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ASPO USA PEAK OIL REVIEW

Association for the Study of Peak Oil & Gas USA

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1. Oil and the Global Economy

Oil prices climbed steadily last week as the situation in the Middle East grew worse. Even the prospect of higher interest rates and weaker demand from the US was not enough to allay concerns about possible supply disruptions. London crude closed at $110.40 after having traded below $105 the week before last and NY closed at $107.46. New York gasoline futures followed crude, climbing 10 cents a gallon during the week. Uncertainty over the situation in Libya where export terminal guards have seized several export terminals, cutting oil shipments roughly in half, was a major factor causing prices to rise.

The weekly US stocks reports showed crude inventories continue to slip to the lowest level since January. The excessive stocks at Cushing, Okla., continued to drain away to refineries, falling by another 1.4 million barrels last week. The peak of the Atlantic hurricane season is about to start and wind shear, which inhibits the formation of hurricanes, has been decreasing.

US natural gas futures, which have fallen about $1 per million BTUs since the end of May climbed a bit on Thursday on slightly-less-than-expected injections into stockpiles and forecasts of warmer weather in the last week of August. By Friday, however, the forecasts were revised downward and traders decided it was getting too late in the season for a sustained jump in the demand for air conditioning.

The controversy over how much natural gas the US should export continues. US chemical companies, that see cheap domestic natural gas prices as giving them a competitive edge in world markets, are opposing increased exports. The natural gas companies, however, see their future and an end to current losses in the much higher prices they can get for LNG in Europe and Asia. In the middle of all this is the question of just how long the shale gas boom will continue. Optimists see production increasing for decades turning the US into an "energy superpower," while some analysts think that shale gas supplies will start to taper off in about 10 years.

2. The Middle East & North Africa

Egypt: Last week leaders of the Egyptian army decided to end the Islamist protests by using force to drive demonstrators from the streets and mosques. Over 800 pro-Morsi protesters died in the operation. The move set off a wave of Christian church burning by frustrated Islamists who could find no other outlet for their rage. Islamist leaders have called for further marches this week although the situation is now quiet and businesses are reopening.

Although the 4.5 million b/d of Middle Eastern crude that moves through the Suez Canal and pipeline has not been affected, many foreign companies, including those producing oil, have cut back or suspended operations in order in insure worker safety. While the Army will do its utmost to protect the canal and pipeline, sinking a

ship in the canal or blowing up the pipeline is relatively easy. Should the canal be closed, there would be an immediate jump in oil prices as traffic would have to be rerouted around Africa resulting in delays and increased costs.

The US-Egyptian military partnership, which has been the bedrock of Middle Eastern security for decades, has been badly frayed, with Washington uncertain as to the proper policy path in the wake of the violent suppression of the Muslim Brotherhood and the arrest of its leaders. Israel is concerned about the growing insurgency in the Sinai as the Egyptian Army contends with all its other problems.

This situation could move in many directions ranging from protracted anarchy and civil war to a relatively stable military dictatorship. At the minute the country is running on $12 billion in gifts and loans from friendly Arab states, but these will run out soon and Egypt's economy is in terrible shape and getting worse. Food and fuel shortages are in the offing. Last week's actions move the likelihood of a stable, democratically elected government to the back burner – probably for a long time.

Iraq: In the week following Ramadan, bombings across Iraq continued without a letup with at least 33 killed and scores injured in a wave of bombings across Baghdad. Among the bombings was one at the Umm Qasr commodities port near Basra. This is significant because it was close to the southern oil infrastructure which so far has been relatively untouched by the bombings. Concerns are growing that al Qaeda is using the Sunni controlled areas of Syria as staging grounds for attacks inside Iraq. Officials note that bombings in Iraq are now running at 30 per month as compared to 5-10 in recent years.

The northern export pipeline was blown up twice last week, each time taking about 48 hours to repair. The government says this was about the 30th bombing attack on the pipeline this year. Exports via the line to Ceyhan, Turkey were some 29 percent lower so far this year than the planned 300,000 b/d. The attacks have been coming more frequently in recent weeks suggesting that the pipeline may soon become unusable.

