



## ***ENERGY RISK MANAGEMENT***

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### **NATURAL GAS & POWER MARKET REPORT FOR JUNE 21, 2011**

#### **NATURAL GAS MARKET NEWS**

##### **North America**

China's biggest North American energy deal to date was called off on Tuesday, as Encana Corp and PetroChina failed to reach terms for a \$5.6 billion US joint venture to develop a Canadian shale gas play. Encana, Canada's No. 1 natural gas producer, said the two companies ended talks on an agreement that would have seen PetroChina take a half stake in Encana's massive Cutbank Ridge field in northern British Columbia. The joint-venture was to be the largest of a string of Chinese investments in North America. State-controlled PetroChina wanted new energy supplies to power China's booming economy while Encana aimed to share the costs of developing its Canadian shale gas lands.

##### **Generation Outages**

**NPCC** – Dominion's 877 Mw Millstone #2 nuclear unit was shut today. Operators had reduced power at the unit to 30% yesterday to facilitate repairs on a reactor coolant pump.

**PJM** – Constellation Energy's 872 Mw Calvert Cliffs #2 nuclear power plant dropped to 25% power early Tuesday from full power yesterday as operators performed voltage regulator work.

Dominion's 789 Mw Surry #2 nuclear unit was shut early Tuesday. The unit had been at 94% power on Monday.

**WECC** – TransAlta has shut its 401 Mw Sundance #6 coal fired power plant.

**The NRC reported this morning that some 88,317 Mw of nuclear generation was online, down 1.6% from yesterday and 6.4% below levels recorded a year ago.**

Private weather forecaster WSI this week reaffirmed its bullish hurricane outlook for this season, looking for the threat of multiple landfalls, including a "significant threat" to the Gulf states.

Canada's environmental minister indicated that the Canadian federal government was keeping a close eye on hydraulic fracturing and was prepared to intervene if it thought either provincial or territorial governments were not properly regulating and protecting the environment.

##### **International**

Chinese custom officials reported today that in May China imported 967,922 tonnes of LNG, with its largest supplier, Australia, supplying 324,611 tonnes.

<b>Natural Gas Cash Market</b>						
<b>ICE Next Day Cash Market</b>						
	<b>Volume</b>	<b>Avg</b>	<b>Change</b>	<b>Basis</b>	<b>Change</b>	<b>Basis 5-Day</b>
<b>Location</b>	<b>Traded</b>	<b>Price</b>		<small>(As of 12:30 PM)</small>		<b>Moving Avg</b>
<b>Henry Hub</b>	819,100	\$4.373	\$0.044	\$0.001	\$0.019	\$0.062
<b>Chicago City Gate</b>	673,000	\$4.463	\$0.023	\$0.091	(\$0.020)	\$0.116
<b>NGPL- TX/OK</b>	912,100	\$4.326	\$0.045	(\$0.046)	\$0.002	(\$0.042)
<b>SoCal</b>	556,100	\$4.551	\$0.094	\$0.179	\$0.051	\$0.118
<b>PG&amp;E Citygate</b>	1,493,700	\$4.687	\$0.063	\$0.315	\$0.020	\$0.314
<b>Dominion-South</b>	924,900	\$4.498	\$0.050	\$0.126	\$0.007	\$0.100
<b>USTrade Weighted</b>	20,695,100	\$4.456	\$0.062	\$0.084	\$0.02	\$0.062

Total May LNG imports are some 49.25% above year ago levels and year to date have been running 23.71% above a year ago. Natural gas imports via its pipeline from Turkmenistan reached 920,732 tonnes in May, some 400% above a year ago.

The Polish government gave state-owned monopoly PGNiG a green light for a deal to buy 550 million cubic meters of gas from trade house Vitol, PGNiG said in a statement. The 550 million euro (\$789 million) deal will run from October 2011 until 2014 and will use the entire capacity of a new link between Poland and the Czech Republic. The gas is likely to be from Russia. Poland imports roughly two-thirds of the 14 billion cubic meters of natural gas it uses from Russia and wants to diversify its supply routes by building an LNG terminal in the Baltic port of Swinoujscie and links with its immediate neighbors. Poland is promoting the idea of a North-South gas corridor that would link the planned LNG terminal in Swinoujscie with its southern neighbors Slovakia and the Czech Republic and go even further south to Croatia.

Pipeline capacity from Britain's Milford Haven LNG terminals will rise to 100 percent in summer 2012, when a new unit to regulate gas pressure will become operational, National Grid said on Tuesday. Gas pressure restrictions in a pipeline connecting Milford Haven's South Hook and Dragon LNG terminals with the national transmission system have capped capacity at 80 percent. The National Grid also said that the start of the Tirley gas pressure reduction installation is expected to increase daily output into the energy network by 18 million cubic meters. Construction on the facility started in March after Tewkesbury Council granted remaining permits and work will last around 18 months.

