

# Natural Gas Week

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## NATURAL GAS WEEKLY SPOT PRICES

Flow Dates: 10/23-10/29

Price Point	\$/MMBtu	Chg.	High	Low	Avg. Daily Vol.	Avg. Daily Deals	Oct. Bid Week
<b>GULF COAST</b>							
ANR SE	6.35	-0.64	6.63	5.95	179,557	34	6.35
Col. Gulf - Erath	6.32	-0.66	6.73	5.95	361,729	61	6.34
Col. Gulf - Rayne	6.25	-0.72	6.71	5.99	118,879	24	6.34
Florida Zone 1	6.37	-0.68	6.69	5.98	7,491	3	6.34
Florida Zone 2	6.48	-0.61	6.75	6.08	9,649	1	6.45
Florida Zone 3	6.78	-0.84	7.25	6.45	55,614	7	6.77
Henry Hub	6.39	-0.64	6.75	6.00	742,871	75	6.43
NGPL-LA	6.25	-0.64	6.54	5.86	23,921	3	6.17
Sonat	6.34	-0.74	6.72	6.04	108,714	17	6.43
Tenn 500 So La Z1	6.24	-0.73	6.65	5.79	367,649	54	6.30
Tenn 800 So La Z1	6.25	-0.65	6.58	5.84	169,707	26	—
Tetco ELA	6.27	-0.71	6.68	5.92	98,524	20	6.36
Tetco WLA	6.25	-0.66	6.62	5.91	84,786	16	6.31
TGT Zone SL	6.32	-0.62	6.65	6.04	80,143	16	6.31
Transco Station 45	6.36	-0.65	6.68	5.95	79,317	15	6.42
Transco Station 65	6.41	-0.70	6.77	6.02	261,383	36	6.49
Trunkline ELA	6.31	-0.72	6.55	6.03	14,031	6	6.38
Trunkline WLA	6.37	-0.62	6.65	5.98	73,871	11	—
Regional Average	6.34	-0.68					6.41
<b>TEXAS (SOUTH/EAST)</b>							
Carthage Hub	6.14	-0.61	6.49	5.80	65,800	9	6.03
Houston Ship Channel	6.35	-0.70	6.68	5.98	43,714	6	6.15
Katy Hub	6.31	-0.70	6.65	5.96	99,915	17	6.14
NGPL-South Texas	6.17	-0.57	6.54	5.85	265,280	32	6.15
NGPL-TexOk	6.24	-0.47	6.56	5.83	449,825	67	5.82
Tenn Zone 0	6.19	-0.73	6.50	5.80	46,244	10	6.24
Tetco-East Texas	—	—	—	—	—	—	6.07
Tetco-South Texas	6.11	-0.77	6.50	5.79	76,334	11	6.12
TGT Zone 1	6.26	-0.60	6.50	6.01	40,457	11	6.27
Transco Station 30	6.24	-0.67	6.50	5.91	56,776	12	6.29
Regional Average	6.22	-0.61					6.02
<b>TEXAS (WEST)</b>							
El Paso Permian	6.11	-0.43	6.38	5.78	184,707	25	5.40
NNG Custer	—	—	—	—	—	—	—
Transwes E of Thoreau	6.15	-0.21	6.17	6.10	3,214	1	—
Waha Hub	6.12	-0.59	6.57	5.84	246,088	34	5.49
Regional Average	6.12	-0.51					5.42
<b>MIDCONTINENT</b>							
ANR SW	5.98	-0.43	6.20	5.50	21,214	6	5.43
CenterPoint East	5.96	-0.39	6.35	5.49	20,729	4	5.43
CenterPoint West	5.88	-0.53	6.20	5.50	17,705	6	—
NGPL-MC	5.86	-0.51	6.17	5.55	241,814	46	5.45
Oneok	5.95	-0.36	6.15	5.50	29,452	8	5.41
Panhandle	5.91	-0.46	6.20	5.54	263,071	40	5.32
Williams	5.85	-0.50	6.18	5.58	10,871	2	5.35
Regional Average	5.90	-0.48					5.37
<b>GREAT PLAINS</b>							
Emerson	6.37	-0.38	6.47	6.10	105,683	13	5.98
NNG Demarc	6.37	-0.41	6.68	6.00	80,357	14	5.81

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## Scoreboard Analysts Reduce Gas Price Forecasts on Supply Growth

Although many recent weather forecasts point to a warmer-than-normal heating season, the 21 analysts participating in the latest *Natural Gas Week* Quarterly Price Scoreboard are not exactly throwing caution to the (winter) wind.

For the fourth quarter, the average analyst forecast for the natural gas composite spot wellhead price slid 35¢ to \$6.94/MMBtu, from a previous average of \$7.29, with a minimum forecast of \$6 and a maximum forecast of \$8.12. For full-year 2007, the analysts' average forecast slid 15¢ to \$6.85.

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## Alberta Backs Off Threatened Royalty Hike, But Not By Much

The Alberta government's final decision on the recommendations of the Alberta Royalty Review Panel could have been worse, but only if the panel's proposals had been adopted as offered. The terms disclosed by Premier Ed Stelmach and Energy Minister Mel Knight on Thursday were moderately more favorable for natural gas and conventional oil, but the new royalty regime still will take a big bite out of earnings and revenues of oil sands operators.

The new royalty framework calls for gas royalties to be set by a sliding rate formula based on natural gas prices and production volumes. The royalty rate will range from

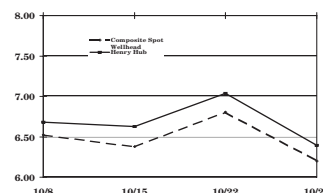
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## November NatGas Tied Like Puppet To \$100 a Barrel Crude Objective

If it weren't for crude oil setting its sights on a \$100/bbl objective, November gas just might be trading around \$6/MMBtu or lower. But because of its sympathetic relationship

to record-breaking crude, not to mention a recent resurgence of hedge-fund buying interest, it looks likely that the November gas contract will expire today with a \$7 handle.

"There was one particular  
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## NATURAL GAS WEEKLY SPOT PRICES (cont.)

Flow Dates: 10/23-10/29

Price Point	\$/MMBtu	Chg.	High	Low	Avg. Daily Vol.	Avg. Daily Deals	Oct. Bid Week
NNG Ventura	6.46	-0.39	6.60	6.21	7,760	2	5.83
Regional Average	6.37	-0.39					5.83
<b>UPPER MIDWEST</b>							
Alliance	6.49	-0.40	6.77	6.22	32,486	5	6.24
ANR ML7	6.58	-0.59	6.73	6.25	10,646	1	—
Chicago Citygate	6.52	-0.37	6.80	6.13	156,103	23	6.25
Consumers	6.65	-0.58	6.87	6.35	3,843	1	6.45
MichCon	6.57	-0.54	6.80	6.15	102,209	18	6.20
Regional Average	6.54	-0.47					6.27
<b>SOUTHEAST</b>							
Tetco M1	6.33	-0.68	6.73	6.00	71,647	11	6.50
Transco Zone 4	6.47	-0.79	6.73	6.25	11,570	4	6.58
Transco Zone 5	6.72	-0.59	7.07	6.49	2,821	1	6.70
Regional Average	6.36	-0.72					6.53
<b>APPALACHIA</b>							
Col. Gas App. Pool	6.63	-0.68	7.00	6.22	391,228	52	6.60
Dominion North	—	—	—	—	—	—	—
Dominion South	6.48	-0.65	6.78	6.10	335,383	50	6.57
Regional Average	6.56	-0.65					6.58
<b>EASTERN CANADA</b>							
Dawn	6.59	-0.57	6.85	6.19	232,087	45	6.46
Iroquois	6.69	-0.61	6.94	6.40	122,921	18	6.64
Niagara	6.65	-0.64	6.91	6.37	96,251	10	6.62
Regional Average	6.63	-0.60					6.51
<b>NORTHEAST / MIDATLANTIC</b>							
Algonquin	6.83	-0.66	7.21	6.40	123,849	17	6.89
Dracut	6.73	-0.66	7.10	6.49	16,012	4	6.79
Iroquois Zone 2	6.85	-0.64	7.15	6.38	183,331	14	6.88
Tenn Gas Zone 6	6.89	-0.68	7.20	6.60	51,130	8	6.86
Tetco M3	6.77	-0.72	7.16	6.35	128,315	27	6.85
Transco Z6 - NY	6.80	-0.63	7.12	6.30	258,820	43	6.87
Transco Z6 - Non-NY	6.76	-0.68	7.13	6.32	92,701	21	6.85
Regional Average	6.81	-0.65					6.87
<b>ROCKIES</b>							
Cheyenne Hub	3.25	-0.13	3.85	2.30	45,529	5	1.25
CIG	3.17	-0.25	3.65	2.29	29,771	5	1.12
Kern River / Opal	2.94	-0.71	3.50	1.90	77,571	14	1.22
NW Rockies	3.22	-0.50	3.40	2.92	24,143	1	1.14
Questar	2.65	-0.96	3.10	2.20	4,071	1	1.31
Regional Average	3.09	-0.47					1.21
<b>SAN JUAN BASIN</b>							
El Paso Bondad	5.90	-0.44	6.27	5.62	63,283	10	—
El Paso San Juan	5.92	-0.48	6.35	5.69	141,042	19	5.11
Regional Average	5.92	-0.46					5.11
<b>PACIFIC NORTHWEST/WESTERN CANADA</b>							
AECO	6.11	-0.28	6.39	5.79	228,896	21	5.62
Kingsgate	6.32	-0.29	6.47	6.12	26,357	3	—
Malin	6.54	-0.30	6.73	6.35	107,675	16	5.65
NW Sumas	6.87	-0.12	7.20	6.49	61,166	15	5.84
Stanfield	6.49	-0.25	6.69	6.23	39,104	7	—
Westcoast Station 2	6.32	-0.24	6.65	5.91	37,997	8	5.31
Regional Average	6.35	-0.29					5.65
<b>CALIFORNIA</b>							
Kern - Wheeler Ridge	6.32	-0.57	6.80	6.04	79,614	9	5.72
PG&E Citygate	6.96	-0.34	7.14	6.78	289,600	35	6.08
PG&E South	6.34	-0.42	6.72	6.02	74,028	10	5.69
SoCal	6.40	-0.40	6.77	6.03	443,926	46	5.62
Regional Average	6.57	-0.42					5.78
<b>WEEKLY COMPOSITE SPOT PRICES</b>							
Wellhead	6.20	-0.60					
Delivered	6.38	-0.62					

## CFTC Asking Congress to Beef Up Oversight of OTC Energy Trading

The Commodity Futures Trading Commission is seeking greater oversight of futures markets to prevent market manipulation, asking the US Congress for authority to regulate the IntercontinentalExchange (ICE). This comes on the heels of CFTC having an active year in enforcement in energy and other markets that resulted in a record number of fines.

