



Drumbeat: July 28, 2009

Posted by <u>Gail the Actuary</u> on July 28, 2009 - 9:11am Topic: <u>Miscellaneous</u>

An Important Greentech Bill You Need to Know: STORAGE

Why is it so important? Here are the basics:

In the same way that tax credits have been an important part of boosting the installation of renewable energy generation, the storage bill would provide an investment tax credit of 20 percent for grid-connected energy storage with a size of at least 2 MW that can deliver 500 kWh for 4 hours, and a 30 percent investment tax credit for residential energy storage gear. In addition, the bill would enable utility energy storage to be paid for by clean energy bonds.

According to a statement by Sen. Ron Wyden, who introduced the bill, tax credits could be used for "individual homeowners with plug-in hybrid vehicles," businesses buying "thermal cooling systems," (like Ice-Energy's ice-powered cooling technology), and factories that want to "install biomass equipment to generate steam to power some of the machinery."

Mines could provide geothermal energy

Mine shafts on the point of being closed down could be used to provide geothermal energy to local towns. This is the conclusion of two engineers from the University of Oviedo, whose research is being published this month in the journal Renewable Energy. The method they have developed makes it possible to estimate the amount of heat that a tunnel could potentially provide.

Offshore wind could be next wave for U.S.

The United States has experienced a surge in investment in wind power over the past four years, more than tripling its ability to turn wind into electricity. But construction has been entirely on land and largely in America's rural midsection -- leaving open the costly challenge of how to transmit power to the densely populated coasts where it is most needed. That could be changing. Developers have proposed wind farms off Massachusetts, Rhode Island, Delaware and New Jersey to meet the electricity needs of the East Coast.

Greenpeace study finds oil companies may be doomed

Environmental activist network argues that the oil industry might be approaching a tipping point from fall in the price, advances in technology and policies on climate change

Greenpeace also contends that a high oil price is simply unsustainable. It cites research from Cambridge Energy Research Associates, which suggests that economies become constrained when the price moves into a band between \$100 and \$120 a barrel, causing the price to fall back. Another report from energy business analysts Douglas Westwood puts the "recession threshold" even lower, at \$80 a barrel.

FACTBOX-Oil production cost estimates by country

The International Energy Agency (IEA) -- in its latest November 2008 world energy outlook -- gave the following estimates for the all-in costs of producing oil from various types of hydrocarbons in different parts of the world:

Oilfields Estimated Production /source Costs (\$ 2008) Mideast/N.Africa oilfields 6 - 28 Other conventional oilfields 6 - 39 CO2 enhanced oil recovery 30 - 80 Deep/ultra-deep-water oilfields 32 - 65 Enhanced oil recovery 32 - 82 Arctic oilfields 32 - 100 Heavy oil/bitumen 32 - 68 Oil shales 52 - 113 Gas to liquids 38 - 113 Coal to liquids 60 - 113

Source: International Energy Agency World Energy Outlook 2008

ASPO-USA: An Interview with Ray Leonard

Question: You worked in Kuwait. What do you see as the future of OPEC production?

Leonard: If you go country by country and look at production histories in post-peak countries, the first step to notice is where the production starts to flatten out. The next step is to look at domestic demand, and that usually keeps rising. The OPEC countries have a tendency to subsidize internal markets; that leads to rapidly rising internal

consumption. Venezuela and Iran are good examples. Indonesia shows the next step, flat production with rising domestic demand that leads to steadily narrowing exports; now, with their exports gone, Indonesia is no longer a member of OPEC. One by one, the other members of OPEC will fall into that same category. Venezuela and Iran are two countries with a future like Indonesia's. Eventually, OPEC is going to consist of Saudi Arabia, Kuwait and the Emirates; they'll be the last three.

As production in the Rest of World drops, OPEC is going to have sway for a certain amount of time; it will be the Golden Age of OPEC. As demand recovers sometime over the next five years, OPEC will have everyone else at a choke point, and that will last for a while.