Russia gas export monopoly Gazprom's renewed eastwards push will start next year with the launch of a new field at the Pacific island of Sakhalin, company officials said on Tuesday. "Who pays the most will get the gas," Gazprom Deputy Chief Executive Alexander Ananekov told a news conference, where he laid out plans to tap new fields across Russia's eastern half to fuel domestic industry and supply growing Asia-Pacific markets. Ananekov's remark sounded like a warning to China, which failed to agree to a final price for Russian pipeline gas deliveries despite the fact the negotiations had been meant to end five years of negotiations. Ananekov reiterated that he still expects a deal this year despite the fact the countries' national energy companies failed to strike a deal in time for Chinese President Hu Jintao's visit last week. Gas deliveries to China are due to start in late 2014 under earlier agreements and last 30 years.

Gazprom expects to start producing LNG at a new plant planned for Russia's Pacific coast in 2017, its deputy executive said on Tuesday.

Gazprom will send two extra cargoes of LNG to Japan in July to cover increased gas needs after the Fukushima disaster, a senior Gazprom official said on Tuesday. He said it could cover all Japan's additional needs, including direct sales and extra pipeline deliveries to Europe to compensate for cargoes diverted to Japan.

Gazprom expects to reach a deal by the end of this year to buy all natural gas from the Sakhalin-1 project operated by US oil major Exxonmobil according to Ananekov. ExxonMobil is operator of the Sakhalin-1 project which also includes Russia's OAO Rosneft, India's ONGC Videsh Ltd, a unit of Oil & Natural Gas Corp. and Japanese joint-venture Sodeco.

Additional demand from Japan, following the country's loss of several nuclear facilities for power generation, has strengthened Gazprom's hand in talks with China—underlining that Russia could have choice of buyers for the gas it plans to pump in Russia's east. It has already stepped in with additional volumes since the Fukushima nuclear disaster unleashed by the March earthquake in Japan.

The BBL gas pipeline linking Britain and the Netherlands will shut for maintenance September 12 to September 15, the company said on Tuesday. Gas flows will be stopped due to annual maintenance

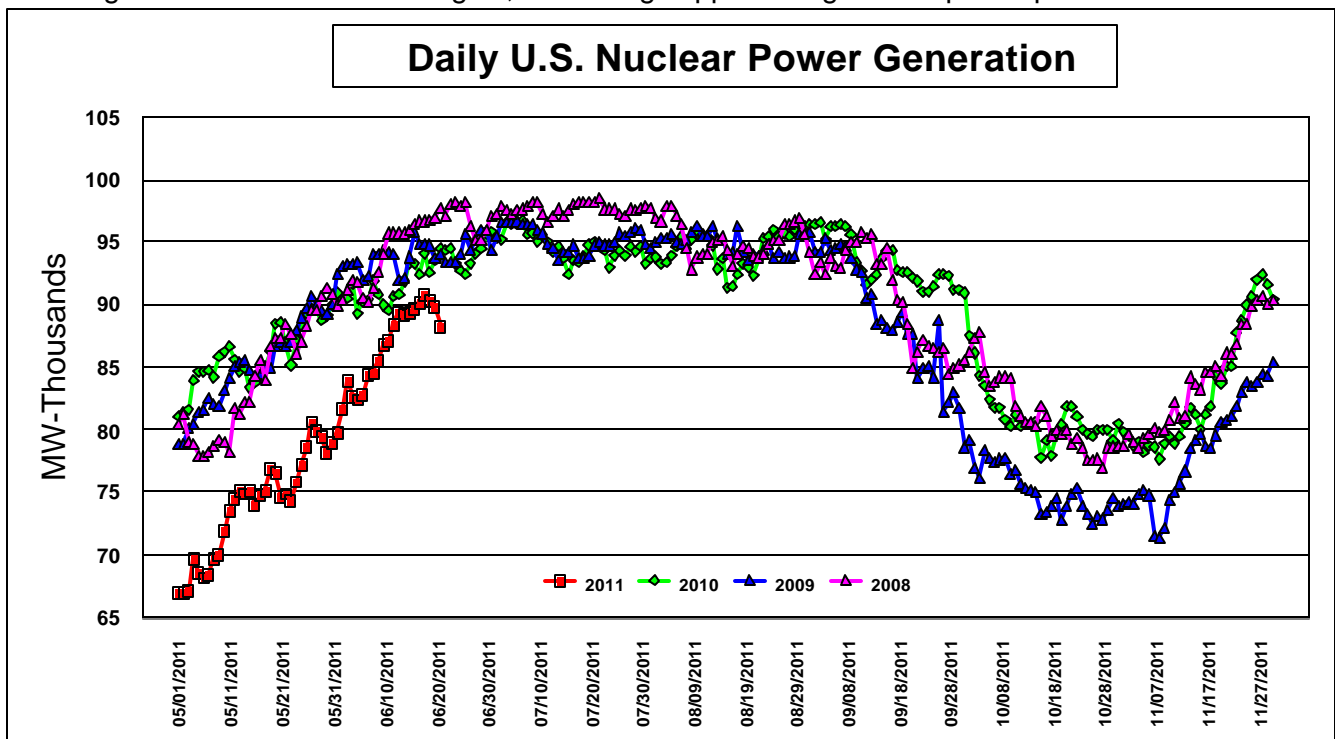
from 0500 GMT on September 12 until 0500 GMT on September 15. The BBL 235-kilometer pipeline connects Balgzand in the Netherlands.

