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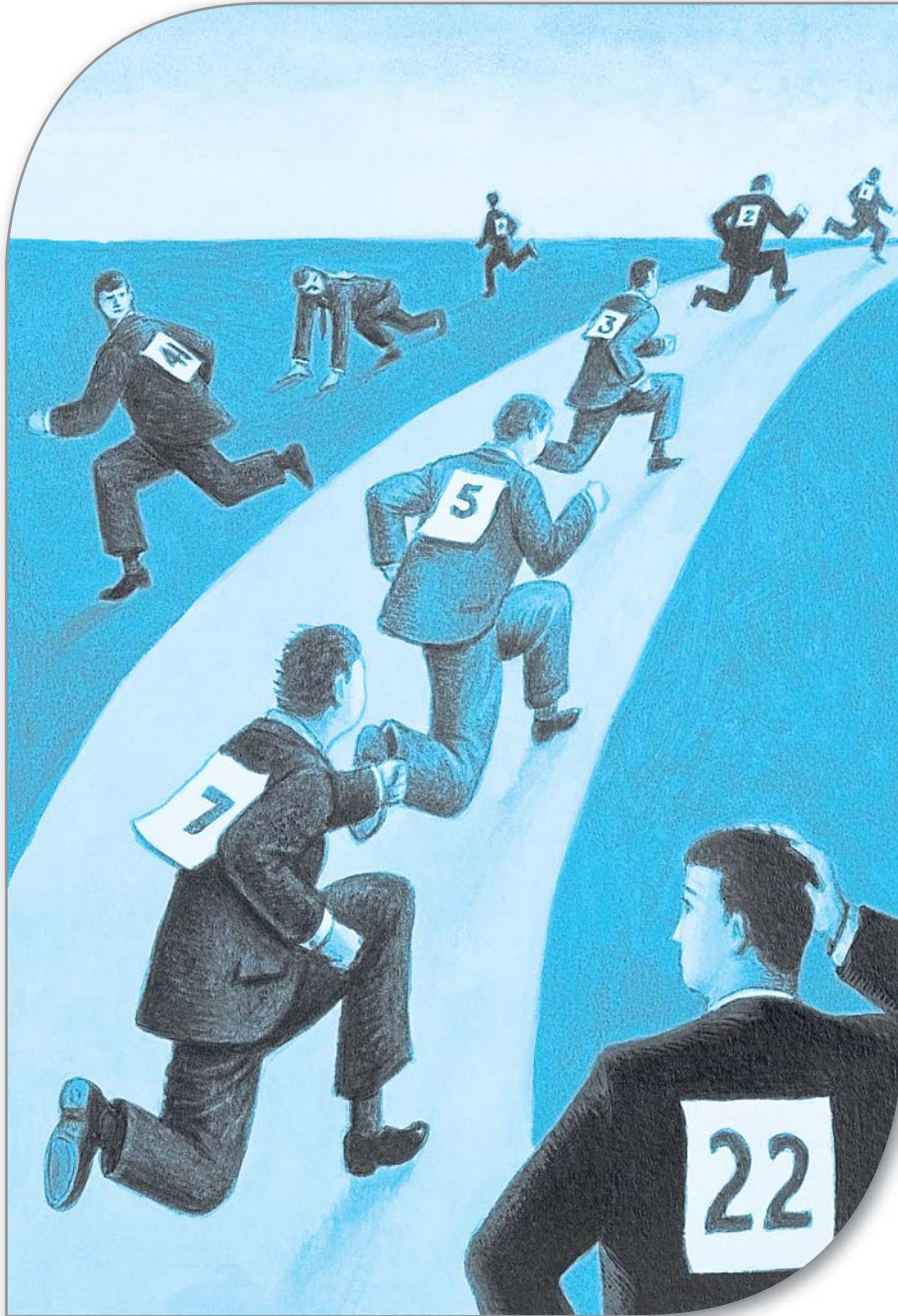
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War of Oil Reserves, Who Benefits?



Introduction

During the past few months, a new round of race has begun amongst OPEC members on proclaiming rises in their crude oil reserves. This new round was started by Venezuela and then

followed by some other OPEC members in announcing new finds in their crude oil reserves. This was largely met by the negative reaction of other members.

Let us take a look at the history of such a rivalry in OPEC.

History of Reserves' War

The history of war of reserves dates back to the 1980s. After the first oil shock (Oct 1973-Mar 1974), the industrial countries of the West, which were the main consumers of the product, started preparing a set of policies for conservation of energy and for finding replacement for oil, especially for that of OPEC and in particular for the oil produced by the Persian Gulf members of the Organization. These policies began to bear fruit in the early 1980s, resulting in a sharp decline in demand for OPEC oil.

From 1980 to 1985, the collective reaction from OPEC members to the lack of demand for their oil was to cut back on their production so that its price would not collapse. That is when production quotas of OPEC members or how the volumes of cutbacks should be distributed amongst them became of paramount importance.

In 1985, Saudi Arabia brought up the notion of 'Market Share', which held that, since OPEC had concentrated only on oil price, it was fast losing its share of the global oil market to the non-OPEC producers. Saudis insisted that OPEC should discard its price oriented strategy and adopt a policy to retrieve its 'Market Share'. In economic terms this meant nothing but 'Dumping', so as to kick out competitors (non-OPEC producers) from the market.