If Congress passes legislation to beef up the CFTC's authority, this would be a big shift since ICE is currently exempt from the CFTC's jurisdiction.

The CFTC, an independent oversight agency that monitors commodity markets, last week requested the establishment of a "significant price discovery function" for exempt markets — such as ICE.

Steps for greater price discovery include mandatory daily reporting of large ICE trades, trader position limits, self-regulatory oversight, and "emergency" authority for the CFTC to detect and prevent manipulation.

The requests come in the wake of allegations of manipulation of the natural gas market by hedge fund Amaranth. The CFTC has charged the hedge fund with manipulating natural gas futures prices on two days in 2006.

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### Late news...

**Taxes paid:** Cheniere Energy has made history in Louisiana by paying its taxes early, and it could have avoided them for a decade or more. The Houston-based company is planning to begin operations at Sabine Pass terminal in Cameron Parish in the second quarter of 2008. But Cheniere Energy, saying it wanted to do something to help the area hit hard by Hurricane Rita in 2005, accelerated paying its property taxes to provide more immediate funding for reconstruction efforts. Cheniere also opted out of Cameron Parish's 10-year parish ad valorem tax abatement and backed a bill in the state legislature that would allow them to pay their taxes early. The bill, now passed and signed into law, allows Cheniere to pay \$25 million over 10 years to the local community.

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**BP fined:** The Federal Energy Regulatory Commission has fined BP \$7 million for violations of federal rules related to interstate natural gas pipeline and storage facilities. The FERC fine is in addition to \$303.5 million in fines, penalties and restitution BP America agreed to in a deferred prosecution agreement with the Justice Department, which admitted the company manipulated and attempted to manipulate the price of physical propane in February 2004 and April 2003. In its filings, FERC said the violations involved thousands of individual transactions in 2005-06 that were related to the way BP managed its customers' rights to ship and store natural gas. FERC said the BP violations involved 49.3 Bcf of gas in total and occurred on 14 major pipeline systems. BP also will have to implement a year-long compliance monitoring plan under FERC supervision.

## CFTC ...

(continued from page 2)

Appearing before a subcommittee of the House Committee on Agriculture last week, CFTC's acting chairman, Walter Lukken, said: "These recommendations have the support of the entire Commission and will allow the agency to oversee price discovery contracts while keeping in place the tiered regulatory structure that has fostered the innovation necessary for US markets to compete effectively in the highly competitive global marketplace."

He argued that increased oversight is necessary due to major changes since the Commodity Futures Modernization Act was passed in 2000. That legislation exempted large segments of the energy markets, such as over-the-counter (OTC) derivatives, from CFTC jurisdiction. In the past seven years, the futures industry has seen a massive increase in trading volumes and the move from open-outcry to electronic trading platforms has occurred rapidly, transforming the entire industry.

The new recommendations follow the CFTC's September hearing on regulated exchanges and exempt commercial markets.

During the fiscal year from Oct. 1, 2006, to Sep. 30, 2007, the CFTC's Division of Enforcement was exceptionally active and was awarded more than \$540 million in penalties stemming from cases involving fraud, manipulation, and other misconduct. The commission filed eight actions against hedge funds, pool operators and trading advisors. Besides Amaranth, the CFTC also brought energy market manipulation charges against Energy Transfer Partners and Marathon.

Nonetheless, many in Congress have called for the CFTC to step up its enforcement of energy markets since prices are at record levels and hedge funds and other noncommercial players have been flexing their muscles in the trading world. Some market analysts and politicians argue that such non-commercial players have had too large an impact on prices.

ICE, for its part, says it is supportive of the CFTC's recommendations. "We support the proactive efforts of the CFTC," said ICE Chief Executive Jeffrey Sprecher in a statement. "The spirit of their recommendations is largely consistent with the views we have expressed in several testimonies this year. Such a solution recognizes and addresses the complexities of OTC markets and preserves the significant economic and utility benefits of a properly functioning market."

In the Senate, Carl Levin (D-Michigan) has introduced legislation to close the so-called "Enron loophole" by mandating greater policing of OTC electronic trading.

**Matt Piotrowski, Washington**

## Native Alaskans, Green Groups Level Fire at Arctic Leasing Plan

Environmental groups and Alaska natives are challenging US Interior Department efforts to open large swaths of Alaska's Arctic to oil and natural gas development.

The Minerals Management Service's latest five-year leasing plan, which went into effect in July, includes sales in Alaska's Bristol Bay, Cook Inlet and the northern Chukchi and Beaufort seas. Meanwhile, the Bureau of Land Management is moving forward with plans to open environmen-

tally sensitive areas in the National Petroleum Reserve-Alaska (NPR-A).

The MMS is the Interior Department agency responsible for offshore oil and gas leasing. BLM is charged with overseeing leasing on public lands.

The MMS argues the lease sales are part of a responsible energy policy to decrease the nation's dependence on foreign sources of oil and gas. Opponents insist the agency is ignoring local concerns and rushing development despite a dearth of information about potential environmental consequences.

A group of Inupiat Eskimos from the North Slope villages of Point Hope and Nuiqsut met with lawmakers and Bush administration officials in Washington last week to voice concerns about the upcoming lease sales and their potential impact on subsistence activities and the environment.

The Alaska Natives, backed by the environmental group the Alaska Wilderness League, want MMS to postpone leasing in the Chukchi and Beaufort seas until better scientific information about the region can be gathered, including the potential impact climate change and oil and gas development combined could have on whales and other marine mammals.

"Development shouldn't go forward until the effects of global warming are addressed," said Becky Wynne, spokeswoman for the Alaska Wilderness League.

Leasing opponents also want to ensure that existing clean-up technology is capable of handling a spill in Arctic waters before companies begin drilling.

Environmental groups, the Native Village of Point Hope, the North Slope Borough and the Alaska Whaling Commission have all filed legal challenges to halt lease sales planned in the Chukchi and Beaufort seas.

Massachusetts Sen. John Kerry and other Democrats have joined in opposing development in the Arctic Ocean. Democrats sent letters to Interior Secretary Dirk Kempthorne asking for a three-year moratorium on leasing in the Chukchi and Beaufort seas to allow more scientific data about the region to be gathered.

Among the groups there's also concern about renewed plans by BLM to lease 400,000 acres in the northeast corner of NPR-A around Teshekpuk Lake — summer home to thousands of migratory birds and an important subsistence hunting ground for the region's indigenous population.

Former Nuiqsut Mayor Rosemary Ahtuanguaruk, a board member of the Inupiat Community of the Arctic Slope and a public health professional, said the pace of development at ConocoPhillips' nearby Alpine field has caused unexpected respiratory problems for local villagers.

"The speed of efforts to develop is way beyond the scientific data that should be guiding how development is occur-

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### INTRASTATE WEEKLY SPOT PRICES

Flow Dates: 10/23-10/29

Price Point	\$/MMBtu	Chg.	High	Low	Avg. Daily Vol.	Avg. Daily Deals	Oct. Bid Week
Louisiana Intras	—	—	—	—	—	—	—
Oklahoma Intras	—	—	—	—	—	—	5.42
South Texas Intras	6.33	-0.73	6.65	5.98	67,643	8	6.18
West Texas Intras	6.30	-0.66	6.63	5.90	72,057	10	6.14

# Native ...

(continued from page 3)

ring,” Ahtuanguaruak said. “The reality is we’re seeing human health effects because of the development activities around our communities.”

The ICAS opposes opening the Teshekpuk Lake area of NPR-A to oil and gas development and recently passed a resolution to that effect. Residents of Nuiqsut are particularly concerned about NPR-A development affecting the migration of the caribou herd they depend on for subsistence.

“We are worried about these continuing health issues and the lack of help to address the long-term impacts they pose to our people,” Ahtuanguaruak said.

Public comment on BLM’s proposal to open the area around Teshekpuk Lake ends Nov. 6.

Earl Kingik, a subsistence whaler from Point Hope, said his community has lost patience with the administration over the lack of communication about the potential impacts of exploration. He said local residents don’t feel the government and the energy industry are taking their concerns seriously.

“It’s very frustrating when they come to our communities and don’t have answers to our questions,” Kingik said. “They are going too fast. They need to slow down and study the cumulative effects of global warming and development before allowing leasing.”

There’s currently no development near Point Hope, which sits on Alaska’s northwestern-most tip on the edge of the Chukchi Sea, and local residents don’t want to see any in the future, Kingik said.

Point Hope residents are concerned about the effect of seismic activity in the Arctic Ocean on the migration path of bowhead whales — a staple of the Inupiat subsistence diet.

“We don’t want to fight against our government, but we have to protect our traditional lifestyle,” Kingik said.