The up-and-down Nabucco pipeline project may have a new lease on life following Germany's decision to switch off nuclear power. Nabucco's backers said it would open two years later than planned and cost more than its target of 7.9 billion euros. The link aims to ease Europe's reliance on Russian gas by delivering supplies through a new southern route. EU Energy Commissioner Guenter Oettinger has said Germany will lose 23 percent of its electricity production when its nuclear power plants go off line. This translates into a 6 percent gap in the EU's electricity supply, he said.

South Korea is seeking ways to increase LNG consumption as an alternative to LNG to avert supply shortages, the economy ministry said in a statement on Tuesday. South Korea, the world's second-largest LNG importer, posted double-digit growth in imports in May from a year earlier as economic recovery boosted consumption. It has also seen a rise in LNG demand for power generation because of a rally in global oil prices, while replenishing LNG stocks after assisting quake-stricken Japan.

Oman LNG's net profit rose 18 percent to \$1.38 billion in 2010 due to slightly higher production and increase in international LNG, its annual report said on Tuesday. The company produced 8.8 million tons LNG last year compared to 8.6 million tons in 2009, according to the annual report. Oman produces LNG from three production facilities which have a capacity to produce 10 million tons per year.

PetroChina has successfully pumped natural gas into its West-to-East pipeline from its first LNG receiving and regasification facility four weeks after taking the first LNG cargo. It suggests the leading gas supplier in China could now route imported gas via its trunk gas pipe to eastern China regions including the financial hub of Shanghai, increasing supplies for gas-fired power plants and other users.



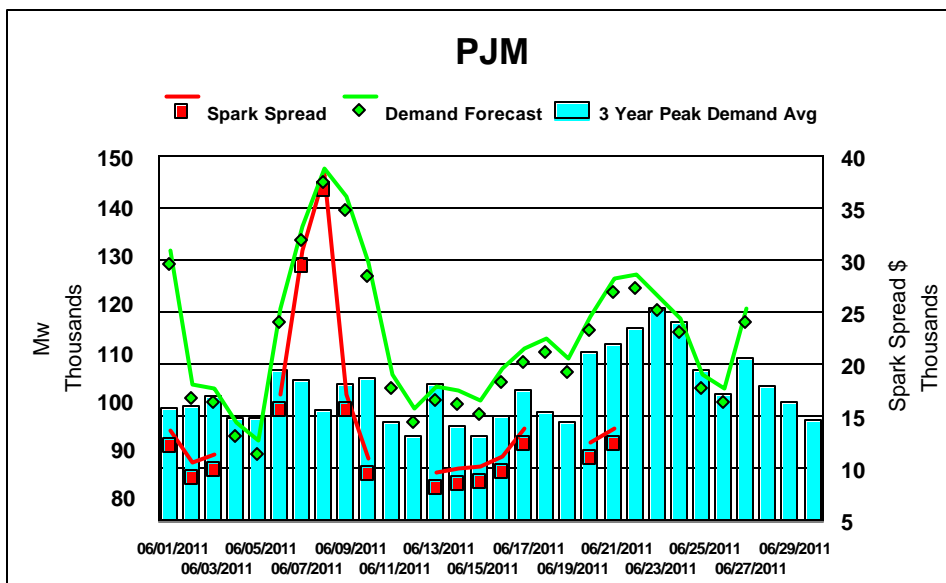
Output from Kuwait's hard-to-access pure gas fields is only expected to begin from 2015 or 2016 at the earliest, a Kuwait Petroleum Corp official said on Tuesday. First gas from the Dorra field and the country's northern pure gas fields, being developed with UK major Royal Dutch Shell will likely only start in four or five years according to an official.