European power from the desert is a Fata Morgana

The Desertec project "Power for Northern Europe from the Sahara desert" is a Fata Morgana. The initiators know: There is no prospect of success. But for all that Desertec could be a good idea indeed. If the aim were to enable the Sahara countries to make the transition to energy generation completely from renewable sources, I would fully agree to the Desertec plan. The EU would make both an essential contribution towards stable economic and social prospects for the southern Mediterranean countries and to fighting climate change. Given their solar and wind power potentials, these countries would even be able to completely move to renewable energy for their electricity supply within less than 20 years. The beneficial effect to their economies would be much stronger compared with exporting power to Europe.

There are several essential reasons that the Desertec concept presented today for largescale solar power exports to Europe is highly questionable. The expected costs are artificially down rated, while the possibilities to save costs when building the high voltage direct current transmission lines are highly overestimated.

Exploration Fuel

His Energy Futures group has just done a simulation of Canadian gas supplies for a government agency, and he believes the results will worry – or should worry – oil sands producers. "Without significant development of Canada's unconventional gas and a significant reduction in natural gas use," he says, "Canada will become a net importer somewhere between 2023 and 2030. Even with development of unconventional gas and a less aggressive shift towards natural gas supplied electricity, Canada may become a net importer by about 2050."

Germans lament post-Communism decline

Every year, 12 million tonnes of Russian crude oil are processed here, into diesel, jet fuel and petrol - a tenth of the oil refined in Germany.

But this business also has a human story to tell, of the extraordinary jolting change that happened in the eastern part of Germany after the Berlin Wall fell in 1989.

New rules on natural gas to close up 'Enron loophole'

The Commodity Futures Trading Commission imposed rules on natural gas swaps on the IntercontinentalExchange, tightening the so-called "Enron loophole" that exempted the contracts from regulation.

"To protect the American public, it is essential that we bring transparency and accountability to the marketplace," Commission Chairman Gary Gensler said in a statement Monday. "Bringing this natural gas contract under the CFTC's regulatory authority is a critical step toward ensuring a fair and orderly marketplace."

Jim Kunstler: WISHES, HOPES, FANTASIES

Something like a week remains before General Motors is reduced to lunch meat on industrial-capital's All-You-Can-Eat buffet spread. The wish is that its deconstructed pieces will re-organize into a "lean, mean machine" for producing "cars that Americans want to buy," and that, by extension, the American Dream of a Happy Motoring economy may be extended a while longer.

This fantasy rests on some assumptions that just don't "pencil out." One is that the broad American car-owning public can continue to buy their cars the usual way, on credit. The biggest emerging new class in America is the "former middle class." Credit kept the remnants of the middle class going for decades after their incomes stopped growing in the 1970s. Now, their incomes have stopped coming in altogether and they are sinking into swamp of entropy already occupied by the tattoo-for-lunch-bunch. Of course, this has plenty of dire sociopolitical implications.

Pipeline Firms Widen Natural-Gas Networks

A profound geographic shift in U.S. natural-gas drilling is leading pipeline companies to expand into new territories, even as prices for the fuel appear stuck in a lengthy slump.

A few years ago, pipeline companies were focused on moving plentiful natural gas from the Rocky Mountains to hungry Northeastern markets. Today's challenge is building enough infrastructure to handle the flood of gas now being pumped out of shale-rock formations in Appalachia and the Southeast.

Global Ocean Surface Temperature Warmest On Record For June

The world's ocean surface temperature was the warmest on record for June, breaking the previous high mark set in 2005, according to a preliminary analysis by NOAA's National Climatic Data Center in Asheville, N.C. Additionally, the combined average global land and ocean surface temperature for June was second-warmest on record. The global records began in 1880.

A Biofuel Process to Replace All Fossil Fuels

A startup unveils a high-yield process for making fuel from carbon dioxide and sunlight.