The MMS plans to hold an offshore lease sale in the Chukchi Sea in February. The agency estimates the region — some 39 million offshore acres stretching from Point Barrow to Cape Lisburne — holds up to 15.4 billion barrels of oil and 76.7 trillion cubic feet of natural gas reserves.

The Chukchi sale includes a 25-mile buffer zone from the coast to protect bowhead whale migration and subsistence activities of the local Inupiat Eskimos. The sale area would start 25 miles offshore and reach 200 miles offshore in water depths up to 262 feet.

Under the five-year plan, additional lease sales are slated in the Chukchi for 2010 and 2012.

In August, the Alaska Wilderness League, tribal government of Point Hope and Pacific Environment filed a legal challenge to MMS’s decision to open Alaskan waters to development on the grounds that the agency had failed to take into account the effects of climate change and development.

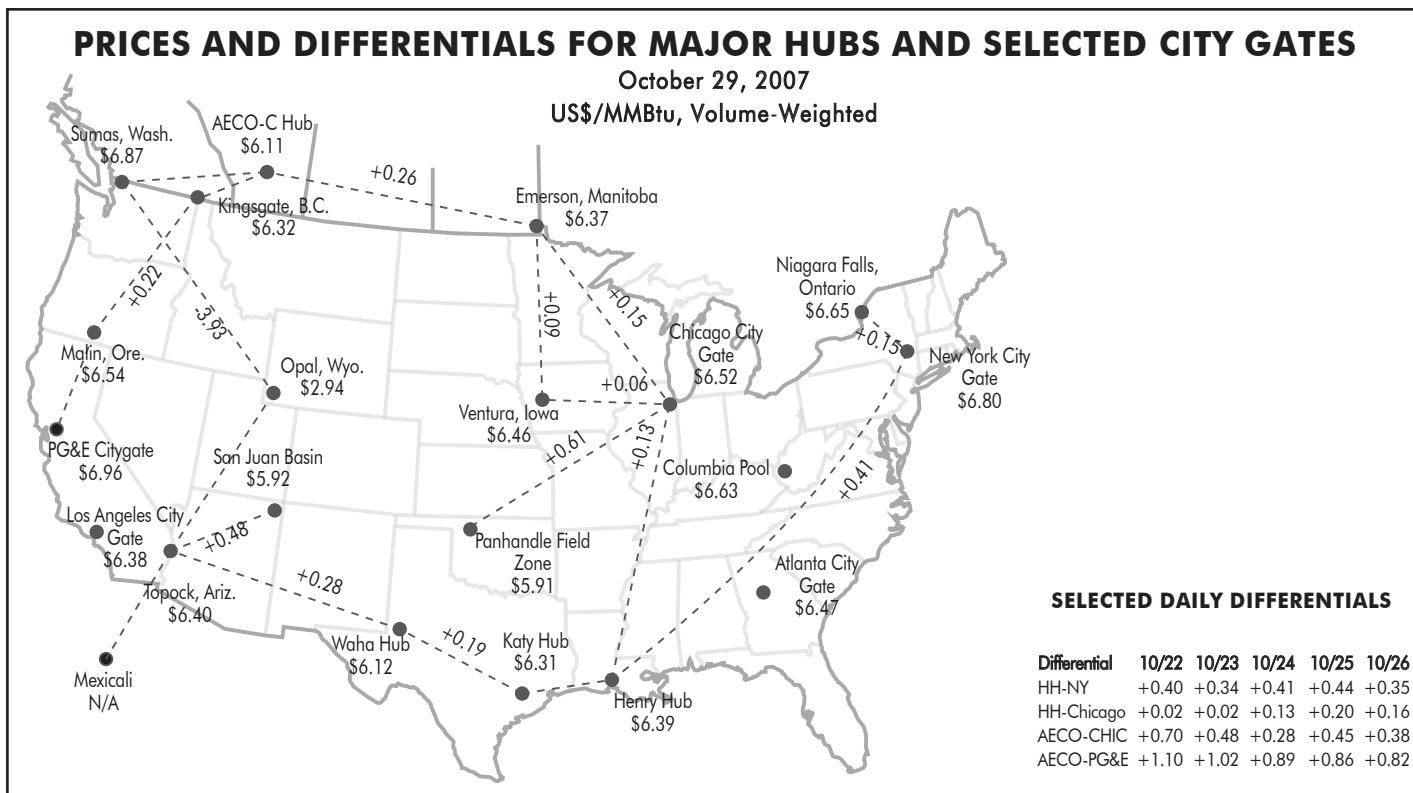
The Center for Biological Diversity filed a separate lawsuit in July, claiming the MMS failed to consider the cumulative impacts of oil and gas development across the country. The two lawsuits are expected to be combined, said Peter Van Tuyn, lawyer for the Alaska Wilderness League.

The MMS has two sales totaling 33.3 million acres scheduled for the Beaufort Sea, which has reserves estimated at 8.2 billion bbl of oil and 27.6 Tcf of gas.

The North Slope Borough and the Alaska Whaling Commission filed a lawsuit in March to block the Beaufort sale, saying it threatened subsistence activities in the region. They were successful in at least temporarily stopping Shell Oil from drilling test wells in the Beaufort this year. The case is pending before the 9th Circuit Court of Appeals.

Another controversial lease sale proposed under the five-

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## Native ...

(continued from page 4)

year plan is the 5.4 million acre sale in the waters of Bristol Bay, also known as the North Aleutian Basin. Environmental and commercial fishing interests are fighting to halt the sale, arguing it could deal a death blow to the state's most productive salmon fishery.

The agency defends the lease sales as part of a responsible energy policy.

"Development of our domestic energy resources, including offshore Alaska, is a key element in reducing our reliance on foreign sources of oil," said MMS spokesman Gary Strasburg. "Studies show the nation's energy demand will continue to increase, so we must find ways to meet that demand while controlling our reliance on foreign supplies."

But Kingik and other villagers insist the industry and the federal government have left too many questions unanswered.

"How are they going to clean the oil spill if anything happens?" Kingik said. "We know what the ice could do to these offshore platforms they'll be building."

The MMS's Strasburg said any development would be done in an environmentally safe way.

"Environmentally responsible and safe offshore exploration and development off the coast of Alaska, in the Gulf of Mexico, or any approved area of the Outer Continental Shelf is critical to our nation's energy security," he said.

**Robert Dillon, Washington**

## XTO Shores Up Barnett Foothold; Solidifies Second Place in Shale Play

XTO Energy, already the No. 2 independent producer in the prolific Barnett Shale play in North Texas, last week tacked on another bundle of Barnett properties for \$550 million from multiple unnamed sellers.

The Fort Worth, Texas-based independent estimates that the 24,000 net acres included in the sale hold proved reserves of over 200 billion cubic feet of gas equivalent, and will initially add 25 million cubic feet of gas equivalent per day to the company's production base.

With its third-quarter net Barnett production numbers

coming in at 341 MMcf/d, XTO remains a distant second behind the dominant Devon Energy, which says it has run away from the rest of the pack through a combination of cost efficiencies, low leasing costs and sheer size (NGW Sep.24,p7). Devon holds a sprawling 750,000 net acres and 3.6 trillion cubic feet equivalent of proved Barnett Shale potential, and is currently aiming to close out the year averaging 875 MMcf/d.

As independents have increasingly turned to repeatable, low-risk resource plays rather than take the gamble on the hit-and-miss business of conventional exploration, the Barnett has quickly become the hottest play in North America. There have been more than 1,200 Barnett well completions over the course of the past year, Carrizo Oil and Gas Chief Executive SP Johnson said last month.

Carrizo is just one of the small-cap companies that have followed the likes of Devon, EOG, Chesapeake and XTO into the Barnett, riding on the technological advances and improved horizontal drilling of the larger players. Quicksilver Resources, another emerging Barnett player, announced in late September that it is unloading a package of low-growth natural gas properties in Michigan in a move designed to give the company more cash to grow its Barnett assets (NGW Sep.17,p5).

For its part, XTO plans to drill anywhere from 280 to 300 new wells during the remainder of the year. As a result of the most recent acquisition, the company issued increases to its 2007 and 2008 production targets, from 17% to 18% and from 15% to 17%, respectively. The 2008 outlook, however, "still looks light," according to a research report by Wachovia Capital Markets, given the potential of the Barnett addition and the recent \$2.5 billion purchase of Dominion Resources' Rocky Mountain, San Juan Basin and Gulf Coast operations.

The acreage also holds an additional 300 to 350 possible drilling locations, with the potential to double reserves, XTO President Keith Hutton said in a statement.

"Over the past three years, we have grown our Barnett production at better than a 50 percent compounded rate, which continues to drive our ambitions to build out XTO's footprint in the region," Hutton said. "This group of acquisitions is the ideal bolt-on investment, focusing in areas of our strongest well performance."

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### NORTH AMERICAN WEEKLY GAS STORAGE

(Billion Cubic Feet)

Region	Oct. 19 Week	Oct. 12 Week	Weekly Change	Year Ago	Yr. Ago Change	5-year Average	5-year Change
<b>US</b>							
East	1970	1932	38	1989	-19	1883	87
West	453	446	7	467	-14	425	28
Producing	1020	997	23	1003	17	904	116
<b>Total Lower 48</b>	<b>3443</b>	<b>3375</b>	<b>68</b>	<b>3459</b>	<b>-16</b>	<b>3212</b>	<b>231</b>
<b>Canada</b>							
East	247	245	2	244	2	—	—
West	339	336	3	216	123	—	—
<b>Total Canada</b>	<b>585</b>	<b>581</b>	<b>5</b>	<b>460</b>	<b>125</b>	<b>—</b>	<b>—</b>
<b>Total North American</b>	<b>4028</b>	<b>3956</b>	<b>73</b>	<b>3919</b>	<b>109</b>	<b>—</b>	<b>—</b>

Sources: Energy Information Administration; Canadian Enerdata.