Three Asian nations have asked state-run Korea Gas Corp to sell them a stake in Iraq's Akkas gas field project, the company's chief executive said. Korea Gas Corp last month said it had raised its stake in the project, Iraq's largest gas field with estimated reserves of 5.6 trillion cubic feet, to 100 percent from 50 percent after partner KazMunaiGas Exploration Production withdrew from the deal. Korea Gas Corp supplied 500,000 tons of LNG to quake-hit Japan on a swap basis in response to requests by Japanese utilities in line with a March announcement by the Korean government. Korea Gas Corp President Choo Kang-soo said no further shipments have been made since then, and it will receive the cargoes back from Japan in the peak demand winter season. South Korea's state-run utility now holds 1.26 million tons in its LNG inventory, or 46 percent of its capacity, and plans to fill storage capacity before winter. Korea Gas Corp's domestic gas sales were expected to rise 4.4 percent in 2011 to reach the equivalent of 32.56 million tons of LNG, Choo said.

**ELECTRIC MARKET NEWS**

The US Energy Department said on Tuesday it will provide Granite Reliable Power LLC with as much as \$135.76 million in loan guarantees for a new wind power project. The company's 99-megawatt project will be located in northern New Hampshire and will be the largest wind farm in the state.

Westinghouse Electric Company said on Monday it will begin shipping fuel to the Tennessee Valley Authority's Watts Bar Unit 2 reactor in Tennessee. Westinghouse will ship the fuel assemblies between late June and August, it said in a statement. Fuel loading is expected to begin in 2012 at Watts Bar 2, which is currently under construction according to Westinghouse. Last week, the Tennessee Valley Authority received a license from the Nuclear Regulatory Commission authorizing the receipt of fresh nuclear fuel for eventual use in its proposed Unit 2 reactor. Once licensed to operate by the NRC, Unit 2 will add 1,180 MW to the TVA power system.



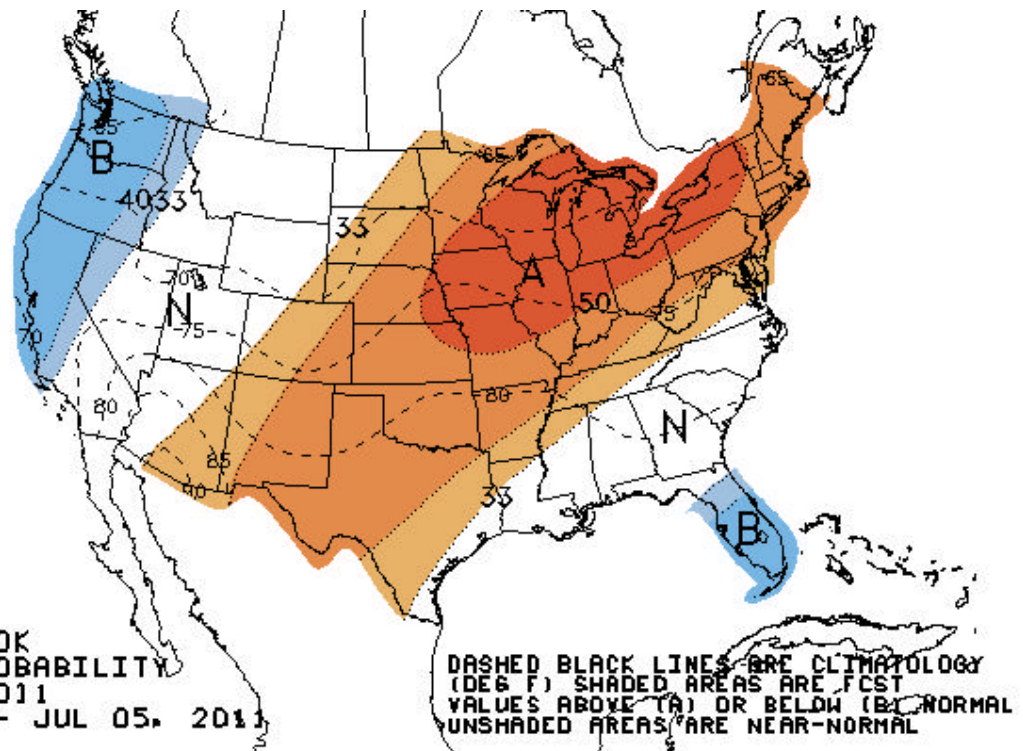
The 800-megawatt Cooper Nuclear Station, run by the Nebraska Public Power District said it was closely tracking the Missouri river's steady increase in elevation due to the US Army Corps of Engineers' releases from dams upstream. Cooper Station said on Sunday that it declared "Notification of Unusual Event" Sunday morning, as part of the safety and emergency preparedness plan it follows when flooding

conditions are in effect. If the river's level increases to 900 feet above sea level, plant personnel will barricade internal doorways as another layer of protection for facility equipment and if the level increases to 45.5 or 902 feet above sea level, plant operators would take the station offline as a protective safety measure, the company said in a statement.