Given that Saudi Arabia had the largest production capacity in OPEC, and had also cut back the most in the earlier period, and also had the largest excess production capacity of all members, it managed to practically impose its will on OPEC for a while.

The policy of 'Market Share' and the consequent 'Dumping' naturally produced nothing but the collapse of oil price, known as the third oil price shock and the first 'Price Crash Shock'.

This policy added further importance to the production quota system of OPEC. Now the question was; if 'Dumping' managed to succeed in retrieving the 'Market Share' and OPEC were to consequently raise its output, what would be the basis for deciding the shares of the members in that rise?

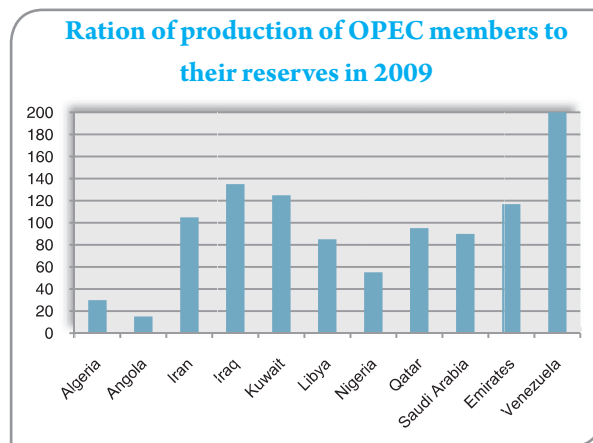
Though various criteria and measures were proposed for setting the production quotas of the members, Saudi Arabia managed to convince others that the volume of reserves was

a just and acceptable criterion for setting those quotas. And it was to the benefit of Saudi Arabia because it also had the largest oil reserves of all OPEC members.

(There are many other aspects of the said oil shock and its consequences, but that is not the subject of this analysis.)

The outcome of 'Market Share' policy, and subsequent acceptance of the volume of discovered underground oil reserves as the criterion for production quotas, was that all OPEC members tried to show high and higher numbers for the volumes of their crude oil reserves, just to get higher production quotas.

The consequence of this rivalry was that the total recoverable oil reserves of OPEC suddenly shot up from 540 billion barrels



in 1985 to about 678 billion barrels in 1987.

The contest was even more intense when it came to Iran and Iraq who were at war then. The military war had expanded to the war of reserves.

Iran's 59 billion barrels of recoverable reserves in 1985 was put at about 93 billion barrels in 1986 and that of Iraq, which was 65 billion barrels in 1985, suddenly shot up to 100 billion barrels in 1987.

Pointless Competition

It should be remembered that in 1985 most OPEC members, who had constantly reduced their outputs from the beginning of the decade, wanted to raise their quotas. Later on however, neither the volume of reserves nor any other factor became the criterion for the quota system. In practice, it was the production capacity of the OPEC members that decided

their respective quotas.

The chart below shows the ration of production of OPEC members to their reserves in 2009 (as per the statistics of OPEC Secretariat). That means, it shows how much of their reserves (percentagewise) have been recovered.

As can be seen in the chart, the recovered volumes of OPEC members vary from 0.5% for Venezuela to 6.7% for Angola. Whereas, if these volumes were set on the basis of their reserves, the figure should have been the same for all members.

In practice, any OPEC member that could manage to invest in its reserves and raise its production has also managed to impose on OPEC its actual production as its quota.

That is ample proof that it did not matter what reserves



which member claims to have, rather the actual production capacity of that member has the final say. Some OPEC members are not yet in tune with the reality and are still stuck with a notion that was a hot topic in the 1980s. Such members every now and then claim higher figures for their reserves to compete with some others. Some of them perhaps need such boasts for the consumption of their domestic audiences.

Who Benefits from High Reserves?

No doubt, existence of high crude oil reserves is a relief to the world oil market as well as to its consumers, though it may even exert downward pressure on its price. That is exactly why the Western institute that produce statistics trust and accept the

figures showing rise the oil reserves of all countries and do not question them at all.

Some 7 or 8 years ago, BP studied Iran's reserves and reported the country's recoverable crude oil, including the secondary recovery volume, to be around 56 billion barrels. However, in its annual reports of those years, BP chose to report Iran's oil ministry's official figure, which was more than twice the BP's estimate, as the actual volume of reserves of the country. The same story could be true for all the other OPEC members too.

Overestimating the volume of underground oil is not limited to just OPEC members; non-OPEC producers have done the same for other motives.

It is known fact that the oil reserves of non-OPEC producers are mostly controlled by large oil companies. Few years ago when Shell had a significant upper hand over its rivals, it was suddenly disclosed that some executives of the company, as its main shareholders, had reported overrated figures of reserves (as the main asset) of Shell, for personal benefits.

Soon after the disclosure, everyone expected Shell's rivals to take advantage of the situation and trumpet the news to no end and bring Shell's shares to a collapse. That, however, did not happen. May be those rivals were engaged in the same practice so could not blame Shell for what they were doing themselves!