The argument over Iraq's export capacity during the heavy maintenance planned for its southern export terminals continues. The IEA says the maintenance will likely reduce Iraq's exports by 500,000 b/d for four to six months – if the maintenance goes as planned. Baghdad, however, contends that the maintenance will not affect exports. The Oil Ministry says that increases in production from three oil fields will offset any export cuts from export terminal construction, without saying exactly how. Iraq has two aging export platforms in the Gulf which have a theoretical capacity of 1.7 million b/d and two new single mooring point buoys which now can only pump about 450,000 b/d – about half their theoretical capacity.

Should exports via the northern pipeline be seriously restricted by bombers and the IEA prove to be correct in its assessment of Iraq's southern terminals, the country's exports could be down by 800,000 b/d in coming months.

Exxon has asked the Iraqi government for permission to sell part of its 60 percent stake in the West Qurna-1 oil field. The move is part of the company's efforts to disentangle itself from Baghdad and concentrate its efforts in Iraqi Kurdistan where conditions for making profits are more favorable.

Syria: It was a quiet week in Syria with little political or military movement by either side. Most of the action related to the war took place in Lebanon where a large car bomb exploded in a Hezbollah-controlled section of Beirut killing 27 and wounding 200. This is the second car bombing in a Hezbollah neighborhood in a month. In retaliation, Hezbollah's leader Hasan Nasrallah gave a fiery televised speech to thousands of his supporters (he has been hiding from the Israelis since 2006) in which he threatened to step up attacks on Sunni insurgents in Syria by doubling the size of his forces there. In reaction for the speech, Lebanon's Sunni leader accused Hezbollah of leading the country into the "Syrian Fire."

Lebanon has been unable to form a new government since the Prime Minister resigned in March. This has stalled the process to auction off potential natural gas bearing blocks off the country's coast frustrating

foreign investors who would like to start drilling. Hezbollah has warned Israel no to encroach on Lebanon's gas reserves during the political instability.

Libya: OPEC reported last week that only one oil export terminal remains open due to the strike of terminal guards who seem to be the most effective armed force in the vicinity of the terminals. A report as to how much oil has been shut-in give estimates varying from 500,000 to 700,000 b/d or more. The backup at the terminals has forced the reduction in oil production to 650,000 b/d as compared with 1.6 million before the civil war. The dispute between the guards and the government has been going on for several weeks. At one terminal the guards are talking about bringing in tankers and selling the oil for their own benefit. Tripoli is threatening to bomb any unauthorized tanker approaching a terminal.

With losses from the strike already running into the billions of dollars and the government unable to pay its bills, Tripoli is threatening to send its army against the strikers unless there is a settlement soon. In the meantime, a substantial amount of oil is not getting to the world market and prices are slowly rising. As oil exports represent most of the country's GDP, it is difficult to see anyone destroying the industry while holding out for a salary increase, but this is Libya. European refiners are already thinking about digging into reserves in hopes exports will be restored soon or looking for other sources of oil.

In the meantime, Libya's Interior Minister resigned over the weekend saying he has no support from the Prime Minister and Parliament, and somebody bombed the Egyptian consulate in Benghazi to protest the Egyptian Army's actions against the Islamists.

Iran: The standoff over the detention of an Indian tanker carrying oil from Iraq by Iran's Revolutionary Guard over a alleged oil spill has been going on for seven days. Tehran says the matter is technical one and has nothing to do with politics. India, under pressure from the US, reduced it purchases of Iranian crude from 360,000 b/d in 2011-12 to 267,000 in 2012-13. However, India is facing a hard currency crisis and is talking about increasing Iranian oil imports by bartering with Tehran.

Iran's new President says he will drop the anti-western bombast that characterized the term of his predecessor, but that Iran will not abandon its "principles." The EU is urging Tehran to return to the nuclear bargaining table.

In the meantime the sanctions continue to take their toll so that the country does not have the revenue to cover one-third of its $68 billion budget next year.

3. China

The debate over the future of China's economic growth and its demand for oil continues with no definitive answer in sight. The *New York Times* reported on Friday that easy credit due to the widespread practice of informal lending in China has dried up and is choking off growth of smaller businesses. Some believe these warnings are overplayed and that the government will find ways to manage itself out of the problem.