# XTO...

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According to Hutton, the purchase brings XTO's net Barnett acreage to 240,000, with roughly 50% of that located in the "core" of the play, where the geology offers the best productivity potential. The company intends to operate about 20 drilling rigs in the play for the foreseeable future, he said, and has invested over \$300 million in compression, processing and pipeline infrastructure to help the company establish a dominant position.

Last week, XTO reported that total third-quarter production came in at 1.928 Bcfe/d, up 24% from 1.553 Bcfe/d in the third quarter of 2006. Total revenues for the third quarter were \$1.42 billion, a 30% increase from the \$1.1 billion posted the previous year.

Hutton also pointed to the company's extensive holdings in the Freestone Trend in East Texas, which logged net production of 464 MMcf/d on the quarter, and XTO is shooting for 15% growth in the Freestone over the next few years.

**Greg Couturier, Washington**

## UK-Based Companies to Showcase Subsea Technologies in Houston

Seeing a potential market worth billions, some of the UK's leading subsea technology companies are coming to Houston to showcase their wares and hopefully open some international doors.

The half-day program will be held Thursday afternoon at the Hilton Hotel on Post Oak Boulevard.

The technology showcase is being put on by Subsea UK. The coalition of 150 UK-based energy service companies is joining forces with the Houston branch of the Society for Underwater Technology and the UK Trade & Investment group, with help from the British consulate in Houston.

"Subsea UK was formed to promote the sector at home and abroad, and this first-of-its-kind event to be held in Houston will showcase some of our most innovative and exciting technology," said Subsea UK Chief Executive David Pridden, adding that the British energy industry has more than 30 years of subsea engineering experience to draw on.

"The key technical challenges around the world facing the subsea sector are, in general, very similar," Pridden said. "This highlights the need for UK companies to get out there and sell their extensive experience and world-leading technology."

According to Subsea UK, about 40% of the oil and gas production in the North Sea is being done at the subsea level, as is much of the work now being done in the Gulf of Mexico, including pipelines and other facilities. The subsea sector in the UK employs about 40,000 people and has annual revenues of about \$6.5 billion.

However, if the UK energy industry wants to remain a market leader, it will have to set its sights on other market opportunities outside its comfort zone in the North Sea, he said.

"Our vision is for the sector to capture \$10 billion of the global capex spending by 2011," Pridden said. "In our strategy, we are seeking to achieve this in several ways, but most notably by capitalizing on international opportunities."

A number of UK-based companies will make presentations about their technologies and how they are working in the North Sea and other fields, Pridden said. Among the companies already confirming participation in the conference are Brinker Technology, MCS, Trelleborg Offshore, Acergy, Nautronix, BSW Ballgrab, DES Operations, 2H Offshore/Aquatic and Duco.

**John A. Sullivan, Houston**

## Scoreboard ...

(continued from page 1)

Of the analysts who put forth a fourth-quarter prediction in both the current and previous Scoreboards, four increased their estimate and four stood pat, but 10 reduced their estimate.

The average forecast for the first-quarter 2008 price is \$7.56, with a minimum forecast of \$6.15 and a maximum of \$9 even.

For full-year 2008, the analysts' average forecast fell to \$7.24, down 19¢, with a minimum of \$6 and a maximum of \$8.50.

Of the analysts who offered a full-year 2008 prediction for

(continued on page 7)

Trading Dates: October 22 - October 26, 2007		NATURAL GAS FUTURES										
NEW YORK MERCANTILE EXCHANGE (NYMEX) (HENRY HUB)												
	Monday		Tuesday		Wednesday		Thursday		Friday		Week's High-Low	Open Interest
	Last	Volume	Last	Volume	Last	Volume	Last	Volume	Last	Volume		
November 2007	6.891	54,202	6.761	38,421	6.972	54,689	7.188	29,410	7.218	—	7.225-6.640	26,883
December 2007	7.529	26,666	7.471	18,216	7.657	24,819	7.816	18,776	7.808	—	7.825-7.365	103,504
January 2008	7.906	11,564	7.851	6,632	8.034	6,570	8.163	5,084	8.138	—	8.150-7.760	87,347
February 2008	7.946	5,268	7.896	1,366	8.074	2,674	8.198	2,212	8.170	—	8.065-7.810	32,473
March 2008	7.771	7,696	7.726	2,384	7.899	2,420	8.023	2,376	7.995	—	7.895-7.640	48,204
April 2008	7.476	4,389	7.456	1,614	7.619	1,669	7.731	1,039	7.720	—	7.605-7.410	39,250
May 2008	7.518	600	7.500	1,588	7.661	828	7.771	536	7.760	—	7.670-7.420	32,161
June 2008	7.607	106	7.590	313	7.748	407	7.856	103	7.845	—	7.720-7.720	19,082
July 2008	7.702	212	7.685	193	7.843	545	7.949	82	7.940	—	7.650-7.650	14,565
August 2008	7.775	441	7.758	90	7.916	497	8.019	67	8.010	—	7.730-7.730	12,762
September 2008	7.796	117	7.779	56	7.937	216	8.040	44	8.031	—	7.930-7.740	9,782
October 2008	7.861	725	7.844	206	8.002	496	8.105	179	8.096	—	8.040-7.810	33,116
<b>12-MONTH STRIP</b>	<b>7.648</b>		<b>7.610</b>		<b>7.780</b>		<b>7.905</b>		<b>7.894</b>			
TOTAL VOLUME		113,984		71,753		96,712		60,148		—		

## Scoreboard ...

(continued from page 6)

the current and previous Scoreboards, only two increased their estimate, while six stayed the same and 10 reduced it.

Even though the forecasts represent a fairly broad range, some analysts are thinking of even broader ranges.

Kevin Petak, vice president of gas market modeling for ICF International in Arlington, Virginia, establishes "weather-based probability distributions" by conducting an extensive stress test of his gas price forecast numbers.

By taking his base forecast — which assumes normal weather — and substituting the weather from each of the last 75 years, he creates 75 different price observations. "The standard deviation of these observations is huge," he said.

Petak sees Henry Hub prices this winter fluctuating anywhere from a low of \$4.50 to a high of \$11. The former case would happen if winter were 10% warmer than normal, the latter if the frigid winter of 1976-77 made an encore.

"In order to nail the market precisely, you would need to know precisely what the weather is going to do," he said.

Joel Musante, senior analyst in the Oil and Gas Group at C.K. Cooper & Co., is looking at a more narrow range.

"We think that gas prices are going to stay between \$6 and \$8, and our forecast tends to be on the lighter side of that," he said.

Musante sees new supply coming on line via expanded LNG imports, new pipeline capacity and production hitting a 1 billion cubic foot per day stride at the new Independence Hub in the Gulf of Mexico. He even sees the potential for additional supply from Western Canada if higher royalty rates cause companies to cut back on oil sands projects, freeing more natural gas to send south.

According to Steve Thumb at Energy Ventures Analysis, the natural gas market is already trading on winter speculation, but fundamentals generally are pointing downward.

"Storage could be at record levels, particularly if early November is warm," he said. "The combination of record storage levels and reasonable winter weather could put significant downward pressure on gas prices at about Jan. 20, 2008."

Then there is the crude oil wildcard to consider, and crude is likely to stay high, "for a while at least," said Carol Freedenthal of Jofree Energy Consulting, adding that people are asking, "If oil is \$12/MMBtu, why shouldn't gas be \$12/MMBtu?"

Petak sees the natural gas market as less prone to down-  
(continued on page 14)