Based on what went above, figures of crude oil reserves of the world are not to be trusted at all. For a country like Iran, with a special status in the global energy map, it is essential to have access to independent and reliable information about the subject, because it is needed for precise analysis of the situation.

I have long been proposing to relevant institutes in Iran's oil ministry to set up a databank of the world's hydrocarbon reserves and have it updated regularly.

In conclusion, it is recommended that the pointless rivalry in claiming higher volumes of oil reserves be stopped, and instead focus be shifted to investing and develop the existing actual reserves. For instance, when neighbors are busy developing their parts of shared reserves with Iran, what does the country benefit by raising the figures of its reserves? Action speaks louder than words. ♦

Director

Gas Flaring Campaign- why should Iran Join the Camp



Natural gas has a bigger share in the world's basket of consumed fuels for a host of reasons such as being readily available, cleaner and reasonably priced compared with other fuels. A major portion of crude oil produced in the oil rich countries contains natural gas. In many instances, the natural gas contained in crude oil is flared in the absence of technology required for its extraction. The Middle East and African states have the highest share insofar as flaring of natural gas contained in crude oil is concerned. Oil and gas producing countries in these regions allocate over 28% of the world's overall flared natural gas to themselves. Iran is ranked first on the list, for it flares a daily 44 million cubic meters of natural gas contained in crude oil.

Necessary infrastructures need to be developed and further international cooperation is required to reduce the present rate of flared gas in Iran. Perhaps an ideal option would be cooperating with the World Bank's Global Gas Flaring Reduction group.

Ghader Shadivand
Planning Department of the Iranian Oil Ministry

Introduction:

Currently, natural gas constitutes one of the world's most favored fuels having a share of 24.1% of the world's basket of consumed energy. There are some advantages attached to natural gas such as clean nature, reasonable prices and lower rate of pollution and for that matter, increasing number of consumers of energy are now switching to this source of energy.

Natural gas contained in crude oil is not economically feasible and is therefore flared or released in the air. These figures are very high in the oil producing nations. Currently, an annual 150 billion cubic meters of natural gas is burnt across the world. This figure constitutes 25% of the overall natural gas consumed in the United States annually.

Assuming that one million BTU is worth US\$6, we come across the very fact that the value of flared gases worldwide is over US\$30 billion. Meantime, flaring of one million cubic feet of natural gas produces 60.3 tons of CO₂, a figure which comes to 320 million tons of CO₂ per year and that imposes

a damage of US\$4 billion on the environment.

The share of Middle Eastern and North African nations of this amount of flared gas is 28% (equivalent to an annual 42 billion cubic meters), Russia 50 billion cubic meters, Nigeria 16.8 billion cubic meters and Iran 16 billion cubic meters.

Gases Flared in the Middle East and North Africa (MENA)

MENA region lies on the world's hugest crude oil and natural gas resources. The share of the MENA states in flaring natural gas is highest in the world as well. Table 1 illustrates the volume of gases flared in MENA nations.

As is evident, Iran's share of flaring natural gas in the world is 11% i.e. 44 million cubic meters per day. Second and third on the list stand Iraq and Algeria. An annual US\$8 billion worth of natural gas is flared in these states. This amount approximates the value of crude produced by Saudi Arabia in a single day. And in view of all the above, more profound measures need to be taken in order to dramatically cut the volume of natural gases that are flared and at the same time curb hazard to the environment.

The regional states such as Algeria, Iraq, Qatar, Kuwait and the UAE have taken certain measures to curb flaring of natural gas including membership in the World Bank's GGFR working group.

Table 1- Gases Flared in the MENA Regional States (billion cubic meters per year)

Country	Volume of Flared Gases
Iran*	16
Iraq	7
Algeria	5.5
Libya	3.7
Saudi Arabia	3.5
Qatar	3
Oman	1.9
Kuwait	1.8

* According to the World Bank's statistics, Iran flares 10.3 billion cubic meters of gas per year, however, figures released by the National Iranian Oil Company put this figure at about 16 billion cubic meters.

World Bank's GGFR Working Group

The working group of World Bank's GGFR was launched pursuant to the 2002 Sustainable Development Meeting in Johannesburg, South Africa in an attempt to assist with the oil producing states and companies to cut the rate of flared gases and protect environment. This working group has devised certain standards that monitor the volume of flared gases. These standards define specific frameworks for the governments, companies and other beneficiaries, within which, they can take joint measures that would restrict extraction of natural gas contained in crude oil.

Members of this working group include officials of the state run oil companies from Azerbaijan, Cameroon, Angola, Ecuador, Guinea, France, Gabon, Chad, Indonesia, Iraq, Kazakhstan, Russia, Nigeria, Norway, Qatar, UAE, US, Uzbekistan, EU, OPEC secretariat as well as Stat Oil, Shell, Marathon Oil, Enni, Exxon Mobile, Philips, BP, Chevron, Total and Qatar Petroleum companies. This working group assists member states that maintain highest rates of flaring gas such as Russia, Algeria, Angola, Cameroon and Qatar with switching to the burner-free production process. Russia which is ranked first in the world in terms of flaring natural gas, has devised plans to reduce the volume of flared gases. According to statistics, Russia extracts a meager 25% of gases contained in crude oil and flares the rest.