US power output for the week ended June 16 rose 0.1 percent from the previous week but fell 2.2 percent from the same time last year, Genscape said on Monday. Below-normal temperatures dominated the populous northern half of the US, while above-normal heat spreads across the south, particularly Texas, WSI Corp weather service said.

Nuclear power's share of global energy generation may fall to 10% in 2035 from 14% currently if governments continue to switch to other resources in response to the Fukushima disaster, Faith Birol, chief economist at the International Energy Agency said Tuesday. Such scenarios may result in higher greenhouse gas emissions due to greater use of natural gas, coal and renewable energy sources, Birol said in a speech. If countries are to find replacement sources of energy in the "low-nuclear case", an additional 130 million tons of coal, 80 billion cubic meters of gas and 460 trillion watt-hours of renewable energy will likely be needed between now and 2035, according to Birol.

A controversial Nevada site is not an option for storing toxic waste from nuclear power plants, a senior US official said, dismissing Republican efforts to revive the Bush-era plan. The world has struggled with what do about nuclear waste for decades, but Japan's nuclear disaster three months ago brought fresh attention to the dilemma as much of the waste is now stored in pools next to reactors. The plan to house atomic waste at Yucca was approved by then-President Bush in 2002 but opposed by people in Nevada who feared it could pollute water and hurt tourism. The head of the UN International Atomic Energy Agency opened the week-long nuclear safety meeting by calling for countries to do risk assessments of their reactors within 18 months, to make sure they could withstand extreme natural events of the kind that crippled Fukushima. He also proposed strengthened international safety checks, or peer reviews on reactors worldwide organized by the UN body. The US, which has 104 of the 440 nuclear reactors in the world supports this proposal and has carried out post-Fukushima safety checks.



Entergy said Tuesday that it has notified U.S. nuclear regulators that New York State environmental regulators have not issued a final decision on the company's water permit for the Indian point nuclear power plant within the required one year time period.

### **ECONOMIC NEWS**

Standard & Poor's said the risks of the US losing its triple A rating over the medium term increased as the country faces a political impasse and nears its debt ceiling. The US is expected to exhaust its ability to meet financial obligations by August 2<sup>nd</sup>. The Treasury Department however has stated that the date could shift. Standard & Poor's threatened in April to downgrade the US's AAA credit rating unless the Obama administration and Congress find a way to cut the federal budget deficit within two years.

The National Association of Realtors said US existing home sales in May fell by 3.8% to 4.81 million. The median existing home price fell by 4.6% on the year to \$166,500. It reported that the inventory of unsold US homes stood at 9.3 months supply.

The euro extended its gains on Tuesday as investors expected the Greek government would survive a vote of confidence. Greece's parliament is expected to vote on Prime Minister George Papandreou's cabinet.

The IMF said Spain's policy response last year had helped the economy to rebalance. It said however said that rebalancing of the economy was incomplete and the risks were considerable.

### **MARKET COMMENTARY**

The natural gas market finally posted an up day as natural gas futures settled up 6-7 cents as nuclear generation levels suffered a marked decline on the day and now stands some 6.4% below year ago levels. As a result the natural gas market remained basically in an upward channel throughout the morning and afternoon as declining nuclear generation levels coupled with a supportive weather forecast may have prompted some short covering, as possibly shown by the volume on the day that continue to be modest at best and not the start of a new bullish buying spree. According to the NYMEX open interest reports, open interest in the Henry Hub futures and swaps on a combined an adjusted basis has seen open interest contract over the last three trading session through Monday.

We continue to feel that this market is trying to establish a new base of support to work off, and given the appearance that the daily 9-day stochastics are on the verge of rolling back over to the upside we would move to exit our last remaining shorts tomorrow. We see resistance tomorrow at \$4.432-\$4.449 followed by \$4.477 and \$4.54. Additional resistance we see at \$4.631 and \$4.714. Support we see starting at \$4.324, \$4.261 and \$4.24. Additional support we see at \$4.224-\$4.216, \$4.195 and \$4.14.

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