### NGW'S PRICE FORECAST SCOREBOARD

Analyst	Company	3Q07	4Q07	Chg. 4Q07	FY07	Chg. FY07	1Q08	FY08	Chg. FY08
David Adams	Jefferies & Co.	\$6.00	\$6.25	\$0.00	\$6.75	\$0.75	\$6.15	\$6.00	\$0.00
Marshall Adkins++	Raymond James	\$6.50	\$7.50	\$0.00	\$6.99	-\$0.09	\$9.00	\$7.00	-\$3.00
Ronald J. Barone	UBS	\$6.85	\$8.12	\$0.00	\$7.00	-\$0.25	\$8.15	\$8.00	\$0.00
Larry Benedetto	Howard Weil	\$6.25	\$7.00	-\$0.75	\$6.88	-\$0.12	-	\$7.00	-\$0.50
Lloyd Byrne	Morgan Stanley	\$7.50	—	—	—	—	—	—	—
Matt Conlan	Weeden & Co.	\$6.50	\$7.00	\$0.00	\$6.75	\$0.00	\$8.50	\$8.50	\$0.00
Carol B. Freedenthal	Jofree Energy Consulting	\$6.15	\$6.79	-\$0.48	\$6.50	-\$0.09	\$6.66	\$6.86	-\$0.14
John Gerdes***	The Gerdes Group	—	\$7.25	—	\$6.93	—	\$8.25	\$8.25	—
Ron L. Gist	Purvin & Gertz	\$5.90	\$6.80	-\$0.05	\$6.60	\$0.00	\$7.45	\$7.00	-\$0.30
Global Energy Team††	CanaccordAdams	\$7.00	\$6.12	-\$2.08	\$6.75	-\$0.75	\$6.50	\$7.00	-\$1.25
Ellen Hannan	Bear Stearns	\$6.00	\$6.00	-\$2.00	\$6.49	-\$0.50	\$7.50	\$7.50	\$0.00
Scott Hanold†	RBC Capital Markets	\$7.50	\$6.50	-\$1.00	\$7.00	-\$0.50	\$7.00	\$7.00	\$0.00
John P. Herrlin Jr.	Merrill Lynch Global Securities	\$6.25	\$6.60	\$0.20	\$6.80	\$0.00	-	\$6.80	-\$0.25
Martin King	First Energy Capital	\$6.42	\$7.25	-\$0.50	\$7.07	-\$0.18	\$6.77	\$7.25	-\$1.10
Dan Lippe	Petral Consulting	\$6.95	\$7.25	\$1.50	\$6.81	\$0.06	\$8.63	\$8.25	\$2.75
Robert Morris	Banc of America Securities	\$6.75	—	—	—	—	—	—	—
Joel Musante	C.K. Cooper & Company	\$6.25	\$6.25	-\$0.25	\$6.77	\$0.39	\$7.00	\$6.50	-\$0.75
Kevin Petak	ICF International	—	\$7.07	—	\$7.00	—	\$7.85	\$7.37	—
R. Rossi/K. Pacanovsky	Ferris, Baker, Watts	—	\$7.00	—	—	—	\$7.50	\$7.00	—
Adam E. Sieminski	Deutsche Bank Alex. Brown	\$7.50	—	—	—	—	—	—	—
Stephen A. Smith	Stephen Smith Energy Assoc.	\$6.40	\$7.60	\$1.40	\$7.00	\$0.25	\$8.00	\$7.30	\$0.30
Scott Speaker***	JPMorgan Chase	\$7.55	\$7.75	-\$0.25	\$7.33	-\$0.27	\$7.35	\$7.38	-\$0.20
Stephen L. Thumb	Energy Ventures Analysis	\$6.24	\$6.82	\$0.24	\$6.69	-\$0.02	\$7.10	\$6.53	-\$0.02
Jon Wolff†	Credit Suisse	\$7.40	\$6.75	-\$1.00	\$6.85	-\$0.57	\$8.25	\$7.50	\$0.00
<b>AVERAGE ANALYST FORECAST</b>		<b>\$6.66</b>	<b>\$6.94</b>	<b>—</b>	<b>\$6.85</b>	<b>—</b>	<b>\$7.56</b>	<b>\$7.24</b>	<b>—</b>
<b>U.S. Energy Information Administration</b>		<b>\$6.72</b>	<b>\$6.26</b>	<b>—</b>	<b>\$6.34</b>	<b>—</b>	<b>\$7.18</b>	<b>\$6.95</b>	<b>—</b>
<b>Natural Gas Week Outlook*</b>		<b>—</b>	<b>—</b>	<b>—</b>	<b>\$6.74</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>Natural Gas Week Actual**</b>		<b>\$6.11</b>							

Notes: All values for US average wellhead prices in \$/MMBtu. \*Measure of NGW composite spot wellhead prices combined with forward futures prices.

\*\*NGW volume-weighted composite spot wellhead. \*\*\* Nymex period averages. †Bidweek averages. ††I. Haas, C. Trimble, A. Bradford, F. Kozak, B. McDonald, R. Wyman, and T. Peters. ++ Henry Hub Averages.

# Kansas Aiming to Break the Renewables Mold

When one thinks of cutting-edge technology on the renewable energy frontier, one does not always think of Kansas.

But that's the place — more specifically, the Holcomb Station in Garden City, Kansas — where arguably one of the most ambitious renewable centers in the country has been proposed.

Currently, the Holcomb Station consists of a baseload, 350-MW coal plant, three natural gas peaking plants and two steam turbines. But if Sunflower Electric Power's dream is allowed to blossom, the site will sprout into the Sunflower Integrated

Bioenergy Center, and will use agricultural and livestock waste, along with an algae reactor, to feed a power plant, a biodiesel plant and a 100 million gallon-per-year ethanol plant.

The project took a major hit recently, when the state's Department of Health and Safety declined to issue an air permit for the proposed core of the center: two 700 MW supercritical pulverized coal units.

Despite Sunflower's proposed emissions-reduction equipment, including an algae subsystem — which consumes carbon dioxide and nitrogen oxide, converting them to renewable fuels — it failed to pass muster with the state agency. That debate was partially fueled by Chesapeake Energy's massive ad campaign against the coal-fueled units, said Sunflower spokesman Steve Miller, who added, "They failed to mention how high natural gas costs are."

"It's irritating that [the air permit denial] is not based on any existing law," he told Natural Gas Week.

Sunflower, nonetheless, is moving ahead with plans for the center, and will challenge the decision "in many ways," including in state court, he said. "It's a question of whether we want to give up ownership just to get it done ... and whether I'll be 140 years old by that time."

A seemingly sleepy co-op serving 125,000 customers in western Kansas, Sunflower is the first utility in the state to commit to the national initiative to produce 25% of its energy from renewable resources by 2025. The timing is good in some respects: Holcomb's aging steam turbines date from 1962; the natural gas peakers employ less efficient, simple-cycle technology from the 1970s.

Sunflower is partnering with Kansas State University on the renewable portion of the center and, for the coal-fired plants, with Golden Spread Electric Cooperative in Amarillo, Texas, and Westminster, Colorado-based Tri-State Generation and Transmission.

Tri-State had planned a third coal-fired unit, but in the face of environmental protest, switched to plans for natural gas-fueled units.

The three G&T cooperatives consist of 67 members spread throughout seven Midwestern states.

The centerpiece for the Sunflower plant will be its algae system, based on technology studied for decades with good results. But the earlier research took place when fuel prices were low, quashing any incentive to adopt such an exotic system in which algae consume the CO<sub>2</sub> and NO<sub>x</sub> in the bioreactor through photosynthesis and other biological processes.

In the process, the algae is harvested daily, drained of water, and may be dried with flue gas diverted from a power plant, without disrupting normal operations.

Finally, the algae biomass is separated into oil — as much as 60% by weight for some algae — and solids, which can be fed to livestock, burned in the power plant or the derivative starch may be used by the ethanol plant.

"They're farmers," one Sunflower employee said of the three co-ops' customers. "Farmers know not to waste anything. You can get energy from everything on God's green Earth," he enthused. "Cotton, methanol, dairy cows...."

**Bobette Riner, Houston**

## Nukes Challenged on Front and Back End

Even while the rush for new nukes is ramping up, federal officials warn that the back end may hit a snag, as no real plans have been made for disposal of the nuclear waste. Meanwhile plans proceed apace for the new wave of nukes, both because of and despite climate change issues.

A top Energy Department official recently announced that the proposed nuclear waste storage facility at Yucca Mountain in Nevada would need from two to three times what was initially budgeted in order to meet the opening date of 2017. The program is now expected to handle about one-third more waste than was envisioned when it began in 1983.

The estimate made in 2001 for the program's total 50-year life cycle (through 2033) was \$57.5 billion in 2000 dollars. That included costs already incurred; since 1983, \$11 billion has been spent. Federal officials said they expect a revised cost estimate by the end of the year.

There were almost as many nukes scrapped over the years as there are in operation today (97 and 104, respectively). One such nuke, Watts Bar Unit 2, was halted when nearly two-thirds of the construction was completed, by federal utility TVA in 1985. TVA recently awarded an engineering, procurement and construction contract to Bechtel Power, which helped TVA with the \$1.8 billion recent restart of its Browns Ferry Unit 1. Bechtel has worked in some capacity with the utility on all of TVA's nuke projects.

TVA has said it wants to resurrect some of those shelved plants, including Bellafonte (NGW Oct. 8, p8). A drought in the Tennessee Valley has drained about 50% of TVA's hydropower capacity, further prompting the utility's desire to move ahead with nuclear power.

Weather, if not accounted for, may further curtail plans for new nukes, which have grabbed the attention of the public largely because of concern over climate change. If designs for newer reactors fail to take into consideration rising ambient temperatures, experts say, global warming itself may greatly affect current nukes' operation. Coolant ponds aren't as efficient turning water into steam for the reactors when the water temperature tops 90 degrees Fahrenheit.

And many of the new nukes being considered will reside in the Southeast, a sweltering region that has of late largely been tied to natural gas for power generation.

**Bobette Riner, Houston**

## California Wildfires Hurting Power Deliveries, Causing Price Volatility

The power grid manager for California declared a transmission emergency early last week in the southern part of the state, as wildfires continued to rage.

Transmission issues crop up daily in the second-most populous state in the nation, but the emergency status remains significant, albeit on the bottom rung of the crisis hierarchy set up by the California Independent System Operator. Two of the state's three main utilities, Southern California Edison and San Diego Gas and Electric, reported brief power outages. Both utilities asked customers to conserve and, in some cases, cut power use, during the crisis.

Two lines serving the San Onofre nuclear power plant, on the coastline outside of San Diego, were reported by Reuters as having been affected Monday afternoon. Both of the nuke's units are at zero percent output, with San Onofre 2 having been taken offline over the weekend.

The Southern California nukes weren't the only ones affected by the fires, which have been exacerbated by the region's Santa Ana winds. Two of the three units comprising the largest nuclear plant in the country, Palo Verde in Arizona, are also at zero percent, with Palo Verde 1 taken down Monday. Only Unit 2 was operating mid-week at 100%.

Natural gas peaking plants situated near load pockets do well in this type of scenario. Indeed, power prices reached triple digits in both real-time and day-ahead markets in southern and northern California on Monday. Yet prices at neighboring Palo Verde dipped to about half that, as power there — often exported to California — was dumped in a "fire sale."

## Power Prices Up; NatGas Behind GHG Fall

The retail price of electricity increased by more than 9% in 2006, representing the largest increase since 1981,

according to a recently-released wrap-up of last year's electricity usage in the US by the Energy Information Administration. Most of the increase was seen in the East, where natural gas has been gaining as a fuel for power generation.

Fourteen states and the District of Columbia saw an increase of 10% or more between 2005 and 2006 in the aftermath of the hurricanes Katrina and Rita, according to the EIA.