In order to prevent flaring of gases contained in crude oil, the GGFR introduces certain plans to these states depending on their production conditions. These plans include injection of gas into oilfields, generation of electricity in small size power plant units, transfer of natural gas through pipeline and production of LNG and LPG.

Iran

Iran is home to the world's second largest natural gas reserves i.e. 29.61 trillion cubic meters. In 2009, Iran produced a daily 568 million cubic meters of natural gas. Natural gases contained in crude oil constituted 18% of the above figure. Whereas, necessary infrastructures do not exist in Iran, the country is practically unable to extract all gases contained in crude oil and flares a major portion of these gases.

In 2009, Iran flared 16 billion cubic meters of gas contained in crude oil. As has been illustrated in diagram 1, in the current decade, Iran has flared an average of 8% of the nation's overall extracted gas per year.

Although Iran is ranked fourth in terms of production of natural gas in the world (Russia, US and Canada stand first on the list), it has an insignificant share of the global natural gas market mainly due to high rate of local consumption and the thrilling volume of flared gases. Iran is likely to fail to meet local natural gas requirements should natural gas imports from Turkmenistan be impeded. This is mainly true in the colder seasons of the year.

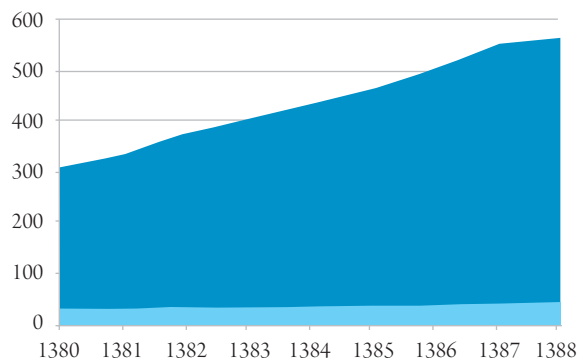
As soon as plans for the collection of gases contained in crude oil are put into force and flaring of such gases is banned,



a daily 44 million cubic meters of natural gas will be available for both local consumption and injection into oil fields or even for exports. This amount of natural gas equals 80% of the capacity of Baku-Tbilisi-Erzurum pipeline (55 million cubic meters per day) and 50% of the capacity of Turkmenistan-China natural gas pipeline (82 million cubic meters per day).

As was stated earlier, Iran ranks first in terms of flaring gases contained in crude oil in the MENA region and immediate measures need to be taken to prevent such a trend. Some projects are already underway by the National Iranian Oil Company for the collection of natural gases contained in crude oil. A big portion of these gases are currently flared or released in the air. In accordance with the oil industry's fifth five year development plan, the volume of gases flared

Diagram 1- Production of rich natural gas and volume of gases flared by Iran (million cubic meters per day)



should be reduced to 2.3 million cubic meters per day by the end of the Plan. This is under circumstances when winning such an aspiration requires huge investments as well as implementation of projects necessary for the collection of gases contained in crude oil.

Cooperation with the international companies and institutions which are rich in technology and financial resources is a priority. Membership in such international organizations as GGFR can assist Iran with winning its objective of cutting the volume of flared gases. The oil rich nations of the region have already initiated to cooperate with reputable international companies aimed at boosting their capability of collecting and consuming gases contained in crude oil. Although OPEC's secretariat is a member of GGFR and the conditions are right for Iran's membership in this organization, no plans have been foreseen by Iran to join GGFR.

The projects of the National Iranian Oil Company should go into operation as soon as possible and cooperation with the international players of the industry must become a priority should the government wish to prevent wasting of valuable hydrocarbon resources. 💧

References:

- 1- Oil Ministry's performance report 2009
- 2- The nation's hydrocarbon balance sheet 2009
- 3- EIA International Energy Statistics 2009
- 4- BP statistical review of world energy 2009
- 5- World Bank Global gas Flaring Reduction Partnership Implementation Plan for Canadian Regulatory Authorities 2008

Emirate's National Oil Company (ENOC) Suspends Bunkering Operations in Fujairah Port

Ali Khajavy

UAE's National Oil Company (ENOC) revealed recently that the Company has suspended supply of fuel to Fujairah port for bunkering purposes as of the beginning of July 2010. ENOC managers have confirmed the news reiterating that all vessels used in these operations have been transferred to other projects. However, Fujairah continues providing other routine services.

Bunkering is a term used to define supply of fuel to vessels at sea. Bunker oil includes heavier petroleum products such as gas oil or lub oil used by ships. Bunkering has currently turned into an industry which, in addition to supplying fuel to vessels renders a host of other services as well.

Reliable sources have reported that the above mentioned company has sustained a loss of US\$ 20 million in the recent months. ENOC has supplied 30 thousand tons of bunker oil to vessels per month recently, whereas, in 2008, the same company supplied a monthly 250 thousand tons of fuel to Fujairah port.

Fujairah port was constructed in 1978 and went into operation in 1983. Next to Singapore, Fujairah port is the world's second largest supplier of bunker oil and services. Fujairah has a share of 83% of the region's overall bunkering services (24 million tons per year). Some projects are under construction here that, when commissioned, will allow for



the docking of super tankers and doubling of fuel stocking and storage capacity. Iran supplies huge volumes of fuel to this port.