The country has had a bout of bad weather this summer with considerable flooding and temperatures in many cities reaching new highs. Beijing has had to step of wheat imports to offset losses caused by the bad weather. The government once again reiterated its intention to deal with pollution seriously by established a centrally-administered effort which will document pollution-control goals, establish responsibilities of local governments, and evaluate their progress.

The "crazy-bad" air pollution seen last winter has already caused a drop in foreign visitors including businessmen. It is becoming more difficult to find foreign executives willing to bring their families to live in a

near-lethal atmosphere. Given the size of China's pollution problem, any serious attempts to clean up the air have got to be a drag on economic growth.

In the meantime, Platts calculates that China's apparent demand for oil in July rose to 9.82 million b/d year over year and new car sales are still going well despite controls on new car registrations in a few major cities.

4. Quote of the Week

- "In the past two or three years … the notion that fossil fuels are supply-constrained has gone from being generally dismissed, to being partially accepted, to being vociferously dismissed… The abundance argument is based not so much on solid data (though oil and gas production figures have indeed surged in the United States) as on exaggerations about future production potential…"

  –– *Richard Heinberg, energy author*

5. The Briefs (clips from recent Peak Oil News dailies are indicated by date and item #)

- In Iran, the return of a reformist-era oil minister is rekindling hopes of revival within the nation's embattled oil industry. (8/17 #7)
- **Saudi Arabia** produced around 10.0 million b/d of oil in July, up from 9.6 million bpd in June, an industry source said. Output usually rises in the summer to fuel domestic power stations needed to meet surging air conditioning demand. (8/13 #11)
- It is unclear how much further **Saudi Arabia** could increase production - they never provide sufficient detail to verify claims as to spare capacity. The conservative view is that they can only increase to previously demonstrated levels - in this case, that is only a few hundred thousand b/d above the present level. If that were the case, a fairly modest disruption in oil supply would be enough to trigger sharp price increases. (8/7 #6)
- Shell and Italy's ENI say they are concerned about **Nigeria's** deteriorating operating environment. Both companies in their second quarter financial summaries note the situation in Nigeria is deteriorating daily and posing an increasingly serious risk for foreign and domestic companies involved in Nigeria's oil and gas sectors. (8/14 #12)
- **Ecuador,** where the rights of nature are recognized in the constitution, plans to develop crude deposits in an Amazon area declared a biosphere reserve by the United Nations as existing oil fields age and economic growth slows. The area is estimated to have 920 million barrels of crude, or about 20 percent of Ecuador's reserves. (8/16 #11)
- **Canadian** shipments of crude oil by railroad to the US seem likely to increase, thanks to a proposed railway hub in Saskatchewan, in response to US resistance to the Keystone XL pipeline. (8/17 #29)
- **Canadian** oil will be stranded unless new pipeline infrastructure is put in place to move product to market, the Canadian natural resources minister said. TransCanada's proposed Energy East pipeline would help offset the estimated 700,000 b/d imported from overseas markets to feed eastern refineries. (8/17 #30)
- **Mexico**'s President Nieto proposed opening his country's historically closed energy industry to foreign investment. The president's plan, which would rewrite two constitutional amendments, challenges a bedrock assumption of Mexico's national identity - its total sovereignty over its energy resources - by inviting private companies to explore and pump for oil and natural gas. (8/13 #14)