The study also found that power generation-related emissions of carbon dioxide, sulfur dioxide and nitrogen oxides declined last year. Sulfur dioxide emissions dropped nearly 8%; CO2 emissions came off 2.2% and NOx emissions were cut back by 4.1%. The EIA attributed these reductions to increases in emissions-free generation from nuclear power, hydropower and wind, as well as an increased reliance upon natural gas, coupled with a reduction in coal and petroleum.

## Power-Hungry CT to Gain NatGas Peaker

The United Illuminating Co., a New Haven-based public utility serving southern Connecticut, is teaming up with NRG Energy of Princeton, New Jersey, to develop a natural gas-fueled peaking power plant in the Constitution State.

No details were released, other than the proposed project will be the first of several planned throughout the state.

### COMPARATIVE FUEL PRICES

(Cash Market)  
October 29, 2007

#### APPALACHIA

Appalachian Pool Divd (Util) \$6.64/MMBtu	Ohio/Big Sandy River Coal \$46.75/ton \$1.95/MMBtu
-------------------------------------------------	----------------------------------------------------------

#### EAST COAST

New York City Gate \$6.81/MMBtu	Heating Oil—No. 2* 232.55¢/gal \$16.77/MMBtu	Residual 0.30% \$73.03/bbl \$11.62/MMBtu	Residual 1% \$64.53/bbl \$10.26/MMBtu
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#### GULF COAST

Natural Gas Texas Onshore Divd (Util) \$6.38/MMBtu	Natural Gas Louisiana Onshore Divd (Util) \$6.45/MMBtu
----------------------------------------------------------------	--------------------------------------------------------------------

Heating Oil—No. 2* 230.26¢/gal \$16.60/MMBtu	Residual 0.70% \$70.00/bbl \$11.13/MMBtu	Residual 3% \$65.82/bbl \$10.47/MMBtu	WTI Cushing \$88.52/bbl \$15.26/MMBtu
-------------------------------------------------------	---------------------------------------------------	------------------------------------------------	------------------------------------------------

NOTES: (1) Residual=Residual Fuel Oil, priced exclusive of taxes; (2) WTI=West Texas Intermediate crude oil; (3) % = % of sulfur content. \*Average sulfur content = 0.2%-0.5%.

SOURCES: Gas: Natural Gas Week; all prices volume-weighted. Oil: The weekly average of The Oil Daily's cash price postings.

### SPOT ELECTRICITY TRADING

Trading Dates: October 22-October 26, 2007

NEW YORK MERCANTILE EXCHANGE (NYMEX) (HENRY HUB)

POINT	Avg. Price		Change	Year Ago	Month Ago
	This Week	Last Week			
Cinergy	\$51.70	\$60.33	-8.63	\$48.17	\$55.13
COB	71.65	69.52	+2.13	74.79	61.92
Comed	55.50	61.00	-5.50	51.33	49.00
Entergy	53.60	64.56	-10.96	58.83	58.25
ERCOT	46.02	63.56	-17.54	58.00	65.21
Into TVA	N/A	N/A	N/A	N/A	N/A
Mid-Columbia	68.06	62.95	+5.11	70.65	56.79
NEPOOL	64.93	73.69	-8.76	72.50	66.50
Palo Verde	60.00	58.45	+1.56	57.90	59.68
PJM-West	64.00	68.11	-4.11	51.67	63.13

Notes: (1) Prices in \$/MWh. (2) Prices are for next day peak delivery. Sources: Staff and wire reports.

## MMS Conducts 'Very Successful' RIK Sale; Could Net \$640 Million

The federal Minerals Management Service has completed a royalty-in-kind (RIK) natural gas sale that MMS Director Randall Luthi called very successful.

The sale will deliver more than 91.6 billion cubic feet of RIK natural gas over five-month or 12-month terms. At the current natural gas price around \$7/MMBtu, this would equate to about \$641 million in total gross revenues, Luthi said, adding that actual revenues will vary based on natural gas prices over the life of the contract.

The gas will be delivered beginning Thursday to 13 offshore pipeline systems originating in the Gulf of Mexico and destined for consumer and industrial use in the continental US. That volume of gas is enough to supply the average gas needs of nearly 1.2 million US homes for one year.

Luthi said the gas sold in the RIK sale involves an aggregation of gas royalties taken "in kind," in the form of product, rather than "in value" or cash payments, from offshore federal leases in the Gulf of Mexico. The MMS then sells the gas competitively in the open market.

Nine companies were awarded contracts for the 13 sales packages that were offered. Winning bidders include Bear Energy, BG Energy Merchants, ConocoPhillips, Louis Dreyfus Energy Services, National Energy and Trade, PPM Energy, Sequent Energy Management, United Energy Trading, and Williams Power. Luthi noted that bidding was strong for the sale, with 21 companies tendering a total of 175 offers for the RIK gas.

### Gulf of Mexico:

China National Offshore Oil Corp. (CNOOC) has no plans to make bids in future lease sales in the Gulf of Mexico, a company official said at a China-US conference in Washington, D.C., last week.

"We today are not interested in the Gulf of Mexico because we are a smaller company," CNOOC Chief Financial Officer Yang Hua told reporters at the meeting. Africa and Asia are more strategic for CNOOC, he said.

He did not name any specific countries in Africa or Asia where the company is looking to make any new investments. Yang told the reporters that "it really doesn't matter" where the company searches for oil or gas, as long as the search ultimately brings "value to my shareholders."

In 2005, CNOOC ran into a political firestorm in the US when it made an \$18.5 billion bid in an unsuccessful attempt to buy Unocal.

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Norway's Aker Kvaerner has won a \$65 million contract to supply subsea power cables and control umbilicals to Petrobras' Cascade and Chinook fields in the Gulf of Mexico.

A spokesman for Aker Kvaerner said the contract calls for the company to deliver about 43 miles of high voltage power cables, as well as static and dynamic steel tube umbilicals. Both the cables and umbilicals will be installed at water depths up to 8,000 feet deep. Aker Kvaerner Subsea's facility in Mobile, Alabama, will handle the project management, engineering and manufacturing. Delivery is scheduled for the middle of 2009.

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New Orleans-based McMoRan Exploration has reported a successful production test at its Flatrock discovery. The well, located at South Marsh Island Block 212 in about 10 feet of water, was rated at 71 million cubic feet of natural gas per day.

### Louisiana:

NiSource Gas Transmission & Storage is conducting an open season through Nov. 2 for expanded capacity to Florida Gas Transmission.

A spokesman for the Houston-based company said the project would include expanding Columbia Gulf's existing facilities near Lafayette.

The spokesman said the capacity increase would be achieved through the addition of compression at Columbia Gulf's Rayne Compressor Station and pipeline facilities on its East Lateral in South Louisiana. The new service could be available by Jun. 1.

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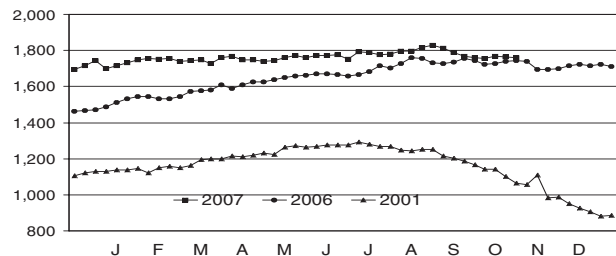
Tulsa, Oklahoma-based Black Bayou has filed an application with the Federal Energy Regulatory Commission to build and operate a natural gas storage facility on the Black Bayou Salt Dome in Cameron Parish.

The project is located within 25 miles of six existing or  
*(continued on page 11)*

## BAKER HUGHES RIG COUNT

Week Ended Oct. 26  
Rotary Rigs

	Current Week	Previous Week	Year Ago
Total US	1,760	1,764	1,744
Land	1,680	1,687	1,632
Inland Waters	28	27	22
Offshore	52	50	90
Gulf of Mexico	51	49	87
Total Canada	345	331	343
<b>US Rigs Exploring for:</b>			
Oil	326	320	289
Gas	1,428	1,438	1,450
Unspecified	6	6	5
<b>US Rigs by State:</b>			
California	42	42	34
Louisiana	158	144	192
New Mexico	74	70	89
Oklahoma	188	191	187
Texas	828	850	801
Wyoming	72	69	101



Source: Baker Hughes

## Regional Market Roundup

(continued from page 10)

proposed LNG terminals. In its application, Black Bayou said construction of the facility could begin in May, and pending the necessary regulatory approvals, the facility could be operational by April 2011.

The Black Bayou project would have an initial working gas capacity of 15 billion cubic feet. Kaiser-Francis Oil would develop and operate the project.

### Also noted:

**Bid made:** Platina Energy Group has made the first

moves in a bid to acquire a 63-mile pipeline in Texas, including six producing wells with a cumulative total of 50 barrels of oil and 450 thousand cubic feet of natural gas per day. Closing is expected in November. Platina will retain 50% of the acquisition and act as project manager.

\* \* \*

**Deal proposed:** Superior Offshore International, which provides underwater construction and diving services, has made a bid to buy privately held Ocean Flow International for \$15 million in a stock-for-stock deal. The deal is expected to close in the fourth quarter.