An annual 200 million tons of bunker oil is supplied to vessels worldwide. The figure is expected to jump to as high as 400 million tons by 2030.

Only ten major ports handle 80% of the world's bunkering operations and three ports alone cover 32% of the world's bunkering market. Fujairah is one of the mentioned three ports while the other two are located in Singapore and Netherlands.

Analysts believe that two factors contribute to the suspension of bunkering operations by ENOC. The first one is the global economic downturn which has caused a tremendous cut in the number of ships navigating to the Persian Gulf region from western destinations and the second is Iran's access to the bunkering market. Iran offers

high quality and reasonably priced services in its domestic ports and for that matter, many vessels are now showing inclination to fill their tanks in the Iranian ports.

Iran has only recently proved to be a major player of the bunkering industry in the region and is expected to gain access to world's bunkering market in near future. Iran's share of the Persian Gulf's bunkering market is currently

industry in the region is 10%. However, National Iranian Oil Company has plans underway to boost its share of bunkering services in the region's market to as high as 50% by 2014. To win this ideal, advantages and disadvantages residing in the Iranian bunkering industry should be identified.

A- Advantages

- High capacity for the production of bunkering oil
- Availability of high quality bunkering oil
- Proximity of the Iranian ports to international free waters compared to Fujairah port
- Availability of Abadan and Bandar Abbas refineries in the southern coasts of Iran

B- Disadvantages

- Shortage of necessary infrastructures particularly storage and loading facilities
- Shortage of bunkering companies close to the local ports
- Shortage of promotional and information dissemination facilities to attract potential customers
- Absence of international agreements for widespread cooperation and provision of services to vessels that navigate in the region
- Fluctuation of prices
- Absence of credit-based sales
- High consumption of heavier petroleum products by the local power plants and other industries in the colder seasons of the year
- Lack of a clear cut policy for the export or local sale of heavier petroleum products
- Unavailability of marginal services such as catering for the vessels



10%.

A second advantage which is attached to Iran's mighty and dynamic presence in the bunkering industry is reinforcement of the nation's political and economic sovereignty in the Persian Gulf and Oman Sea. Some other advantages include generation of more income, employment opportunities, development of ports and infrastructures and of course, a stronger global credibility for Iran.

In the 2007-2009 period alone, Iran provided bunkering services to vessels worth US\$ 3.2 billion. And in the first half of 2010, Iran supplied fuel to the passing by vessels worth US\$450 million.

In 2009, Iran supplied a total of 3.3 million tons of bunker oil to vessels in the Persian Gulf and Oman Sea. This illustrates the very fact that Iran's share of bunkering

C- Opportunities

- Large number of tankers, vessels and ships frequently navigating in the Persian Gulf and the Oman Sea
- Iran's proximity to the international waterways compared to Fujairah
- Dependency of the UAE on Iran's liquid fuel supplies

D- Challenges ahead

- Imposition of international sanctions



- Availability of efficient and diversified bunkering, catering and other services in Fujairah
- Daily developing capacities of Fujairah in terms of services offered
- Credit-based sales of fuel in Fujairah that practically generates more incomes. Meantime, customers prefer credit-based purchases
- Chain nature and performance of bunkering companies conducting business in the UAE which allows for the extension of the scope of international services rendered by them everywhere in the world

E- Conclusion

The following solutions are proposed to secure a stronger and more reliable position for Iran taking into account advantages and disadvantages, opportunities

as well as overseas menaces which reside in the nation's bunkering industry:

- Launch of long term joint ventures with foreign companies involved in this area of industry preferably corporations from China and Singapore
- Planning for long term joint ventures for the bunkering of liquid fuel produced in Iran and the Central Asian states (Azerbaijan Oil Company has a share of bunkering investments and operations in Fujairah)
 - Launch of a consortium comprising bunkering companies
 - Improving infrastructures and marginal shipping services in the bunkering centers along the Persian Gulf and Oman Sea coasts, south of Qeshm Island where vessels navigate frequently in particular
 - More profound marketing activities and information dissemination services to be rendered via publications, media, internet, international forums, etc, to display the potentials and capacities which the Iranian bunkering industry has to offer to the world
- Provisional tax holidays to be granted to private players of industry aimed at reinforcing their ability to compete in the market and providing them with the incentive to join the industry in a more dynamic manner
- Providing for supportive banking systems to promote credit-based sales mechanism

Sources and references:

- "Margins evaporate", World Bunkering magazine, autumn 2010
- "Competition intensifies", World Bunkering magazine, spring 2010
- Performance report of National Iranian Oil Products Refining and Distribution Company 2009

Iran to boost West Karoun oil output



SalbAli Karimi, managing director of Arvandan Oil & Gas Production Co. said oil production from oilfield in West Karoun River in Khuzestan province approximates 218,000 bpd and expressed hope that the region will be producing about 550,000 bpd of oil once the \$ 10 Bln credit is allocated in the next 5 years.

According to the news agency of Iran oil ministry, Karimi added: "Azadegan, Darkhovin and Jufeyr oilfields presently produce about 50,000, 166,000 and 3,500 bpd of oil, which is estimated to come to a total of 218,000 bpd."