A startup based in Cambridge, MA--Joule Biotechnologies--today revealed details of a process that it says can make 20,000 gallons of biofuel per acre per year. If this yield proves realistic, it could make it practical to replace all fossil fuels used for transportation with biofuels. The company also claims that the fuel can be sold for prices competitive with fossil fuels.

Joule Biotechnologies grows genetically engineered microorganisms in specially designed photobioreactors. The microorganisms use energy from the sun to convert carbon dioxide and water into ethanol or hydrocarbon fuels (such as diesel or components of gasoline). The organisms excrete the fuel, which can then be collected using conventional chemical-separation technologies.

Iraq to Hold Roadshow Aug 25 on 2nd Round Oil, Gas Deals

Unlike in the first round, there will be no soft loans attached to the second-round service contracts, but signature bonuses will be instated in a tender protocol to be issued in few weeks, the official said.

The second bidding round, unlike the first round's producing fields, covers mostly undeveloped fields. Some small oil fields were grouped together.

Traders Blamed for Oil Spike

The Commodity Futures Trading Commission plans to issue a report next month suggesting speculators played a significant role in driving wild swings in oil prices -- a reversal of an earlier CFTC position that augurs intensifying scrutiny on investors.

In a contentious report last year, the main U.S. futures-market regulator pinned oilprice swings primarily on supply and demand. But that analysis was based on "deeply flawed data," Bart Chilton, one of four CFTC commissioners, said in an interview Monday.

The CFTC's new review, due to be released in August, adds fuel to a growing debate over financial investors who bet on the direction of commodities prices by buying contracts tied to indexes. These speculators have invested hundreds of billions of dollars in contracts that were once dominated by producers and consumers who sought to hedge against oil-market volatility.

The review also reflects shifting political winds.

China relaxes one-child rule to beat pension crisis

Fears that an ageing population could be left unable to support itself mean that China's biggest city and financial centre, Shanghai, is overhauling the decades-old One Child Policy and encouraging couples to have a second baby.

Many couples will be excluded from the new diktat, but if both parents were an only child, like most newly-weds in the city, they will be encouraged to conceive again, in an effort to ensure that the city's workforce is not outnumbered by its pensioners.

Oil Rises, But Will Rally Continue?

Short term, our fate is going to be determined by the stock market," said Phil Flynn, the vice president in charge of research for PFG Best in Chicago. "I think that we're being supported on oil because we're seeing better than expected earnings and better than expected housing numbers."

Being ignored in the market right now, bearish fundamentals will ultimately prevail Flynn advised.

"There's a possibility that we could see oil get into the \$30s by the end of the year," he predicted. "We could get a major move to the downside. Obviously there are a lot of variables that could change that, but I think long term the fundamentals are bearish."

Sulphur feels weight of oversupply

Like in 2007, sulphur is in excess once again with prices as low as \$45/tonne in March 2009. In some cases, refineries even had to pay to remove their sulphur, such as in the USA or Mexico with fertiliser producer Grupo Fertinal being paid to accept molten sulphur from US and Venezuelan refineries (IM April '09, p.36: Fertiliser loses its mineral appetite)...

He added: "From tight market conditions and resulting high prices, it went rather quickly in the opposite direction, affected by similar conditions impacting phosphate fertilisers, its major end use."

Russian Consortium Visits Venezuelan Oil Fields

Russia's deputy premier and company officials from a Russian oil consortium visited Venezuela's eastern oil-producing region Monday, an area where it plans to drill for extra-heavy crude.

They were accompanied throughout the region by Venezuela Oil Minister Rafael Ramirez, who said he hopes to finalize a deal with the Russians by September...

The Russians could be involved in up to 1.2 million barrels a day of production in Venezuela if they were to win the bidding in the Carabobo and meet drilling expectations at the Junin 6 block, Ramirez said.

6

SOMERIGHTS RESERVED This work is licensed under a Creative Commons Attribution-Share Alike 3.0 United States License.