except the Bible."

Shalom's remarks are liable to raise hard questions at Woodside's board of directors. "Who is this Silvan Shalom?" the directors are liable to ask. "Why in hell are we wasting our time in Israel? To get lectures on the Bible?"

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Published by Globes, Israel business news on March 8, 2013

Karish 1 drilling to begin in coming days

Delek announced that drilling will begin at the prospect north west of Haifa, which has a 77% probability of holding 3 TCF of gas.

Delek Group Ltd. (TASE: DLEKG) energy exploration units Delek Drilling Limited Partnership (TASE: DEDR.L) and Avner Oil and Gas LP (TASE: AVNR.L) announced this morning that drilling at the Karish 1 field will begin in the coming few days. The companies said that the drilling at Karish 1, which is part of the Alon C license, would last three months and cost $90 million.

The drilling will be carried out on the basis of a prospective resources report published in December 2012, which said there was a 77% probability of finding gas. The report added that any findings were likely to be of commercial quantities.

Yesterday, Noble Energy Inc. (NYSE: NBL), Delek's partner in the Karish prospect and the drilling operator said, "Following operations at Leviathan 4 and pending partner approval, the Ensco 5006 rig will be relocated to the Karish prospect in the Alon C license. The Karish prospect has a pre-drill gross mean resource estimate of 3 TCF (trillion cubic feet), and a range of 2.3 to 3.6 TCF and is expected to reach total depth in the second quarter."

The Karish 1 drilling will take place 75 kilometers North West of Haifa with the target strata in the Tamar sands. The depth of water at the drilling site is 1,740 meters, and the target depth of the drilling is 4,900 meters.

Noble Energy owns 47.1% of the Alon C license, and Avner and Delek Drilling each own 26.47%.

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Lebanon Picks 46 Firms for Gas Exploration Bids

BEIRUT - A group of 46 firms have qualified to bid on a first round of licenses to explore Lebanese offshore gas fields, with 12 qualified to bid as operators, the energy minister said on Thursday.

"This is a new step forward towards the entry of Lebanon into the world of oil," Gebrane Bassil said during a press conference to announce the qualifiers.

The bidding round is scheduled to begin on May 2.

Of the 52 companies that entered the pre-qualification process, 12 qualified as potential operators and another 34 as potential non-operators able to participate indirectly in the exploitation of Lebanon's offshore gas reserves.

The 12 include U.S. firms Anadarko Petroleum Corp., Chevron Corp. and Exxon Mobil Corp., Europe's Total SA, Repsol SA, Royal Dutch Shell PLC, Maersk Sealand, Statoil ASA and Eni SpA; Brazil's Petrobras, Malaysia's Petronas Carigili and Japan's Inpex Corp.

The bidding will be open until Nov. 4, Bassil said, adding that tender specifications had been finalized but needed to be approved by the cabinet.

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Published by Rigzone on March 25, 2013

Lebanese Geology Promises Offshore Oil Bonanza

The Levant Basin in the Eastern Mediterranean has already been proven as a hydrocarbon system thanks to major gas discoveries in both Cypriot and Israeli waters. Now the Republic of Lebanon is getting in on the act by opening up its offshore waters to oil and gas explorers.

Lebanon's deepwater area off its coast in the Eastern Mediterranean covers more than 7,600 square miles and offers a variety of unexplored hydrocarbon plays. However, while gas appears to be predominant in the southern part of the Levant Basin, offshore Israel, there is evidence to support the view that there might be plenty of oil resources in the waters of Israel's northern neighbor.

Recently, the Petroleum Administration of the Republic of Lebanon held a seminar to promote pre-qualification for the first ever Lebanese offshore licensing round. Held on March 7 in London, and attended by Rigzone, this was the only formal event planned by the Petroleum Administration ahead of the March 28 deadline for pre-qualification.

Delegates from a variety of oil and gas companies – including majors such as Chevron Corp. and Repsol S.A. – were treated to an exposition on the geology of the region, and got further details from the Petroleum Administration itself on the forthcoming licensing round.

According to one of the presenters, Dr. Neil Hodgson, an exploration geology specialist at seismic imaging firm Spectrum ASA, offshore Lebanon represents an enticing frontier exploration zone.

"It's not many times in your career that you come across a basin that is completely untouched and yet is incredibly prospective," Hodgson said.

"One of the exciting things about this particular basin is that the acreage offshore has never been licensed before. And this is the first chance that the industry has got to discover the wealth and the hydrocarbon promises that lie offshore."

Hodgson pointed out that oil and gas companies who get involved in offshore Lebanon will also benefit from a lot of 3D seismic data that has already been acquired.