- **Mexico** has come up with an inducement for private companies such as Exxon to bid on contracts that would end a 75-year state energy monopoly. Though the government will retain ownership of oil, the plan would lift restrictions on companies registering the value of contracts with the US Securities and Exchange Commission. (8/14 #13)
- **Mexico's** government will send a bill to Congress in September to improve state-owned Pemex's capacity to invest in projects by reducing the oil company's tax burden. (8/16 #12)
- Development of **Brazil's** ultra-deepwater oil fields in the pre-salt region is "sustainable" with international oil prices between $40 and $45 per barrel, the exploration and production director at state oil company Petroleo Brasileiro said Monday. The figure does not include the costs linked to infrastructure needed to deliver the oil to shore. (8/13 #13)
- US **oil and gas rigs** rose by 13 to 1,791 this week, reaching the highest level this year according to Baker Hughes. Oil rigs rose 12 to 1,397 while gas rigs added two to 388. The US count is down 123 from a year earlier as producers use more efficient equipment to bore multiple wells off the same drilling pads, cutting times and helping boost domestic production. (8/7 #28)
- **North Dakota's** government said Thursday its 821,415 barrels of oil produced per day in June set a record for the state. But the boom is straining schools in the oil producing area. (8/17 #26)
- Crude oil shipped by railroad from **North Dakota** is drawing fresh scrutiny from regulators concerned that the cargo is adding environmental and safety hazards, something that analysts say could raise costs. (8/13 #18)
- With forecasters predicting a higher-than-average number of **storms** for this year there is a strong possibility that Gulf of Mexico production will be affected. (8/17 #5)
- Cuadrilla, the fracking company, is temporarily suspending operations in the UK's West **Sussex** village of Balcombe as anti-shale protesters gear up for a campaign of "mass civil disobedience" near its drilling site. (8/16 #19)
- Beijing signed off on plans for **China's** first offshore liquefied natural gas facility—a $539 million LNG import terminal—for the eastern port city of Tianjin. (8/15 #9)
- More than a dozen applications for **natural gas exports** from the United States could be idled once the government starts weighing new data, a market report said. Three such applications have been approved to date. (8/7 #23)
- **Marcellus shale** gas production is rising even faster this year than energy experts had predicted, and that's having a national impact on energy. Bentek said 2013 production in Pennsylvania and West Virginia is up about 50 percent compared with last year. (8/15 #10)
- Antero Resources plans to spend more than half a billion dollars on **a pipeline that will carry water** from the Ohio River to fracking sites in West Virginia and Ohio. The project is a costly wager that the hydraulic-fracturing industry's thirst for reliable sources of water will grow over the next few years. The proposed pipeline would slash well drilling water costs by two-thirds, or about $600,000 per well. (8/14 #17)
- The **Church of England** has set itself on a collision course with opponents of hydraulic fracturing – fracking – by signaling support for exploration of Britain's shale gas reserves. (8/17 #32)
- **Europe's 0.3% GDP growth** in the second quarter is vulnerable to external shocks and too weak yet to make a difference to two of the major issues hanging over the euro zone: record unemployment and the sustainability of the area's public and private debt. (8/17 #31)

- **Germany and France** both grew more than forecast in the second quarter—0.7% and 0.5%--reinforcing expectations that the currency bloc has moved out of recession. (8/14 #18)
- Momentum in the **global economy** is shifting to the developed world, away from the emerging economies that had led growth since the financial crisis. For the first time since mid-2007, the advanced economies, including Japan, the U.S. and Europe, together are contributing more to growth in the $74 trillion global economy than the emerging nations, including China, India and Brazil. (8/12 #3)
- In **North Africa and the Middle East,** it is clear that the region's old status quo, dominated by imperious rulers who fixed elections, ruled by fiat and quashed dissent, has been fundamentally damaged, if not overthrown, in the three years since the outbreak of the uprisings optimistically known as the Arab Spring. (8/15 #5)
- A media report assessed the Top 5 **trouble spots** in terms of acts of violence targeting the energy industry. Apart from Columbia, all of the threat areas were in the Middle East and North Africa. (8/14 #4)
- Without **Egypt's cooperation**, US military missions in some parts of the Middle East could take days longer. That's in part why the generals now in charge in Cairo are not without their own leverage in dealing with Washington in the aftermath of President Obama's condemnation Thursday of the military's bloody crackdown on supporters of the former president, Mohamed Morsi. (8/17 #14)
- It is almost impossible to overstate the hatred between **Sunni Saudi Arabia and Shi'ite Iran**, which has fuelled a decade of violence across the region. In Syria, Iraq, Lebanon and Yemen, the two sides back sectarian proxy forces that are either at daggers drawn or openly at war in conflicts killing thousands each month. (8/13 #10)
- **Venezuela's** President is ratcheting up intimidation of his political foes as his government prepares for key municipal elections amid a deteriorating economy. (8/13 #15)
- The leader of the **Yemen**-based al-Qaida offshoot has vowed to free fellow militants from prisons everywhere and urged them to remain faithful to the terror group's ideology. (8/12 #10)
- **South Korea's** government is desperately trying to reduce the country's power consumption over the next few days as scorching summer heat compounds power supply issues, raising the risk of rolling blackouts. (8/12 #12)