### GAS PRICE TRENDS

(\$/MMBtu)	CALIFORNIA		ROCKY MTNS	NEW MEXICO	TEXAS				MID-CONT.	LOUISIANA			MID-WEST	APPA-LACHIA	SOUTH-EAST	NEW ENG.
	South	North			Gulf Coast Offshore	Gulf Coast Onshore	Central	West		Gulf Coast Offshore	Gulf Coast Onshore	Northern Louisiana				
	<b>Oct 29, 2007</b>															
Inter (well)	—	—	2.91	5.75	6.18	6.15	6.21	6.05	5.80	6.23	6.27	6.19	—	6.45	6.37	—
Intra (well)	6.19	—	2.88	—	6.19	6.17	6.21	6.05	5.78	6.23	6.27	6.18	—	—	—	—
Dlvd (pipe)	6.39	6.54	3.03	5.92	6.25	6.23	6.30	6.12	5.90	6.30	6.34	6.26	6.46	6.56	6.52	6.81
Dlvd (util)	6.39	6.46	3.36	6.07	—	6.38	6.47	6.20	6.15	—	6.45	6.40	6.52	6.64	6.81	6.84
<b>Oct 22, 2007</b>																
Inter (well)	—	—	3.47	6.23	6.85	6.77	6.88	6.55	6.28	6.89	6.94	6.79	—	7.10	7.08	—
Intra (well)	6.61	—	3.44	—	6.86	6.79	6.88	6.55	6.26	6.89	6.94	6.78	—	—	—	—
Dlvd (pipe)	6.81	6.84	3.59	6.40	6.92	6.85	6.97	6.62	6.38	6.96	7.01	6.86	6.85	7.21	7.23	7.47
Dlvd (util)	6.81	6.83	3.92	6.55	—	7.00	7.14	6.70	6.63	—	7.12	7.00	6.89	7.29	7.56	7.50
<b>Oct 15, 2007</b>																
Inter (well)	—	—	1.31	6.06	6.54	6.43	6.47	6.32	6.08	6.51	6.55	6.53	—	6.68	6.63	—
Intra (well)	6.34	—	1.28	—	6.55	6.45	6.47	6.32	6.06	6.51	6.55	6.52	—	—	—	—
Dlvd (pipe)	6.54	6.43	1.43	6.23	6.61	6.51	6.56	6.39	6.18	6.58	6.62	6.60	6.50	6.79	6.78	7.06
Dlvd (util)	6.54	6.48	1.76	6.38	—	6.66	6.73	6.47	6.43	—	6.73	6.74	6.53	6.87	7.14	7.11
<b>Oct 8, 2007</b>																
Inter (well)	—	—	3.23	6.02	6.56	6.48	6.55	6.24	5.98	6.61	6.63	6.58	—	6.72	6.88	—
Intra (well)	6.29	—	3.20	—	6.57	6.50	6.55	6.24	5.96	6.61	6.63	6.57	—	—	—	—
Dlvd (pipe)	6.49	6.41	3.35	6.19	6.63	6.56	6.64	6.31	6.08	6.68	6.70	6.65	6.51	6.83	7.03	7.25
Dlvd (util)	6.49	6.43	3.68	6.34	—	6.71	6.81	6.39	6.33	—	6.81	6.79	6.59	6.91	7.17	7.30
<b>Oct 1, 2007</b>																
Inter (well)	—	—	0.98	5.21	6.24	6.09	6.18	5.47	5.40	6.21	6.22	6.10	—	6.38	6.37	—
Intra (well)	5.53	—	0.95	—	6.25	6.11	6.18	5.47	5.38	6.21	6.22	6.09	—	—	—	—
Dlvd (pipe)	5.73	5.66	1.10	5.38	6.31	6.17	6.27	5.54	5.50	6.28	6.29	6.17	6.06	6.49	6.52	6.89
Dlvd (util)	5.73	5.68	1.43	5.53	—	6.32	6.44	5.62	5.75	—	6.40	6.31	6.20	6.57	6.83	6.94
<b>September 2007</b>																
Inter (well)	—	—	1.06	5.07	5.88	5.76	5.79	5.29	5.17	5.91	5.89	5.83	—	6.00	6.15	—
Intra (well)	5.45	—	1.03	—	5.89	5.78	5.79	5.29	5.15	5.91	5.89	5.82	—	—	—	—
Dlvd (pipe)	5.47	5.47	1.18	5.24	5.95	5.84	5.88	5.36	5.27	5.98	5.96	5.90	5.72	6.11	6.30	6.53
Dlvd (util)	5.47	5.47	1.51	5.39	—	5.99	6.05	5.44	5.52	—	6.07	6.04	5.87	6.19	6.44	6.53
<b>Third Quarter 2007</b>																
Inter (well)	—	—	2.14	5.27	5.89	5.87	5.90	5.59	5.48	6.07	6.09	6.03	—	6.27	6.68	—
Intra (well)	5.75	—	2.11	—	5.90	5.89	5.90	5.59	5.46	6.07	6.09	6.02	—	—	—	—
Dlvd (pipe)	5.77	5.72	2.26	5.44	5.96	5.95	5.99	5.66	5.58	6.14	6.16	6.10	5.97	6.38	6.83	6.82
Dlvd (util)	5.77	5.74	2.59	5.59	—	6.10	6.16	5.74	5.83	—	6.27	6.24	6.07	6.46	6.67	6.82
<b>Second Quarter 2007</b>																
Inter (well)	—	—	3.94	6.44	7.32	7.17	7.25	6.79	6.55	7.43	7.45	7.41	—	7.95	7.53	—
Intra (well)	6.91	—	3.91	—	7.33	7.19	7.25	6.79	6.53	7.43	7.45	7.40	—	—	—	—
Dlvd (pipe)	6.93	6.88	4.06	6.61	7.39	7.25	7.34	6.86	6.65	7.50	7.52	7.48	7.18	8.06	7.68	8.30
Dlvd (util)	6.93	6.90	4.39	6.76	—	7.40	7.51	6.94	6.90	—	7.63	7.62	7.31	8.14	7.96	8.30
<b>First Quarter 2007</b>																
Inter (well)	—	—	5.33	6.22	6.67	6.65	6.63	6.28	6.32	7.22	7.23	7.19	—	7.59	7.09	—
Intra (well)	6.55	—	5.30	—	6.68	6.67	6.63	6.28	6.30	7.22	7.23	7.18	—	—	—	—
Dlvd (pipe)	6.57	6.71	5.45	6.39	6.74	6.73	6.72	6.35	6.42	7.29	7.30	7.26	6.96	7.70	7.24	8.63
Dlvd (util)	6.57	6.65	5.78	6.54	—	6.88	6.89	6.43	6.67	—	7.41	7.40	7.03	7.78	8.18	8.63
<b>2006 Average</b>																
Inter (well)	—	—	4.89	5.49	6.41	6.27	6.38	5.84	5.83	6.60	6.54	6.80	—	6.96	6.83	—
Intra (well)	6.05	—	4.86	—	6.42	6.29	6.38	5.84	5.81	6.60	6.54	6.79	—	—	—	—
Dlvd (pipe)	6.07	6.04	5.01	5.66	6.48	6.35	6.47	5.91	5.93	6.67	6.61	6.87	6.64	7.07	6.98	7.30
Dlvd (util)	6.07	6.05	5.34	5.81	—	6.50	6.64	5.99	6.18	—	6.72	7.01	6.72	7.15	7.10	7.30
<b>October 2006</b>																
Inter (well)	—	—	3.99	5.10	4.91	5.56	5.39	5.05	5.14	5.78	5.57	5.45	—	5.84	6.28	—
Intra (well)	5.35	—	3.96	—	4.92	5.58	5.39	5.05	5.12	5.78	5.57	5.44	—	—	—	—
Dlvd (pipe)	5.37	5.20	4.11	5.27	4.98	5.64	5.48	5.12	5.24	5.85	5.64	5.52	6.17	5.95	6.43	6.05
Dlvd (util)	5.37	5.28	4.44	5.42	—	5.79	5.65	5.20	5.49	—	5.75	5.66	6.33	6.03	6.30	6.12

**NOTES:** (1) Inter = Interstate Intra = Intrastate Well = Wellhead Dlvd = Delivered Pipe = Pipeline Util = Utility (2) This table presents historical data from the Gas Price Report. (3) R = Revised. (4) Mid-Cont. = Mid-Continent New Eng. = New England (5) Since Jan. 3, 1994, California prices have been divided into North to reflect gas delivered from Pacific Gas Transmission Co. to northern California and South to reflect gas delivered to southern California via the Transwestern Pipeline Co., El Paso Natural Gas Co. and Kern River Gas Transmission pipeline systems. Previous reporting for the state concentrated on southern California; thus, the historical prices in the South column properly reflect trading for southern California. Natural Gas Week has no similar history of prices for northern California. (6) All prices are volume-weighted.

## Revised Regulations Increasing Onshore Drilling in Nova Scotia

When Nova Scotia initiated a new round of efforts to entice oil and natural gas companies to conduct further exploration and development activities in the Atlantic Canada province, the energy department expected offshore prospects would be the primary attraction.

Somewhat to their surprise and pleasure, the first companies to take advantage of the more attractive royalty and tax terms were a handful of minnow exploration and production companies that wanted to test several onshore prospects, specifically unconventional gas.

The idea that natural gas deposits might be buried beneath Nova Scotia's rolling hills didn't come as a surprise to energy ministry officials. "We've been mining coal here since the 1700s," Deputy Minister Alison Scott told *Natural Gas Week* on a recent visit to her Halifax office. "Our coal production has been particularly gas-prone."

Currently, six onshore exploration agreements are active. Operators are looking mostly for unconventional gas, either coalbed methane (CBM) or shale gas. The energy minister is expected to make a decision shortly on Canadian junior Stealth Energy's proposed development of its Cumberland Basin CBM discoveries near the border with New Brunswick (NGW Apr.3,'06,p16).

Triangle Petroleum's Elmworth Energy has drilled two exploratory wells on a 516,000-acre shale gas prospect northwest of Halifax (NGW Oct.15,p12). Results from core tests and other studies are expected by the end of the year. Another active drilling prospect is the 776,000-acre Alton block, which privately held Forent Energy acquired earlier this year on a farm-out from EOG Resources. According to the energy department, Forent has permits for two wells, but hasn't yet disclosed any findings.