"It's very rare that you have 70 percent of a basin covered by 3D seismic before there's even a single license block. That's something very clever that the Lebanese authorities have arranged so that the industry will have 3D seismic when they acquire blocks. So, instead of acquiring seismic before they drill, they can move very, very rapidly into a drilling phase," he said.

One of the key factors that make offshore Lebanon enticing for explorers is that its geology is different to that found elsewhere in the Levant Basin.

While Cyprus and Israel saw giant gas discoveries such as the Aphrodite field (estimated to hold up to nine trillion cubic feet of gas) and Tamar (eight trillion cubic feet), offshore Lebanon promises large oil fields as well as gas.

"The wells that were discovered in the southern Levant Basin discovered dry gas and they discovered dry gas in the early Miocene. But as you come offshore to the north and you go into the Lebanese acreage in the northern Levant Basin the basin gets deeper, the source rocks become more mature and it becomes an oil-prone basin as well as a gas-prone basin," explained Hodgson.

Oil Seeps All Along the Coast

The early Miocene sands in the Levant Basin come from Nile Delta, according to Hodgson. Sands from the early Miocene period were transported long distances to the basement floor and dumped along what is known as the Levant Ramp – a steep change of dip on the basement floor. Channel systems, like gutters, run along the southern Levant Basin, which means the sands have distributed into large fans in the northern Levant Basin.

"And so the mass of sands is in the northern Levant Basin offshore Lebanon, rather than the southern Levant Basin, where the gas discoveries were made. It's quite unusual … but all of these discoveries here [in the southern Levant basin] – Tamar, Leviathan and Aphrodite – have relatively thin reservoirs. They have several hundred meters of reservoirs, which is pretty good, but it's not as good as you are going to find when you go into the northern Levant Basin offshore Lebanon because the reservoir there will be a thousand meters thick. At least three times as thick as you find with the reservoir to the south," Hodgson said.

The source rock offshore Lebanon is mature and buried deep enough for oil generation, Hodgson explained.

"In Tamar, we have biogenic gas – gas produced by biogenic action, not thermally produced … That's because this source rock is not buried deep enough, whereas in the northern Levant Basin it is buried deep enough and there's so many studies now that come together to demonstrate that," Hodgson said.

"From the study that we did, we could see that the source rock under Tamar/Leviathan was not mature, whereas the source rock here in the northern Levant Basin offshore Lebanon is mature and it is mature for the production of oil."

Meanwhile, more evidence for oil plays offshore Lebanon exist in the form of oil seeps that can be seen all the way along the coast of Lebanon. The reason for these seeps running up the coats is a kilometer-thick sequence of salt that no oil can get through.

The oil "migrates up and hits the base of the salt and then wriggles along the base of the salt until it can find a way out. And it finds a way out at the edge of the salt, which is all the way up the coast," Hodgson explained.

One 769-square mile (2,000-square kilometer) area that Spectrum has acquired 2D seismic data over suggests a number of structures that hold up to 20 trillion cubic feet of gas (or their oil equivalent), according an example presented by Hodgson.

License Blocks Already Prepared

After some political infighting within Lebanon, which delayed the original pre-qualification process for international companies that want to get involved in the country's first offshore licensing round, Lebanon has now set a March 28 deadline for pre-qualification. However, that could still be extended by a couple of weeks according to Wissam Zahabi, the head of Lebanese Petroleum Administration's economic and finance department, who also presented at the London seminar.

Three weeks will be taken to assess the license applications before the licensing round officially begins May 2. The round will last six months and close Nov. 4.

The Lebanese government is to opt for a royalty charge rather than have the state itself take part in the licensing round, Zahabi explained.

"There's an option in the law, but we will not have this state participation. We don't have the entity to manage this," Zahabi said. "So there will be no state participation, we will have royalty on gas, which is flat, and royalty on oil which is progressive and related to production. I will not give the figures now."

Meanwhile, Zahabi said that the various license blocks that Lebanon will put up for auction will be revealed soon.

"We have already prepared them," he said. "How many blocks we shall award we don't know. We are still working on our licensing strategy."

Zahabi outlined a few of the terms of the licenses:

- The licenses will include an exploration phase of up to 10 years and a production phase that will last up to 30 years.

- Each exploration block must have at least three companies participating in the license. Firms participating should be joint stock companies.
- Operators of a license should have total assets of $10 billion and should previously have had operatorship of at least one petroleum development in water depths in excess of 500 meters (1,640 feet).
- Non-operating participants should have already established petroleum production elsewhere and have at least $500 million of total assets, although joint ventures of companies that have combined assets of more than $500 million will also be acceptable.

Dozens of companies have already expressed interest in Lebanon's first offshore licensing round. The next couple of months will see how many are in the mix for when the country comes to award the licenses in February 2014.

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