He announced: "This increase of 350,000 bpd of oil will be realized from Yadavaran, Azadegan and Ilam/ Sarvak layers of Darkhovin (3rd phase) as well as expanding some small hydrocarbon fields in the region. "

Karimi explained: "Considering the programs National Iranian Oil Co. (NIOC) has on agenda to develop oilfields in the west of Karoun, oil production from this region will reach at least 1 Mln bpd by 2025."

Arvandan Oil & Gas Production Co. was set up in December 2004. The oilfields under this company are significantly extensive in terms of dimension, physical attributes of the rocks, fluid and technical complexity.

In terms of oil content, Azadegan and Yadavaran oilfields belong to the giant hydrocarbon reservoirs in the world. Darkhovin, Jufeyr, Susangerd and Band-e-Karkheh group under medium or large hydrocarbon reservoirs and Moshtagh, Omid, Arvand, Sohrab, Mehr and Khoramshahr fall under the small hydrocarbon reservoirs.

Afghan government awards oil contract



The Afghan government on Monday awarded a small but potentially path-breaking crude oil contract, marking the first phase of an effort that Afghan officials say could bring the cash-strapped government significant revenue.

The six-month deal for crude from the Angot field in Sar-i-Pol province in Afghanistan's north was designed as a confidence-building venture for one of the world's least-attractive foreign-investment markets.

If successful, Afghan officials hope the deal will put Afghanistan on the hydrocarbon industry map and attract direly needed private investment to

this landlocked country, which is kept solvent by international donors.

Angot is among a handful of developed fields in the Amu Darya Basin, which straddles Afghanistan and Turkmenistan. The Afghan side of the basin has an estimated 80 million barrels of proven crude reserves, according to the U.S. Geological Survey. The nearby Afghan-Tajik Basin could hold as much as 1.5 billion barrels worth of crude, according to a study the agency commissioned in 2006. Together, the two areas have the potential to generate hundreds of millions of dollars per year in government revenue over the next two decades.

Second phase of 'IGAT VII' gets \$ 1 Bln credit

National Iranian Gas Co. (NIGC) and Bank Saderat reached an agreement to allocate \$ 1 Bln long-term loan for the construction of phase 2 of 'IGAT VII'. According to the Pana news agency, phase 2 of 'IGAT VII' aims to expand cross-country gas network in Sistan and Baluchestan province and transfer gas to Pakistan

borders.

The construction of this phase consists of 3 sections:

- 1- Iranshahr-Pakistan 56" pipeline with the length of 275 km,
- 2- Iranshahr-Zahedan 36" pipeline with the length of 260 km,
- 3- Iranshahr-Bandar Chabahar 30" pipeline with the length of 90 km.

Turkey approves link for Iran-EU gas pipeline



Turkey has issued a license to a Turkish company planning to construct a pipeline to export Iranian natural gas across Turkey to Europe.

Turkey's state Petroleum Administration (PIGM) has issued the license to Turang Transit Tasimacilik, giving it the right to operate a 35bn cubic metre per year (bcm/y), 1,720-kilometre-long pipeline from the Iranian border town of Bazargan across Turkey to Ipsala on the Turkey-Greece border and from there across Europe to Germany.

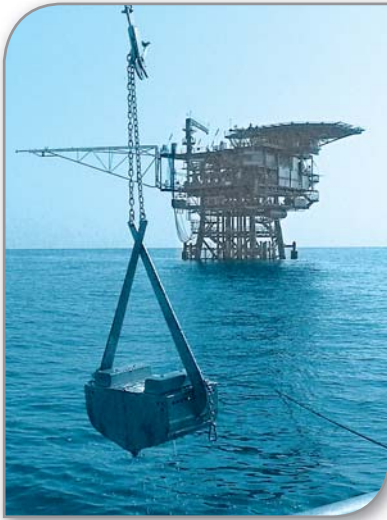
Valid for 30 years, the license carries the condition that Turang must demonstrate within two years that it has finalized agreements with gas producers and concluded financing for the line, or face the license being cancelled. However, here's where the facts end and the speculation begins.

Turang is a subsidiary of Turkey's Som Petrol, a petroleum products trading company owned by Turkish businessman Sitki Ayan, which was said by Tehran to have signed a deal to transport Iranian and Turkmen gas from Iran to Europe via Turkey. Subsequently, Ayan was reported

in the Turkish media as claiming to have arranged financing for the construction of an export pipeline, which is expected to cost up to \$11.5bn to build. Som Petrol also has yet to negotiate transit agreements with Greece and whichever other countries it chooses to run its pipeline through to reach Germany, not to say conduct environmental impact studies, receive construction permits and, most importantly of all, identify potential buyers of the gas and sign sales agreements. In fact other than the agreement with Iran - the details of which have not been made public - all the project currently has is a license from Turkey, valid for two years during which the sponsoring company, must complete all of the above.

In other words, Turang must in two years conclude a lengthy series of agreements and studies that the six large state energy groups that make up the consortium sponsoring the Nabucco gas pipeline, which also plans to carry gas across Turkey to Europe, have been unable to complete in eight years, even with the full backing the EU.

Iran Offshore Technical Society' to be formed



In a meeting held by Iranian Offshore Engineering & Construction Co. (IOEC) where delegates of 11 companies active in offshore attended, the composed article of association of 'Iran Offshore Technical Society' was reviewed by its founding board members.

According to IOEC's PR office, the registration procedure and setting up of this trade union are planned to be carried out upon receiving opinions of the interested companies as well as completion of the required documents of the members.

The founders of this society, which includes IOEC, SADRA and ISOICO aim to provide and retain rights and interests of engineering and contractor companies in this industry, improve executive activities both qualitatively and quantitatively and attempt to improve managerial quality and employee's technical skills, find appropriate solutions to influence world markets, and improve and facilitate the export of technical and engineering services through cooperation with the government as well as the parliament.

Iran exports over \$ 4 Bln condensate from PSEEZ

In the first 8 months of current Iranian year (started Mar.2010), Iran exported over 7.530 Mln tons of gas condensate- worth over \$ 4.338 Bln- from Pars Special Economic Energy Zone (PSEEZ) which increased 67% weight-wise and 94% value-wise compared to the same period last year.

According to the PSEEZ PR Office, a total of over 12.23 Mln tons of products including heavy and light poly-ethylene, gas condensates, propane, butane, benzene and parazylyene,- which worth over \$ 7.229 Bln- were exported from PSEEZ, enjoying a 29% increase in weight and 52% in value year on year.

Three European firms co-op Iran to reduce energy waste

One of National Iranian Oil Co. (NIOC) subsidiaries reached an agreement with three English, Belgian and German companies to reduce and control energy waste in oil, gas and petrochemical installations.

Since 2 years ago, a series of studies has seriously started to reduce and ultimately eliminate energy waste in Iran's oil, gas and petrochemical installations. The studies have finally led to the generation of new standard criteria for energy consumption in Iran's strategic industry, reported the Pana news agency. NIOC official

statistics talk of Iran's annual energy waste equal to 300 Mln bbls of crude oil in petroleum, power, construction and transportation industries.

Among various parts of oil upstream and downstream sectors, Iran's crude oil refineries are presently the largest waste-to-energy plants in Iran; so that, 4,590 Mln bbls crude oil equivalent of energy per annum are wasted in oil refineries. Besides, petrochemical non-polymer industry is another waste-to-energy sector in Iran oil industry which wastes 3,760 Mln bbls crude oil equivalent of energy every year.

NIOC MD: Darkhovin oil output reaches 160,000 bpd

By brining 2nd phase of Darkhovin oilfield on stream, the field's crude oil production rate has raised from about 100,000 bpd to 160,000 bpd.

Stating the above, managing director of National Iranian Oil Co. (NIOC) Ahmad Ghalehbandi also talked of the simultaneous oil production and injection of the associated gas into the field and said: "Oil production from

this field is fully carried out within the framework of sustainable reservoir engineering programs of National Iranian Oil Co. (NIOC)."

Darkhovin 2nd phase project, handled by Italian Eni and its local contractor Jahanpars, was initially foreseen to reach 160,000 bpd in May 2008; however, because of various reasons it was repeatedly deferred.

Local banks to fund petchem projects



Director of planning at National Petrochemical Co. (NPC) Ramezan Oladi revealed that a new agreement has been reached with domestic banks over construction and development of 35 petrochemical plants, reported the Mehr news agency. Pointing out that the fund provision for 21 petrochemical plants -worth \$ 6 Bln- would be finalized soon with Bank Melli of Iran (BMI), Ramezan Oladi said: "A four-billion-dollar agreement has been also reached with Bank Mellat to finance the construction of Damavand Petrochemical Complex."

Oladi talked of a 2-billion dollar agreement with Bank Pasargad over securing fund for 4 petrochemical projects and reminded that Export

Development Bank of Iran has been also assigned to fund 4 petrochemical plans with \$ 3.5 Bln worth.

Oladi referred to Bank Sepah which is assigned to finance 2 petrochemical projects worth \$ 1 Bln and added: "There are some talks with domestic banks to secure the needed fund for 3 other petrochemical projects."

Oladi also revealed that the construction and partnership of 7 petrochemical plants with an approximate value of \$ 7 Bln has been awarded to Sepehr Energy (Bank Saderat) and expressed: "Talks are underway with Ministry of Economy and Finance Affairs to provide bank guarantee for some of private petrochemical plans."

NISOC to build NGL 2400 in Rag-e Sefid

Over the first 7 months of current Iranian year (started Mar. 2010), 110,000 bpd of NGL from 15 gas and NGL plants of National Iranian South Oil Co. (NISOC) were sent to Bandar Imam Petrochemical Complex (BIPC) which played a great role in BIPC's gasoline output.

According to the Mash'al Weekly- a publication of Iran oil ministry PR- in this period, 30,000 bbls of naphtha from Gachsaran and Omidieh NGL plants were also sent to BouAli Sina Petrochemical Complex, which also played a major role in gasoline production.

Future Global Need for the Increase in Iraq's Oil Production



Recently and as shown in the table below, Iraq has signed a number of contracts with major oil companies with a view to increasing its oil production from 2.5mn b/d to around 12mn b/d in 2017.

The targeted increase in Iraq's oil production is supported by the large Iraqi proven oil reserves of 143.1bn barrels. In fact, according to the Iraqi Ministry of Oil, this figure is very conservative and may increase substantially in the future.

This targeted increase in Iraq's oil production will certainly be needed to fulfill the future global requirements for oil, due mainly to two important factors as depicted below.

Expected increase in the future global demand for oil

It is very likely that the future global demand for oil will witness a significant increase and is predicted by the International Energy Agency (IEA) to rise from the current

Iraqi Upstream Awards

Area	Winning Consortium	Remuneration Fee (\$Bn)	Current Production (B/D)	Plateau Production Commitment (B/D)	Plateau Duration (Years)	Signature Bonus (\$Mn)
Rumaila	BP (50.67%) CNPC (49.33%)	2.00	1,066,000	2,850,000	7	500
W. Qurna-1	ExxonMobil (80%) Shell (20%)	1.90	258,505	2,325,000	7	400
Zbair	Eni (43.75%) Oxy (31.25%) Kogas (25%)	2.00	195,000	1,125,000	7	300
Majnoun	Shell (60%) Petronas (40%)	1.39	45,900	1,800,000	10	150
Halfaya	CNPC (50%) Petronas (25%) Total (25%)	1.40	3,100	535,000	13	150
Qayara	Sonagol (100%)	5.00	0	120,000	9	100
W. Qurna-2	Lukoil (75%) Statoil (25%)	1.15	0	1,800,000	13	150
Badra	Gazprom (40%) TPAO (10%) Kogas (30%) Petronas (20%)	5.50	0	170,000	7	1,203
Gharaf	Petronas (60%) Japex (40%)	1.49	0	230,000	13	100
Najma	Sonagol (100%)	6.00	0	110,000	9	100
Total				9,606,000		

level of 86mn b/d to 106mn b/d by 2030 (with demand having already grown by 2mn b/d since August 2009). This is expected to be driven by the following factors:

- The world population is expected to increase from the present 6.5 billion to around 8 billion in the next 30 years, underpinning increased demand for oil.
- The continuing relatively high annual economic growth rates in China of 10% and India of 8% as well as in many other South East Asian countries will spur ongoing increased demand for oil.
- According to IEA estimates, globally the number of cars will increase from the current level of 800 million to 1.6 trillion by 2035.

Expected constraints on future global oil supply

Although global oil demand is expected to rise markedly in the future, this increase will be accompanied by a number of constraints on global oil supply:

- Globally and due to depletion, old oil fields are losing 3mn b/d of production annually, which must be replaced by new capacity.
- It is expected that non-OPEC oil production will decline during the period 2010-15 by 2.2mn b/d.
- It is also expected that due to the increase in global oil demand, OPEC surplus production capacity will decline from 5.4mn b/d in 2010 to 2.5mn b/d in 2012.
- A relatively high increase in OPEC's internal demand for oil will limit the amount of OPEC's oil exports. For example, in Saudi Arabia during the period 2000-09 oil demand increased by 1mn b/d.
- From 2005 to 2030, it is estimated there will be big global financial requirements for oil and gas exploration, which will reach a total of \$12.7 trillion.
- One of the most important factors which will limit the global supply of oil will be global 'peak oil', which means that sooner or later global oil supply will reach a peak and will then start to decline. The peak oil concept is a reality. It started to happen in the US in the early 1970s and happened recently in the UK North Sea and Indonesia. It is expected to happen in Mexico, Norway, Algeria and

other major oil producing countries. In its recent World Energy Outlook 2010 the IEA indicates that peak oil is inevitable and states that total oil production including unconventional oil and natural gas liquids is expected to peak at around 96mn b/d after 2035.

OPEC and the increase in Iraq's oil production

There has been a lot of debate regarding the effect of Iraq's oil production increase on OPEC. Some have said that such an increase in Iraqi oil production may lead to the collapse of the organization, because it may flood the market and lead to a large decline in international oil prices and so on.

This concern is highly exaggerated and it is not anticipated to happen due to the following factors:

- All OPEC countries have since 1980 benefited from the decline in Iraq's oil production. It is only fair that Iraq is compensated for this loss.
- There will be a gradual increase in Iraq's oil production and many Iraqi oil experts believe it may take Iraq more than seven years to reach 12mn b/d due to the fact Iraq needs a lot of investment and time to rebuild its oil infrastructure.
- Even if the international oil market does not absorb the entire increase in Iraq's oil production, Iraq can still have surplus production capacity. This capacity can be used to supply the international oil market in times of disruption from some major oil producers. In addition, Iraq may benefit significantly from this capacity during periods of increased global oil demand and higher oil prices. This is what happened to Saudi Arabia, which kept surplus production capacity even when during the period 2000-08 global oil demand increased by 8.8mn b/d and oil prices reached \$147/B in 2008.
- OPEC as an organization has proved throughout its entire history that its members always cooperate with each other to stabilize the international oil market and prices and protect their interests. It is very obvious from all the factors mentioned above that perhaps most if not all of the increase in Iraq's oil production will be absorbed by the international oil market and in fact this increase will probably be needed to help the growth of the world economy. ♦