The four exploratory wells and workovers of some CBM wells represent the province's most active drilling year in a while. According to Kimberly Doane, manager of petroleum resources for the province, the onshore has been more active than the offshore, where no wells were drilled in 2007. Drilling should resume next year when EnCana begins development of the offshore Deep Panuke project (NGW Oct.8,p.1).

Scott cited the slowing of activities offshore Newfoundland and Labrador as one reason for lack of interest in the offshore plays. "The exodus of drilling rigs from Atlantic Canada makes attracting companies to our offshore more difficult," she said. That may change with the pending start-up of work on the Hebron field and the extension of the White Rose field (NGW Sep.24,p.7).

Department officials credit their revised regulatory regime for easing the process for operators. One component is the "one window" feature, where a single application is distributed to all of the agencies and boards whose authorization is required, said Sandy MacMullin, director of resource assessment and royalties.

Another key asset Nova Scotia can offer is infrastructure. The offshore Sable Island fields began producing in 1999. Though the gas deposits haven't proved as prolific as initial-

ly believed, they were enough to justify construction of the Maritimes & Northeast Pipeline to deliver the output to markets in Atlantic Canada and New England.

Sable production stands at around 400 million cubic feet per day, leaving both existing and expansion capacity available for other production, such as the potential output of the CBM and shale gas projects.

Onshore operators in both Nova Scotia and neighboring New Brunswick also credit the pipeline's presence to enhancing the potential economics of their projects. Another places the regulatory regime's two-year royalty holiday to allow faster recovery of initial investment.

The existing regulatory regime addresses only onshore exploration, not development operations. The pending Stealth CBM project would be the first onshore find to go to development, Doane said, and the higher levels of activity associated with development require another set of policies.

Nova Scotia is adapting the best practices of CBM policies already established in Alberta and other western provinces for operations in Atlantic Canada.

So far, local residents in the largely rural and small-town areas have indicated strong support for the natural gas explorers and drillers. Their motivations may be driven as much by emotion as economics. "The question everyone asks is, 'Will this keep our kids at home?'" Doane said. Atlantic Canada has seen thousands of its young adults move west to the oil sands projects in Alberta, where jobs are plentiful and pay is high.

If the potential discoveries live up to hopes and expectations, then the workers could have equally good jobs available locally.

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**Rig Count:** There were 325 rigs drilling for natural gas and oil in Western Canada as of Oct. 23, 28 more than in the previous week, according to the Canadian Association of Oilwell Drilling Contractors (CAODC).

During the same period a year ago, CAODC reported that 382 rigs were drilling in the region.

A total of 894 rigs are available in the region, one more than in the previous report, the CAODC said.

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**Working gas** in all Canadian storage facilities rose to 89.6% of capacity as of Oct. 19, with a 4.9 Bcf increase from the week before, according to the most recent Canadian Enerdata gas storage survey.

A total of 585.3 Bcf of gas was in storage last week; capacity is 653.1 Bcf. Stores were 96.2% full a year ago.

Working gas levels in facilities west of the Manitoba/Saskatchewan border rose to 338.8 Bcf, up from 336.0 Bcf the week before; capacity is 402.1 Bcf.

Working gas levels east of the border rose to 246.5 Bcf, up from 244.5 Bcf the previous week; capacity is 251.0 Bcf.

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**The composite spot import price** this week is US\$6.42/MMBtu for gas leaving Canada and entering the US through six border crossing points.

*Natural Gas Week's* Oct. 30, 2006, average for Canadian exports was US\$7.21/MMBtu.

Canada's average spot wellhead price is US\$6.15/MMBtu; the price for the same week a year ago was US\$6.69.

**Barbara Shook, Halifax, Nova Scotia**

## Chile Lays Claim to Parts of Antarctica

Chile's foreign minister told reporters last week that his country will ask the UN Commission on the Limits of the Continental Shelf to recognize his country's claim over a chunk of Antarctica.

Alejandro Foxley said Chile's move is after Britain's announcement that it is claiming oil and natural gas resources

in a portion of the Antarctic seabed (NGW Oct.22,p.13). Foxley said Britain's claim overlaps Chile's claim.

In 1959, Chile and several other nations signed the Antarctic Treaty that bans energy production around the South Pole. The other treaty signers are Argentina, Australia, Belgium, France, Japan, New Zealand, Norway, South Africa, the former Soviet Union, the UK and the US.

<b>CANADIAN PRICE REPORT</b>											
(\$U.S. per MMBtu/\$Can per Gigajoule)											
	BRITISH COLUMBIA			ALBERTA			SASKATCHEWAN		MANITOBA	ONTARIO	
	Total Province	Huntingdon/ Sumas Border	Kingsgate/ Eastport Border	Total Province	AECO-C* Hub	Empress Border	Total Province	Monchy Border	Emerson Border	Toronto City Gate	Niagara Border
	Spot	Spot	Spot	Spot	Spot	Spot	Spot	Spot	Spot	Spot	Spot
<b>OCTOBER 29, 2007</b>											
Wellhead U.S. \$	6.44			5.83			5.91				
Canadian \$	5.89			5.33			5.40				
Delivered to Pipe U.S.\$	6.60	6.87	6.32	5.99	6.11	6.24	6.06	6.25	6.37	6.59	6.65
Canadian \$	6.03	6.28	5.78	5.47	5.59	5.70	5.54	5.71	5.82	6.02	6.08
<b>OCTOBER 22, 2007</b>											
Wellhead U.S. \$	6.65			6.08			6.08				
Canadian \$	6.08			5.56			5.56				
Delivered to Pipe U.S.\$	6.80	7.00	6.61	6.23	6.39	6.48	6.23	6.64	6.75	7.16	7.28
Canadian \$	6.22	6.40	6.04	5.70	5.84	5.92	5.70	6.07	6.17	6.55	6.66
<b>OCTOBER 15, 2007</b>											
Wellhead U.S. \$	6.07			5.78			5.78				
Canadian \$	5.58			5.31			5.31				
Delivered to Pipe U.S.\$	6.22	6.26	6.18	5.93	5.92	6.06	5.93	6.43	6.39	6.79	6.90
Canadian \$	5.72	5.75	5.68	5.45	5.44	5.57	5.45	5.91	5.87	6.24	6.35
<b>OCTOBER 8, 2007</b>											
Wellhead U.S. \$	6.09			5.52			5.52				
Canadian \$	5.65			5.12			5.12				
Delivered to Pipe U.S.\$	6.24	6.34	6.14	5.67	5.92	5.98	5.67	6.15	6.34	6.86	6.96
Canadian \$	5.79	5.89	5.70	5.26	5.49	5.55	5.26	5.70	5.88	6.36	6.46
<b>OCTOBER 1, 2007</b>											
Wellhead U.S. \$	5.40			4.84			4.84				
Canadian \$	5.08			4.55			4.55				
Delivered to Pipe U.S.\$	5.55	5.59	5.50	4.99	5.17	5.27	4.99	5.85	5.71	6.32	6.46
Canadian \$	5.22	5.26	5.18	4.69	4.86	4.96	4.69	5.50	5.37	5.94	6.08
<b>SEPTEMBER 2007 AVERAGE</b>											
Wellhead U.S. \$	5.11			4.66			4.66				
Canadian \$	4.82			4.40			4.40				
Delivered to Pipe U.S.\$	5.26	5.26	5.26	4.81	4.87	5.03	4.81	5.63	5.43	6.04	6.13
Canadian \$	4.96	4.96	4.96	4.54	4.59	4.74	4.54	5.31	5.12	5.70	5.78
<b>3RD QUARTER 2007 AVERAGE</b>											
Wellhead U.S. \$	5.26			4.72			4.73				
Canadian \$	4.96			4.45			4.46				
Delivered to Pipe U.S.\$	5.41	5.41	5.41	4.86	4.98	5.10	4.88	5.70	5.54	6.27	6.33
Canadian \$	5.10	5.10	5.10	4.59	4.70	4.81	4.60	5.37	5.22	5.91	5.97
<b>2ND QUARTER 2007 AVERAGE</b>											
Wellhead U.S. \$	6.58			6.17			6.13				
Canadian \$	6.60			6.19			6.15				
Delivered to Pipe U.S.\$	6.72	6.69	6.75	6.31	6.53	6.67	6.27	7.00	7.05	7.80	7.95
Canadian \$	6.74	6.71	6.76	6.33	6.55	6.69	6.29	7.01	7.07	7.82	7.97
<b>1ST QUARTER 2007 AVERAGE</b>											
Wellhead U.S. \$	6.52			6.03			6.02				
Canadian \$	7.11			6.57			6.57				
Delivered to Pipe U.S.\$	6.65	6.72	6.57	6.16	6.74	7.07	6.15	6.52	6.87	7.12	7.31
Canadian \$	7.25	7.33	7.16	6.71	7.35	7.71	6.71	7.11	7.49	7.76	7.97
<b>2006 AVERAGE</b>											
Wellhead U.S. \$	5.66			5.50			5.50				
Canadian \$	6.21			6.04			6.03				
Delivered to Pipe U.S.\$	5.78	5.84	5.73	5.63	6.31	6.52	5.62	6.14	6.13	6.90	6.96
Canadian \$	6.35	6.41	6.29	6.18	6.93	7.16	6.17	6.74	6.73	7.57	7.64
<b>OCTOBER 2006 AVERAGE</b>											
Wellhead U.S. \$	4.93			5.09			5.09				
Canadian \$	5.25			5.41			5.42				
Delivered to Pipe U.S.\$	5.07	5.40	4.73	5.22	5.10	5.40	5.23	5.63	5.55	5.93	6.18
Canadian \$	5.39	5.74	5.03	5.55	5.42	5.74	5.56	5.99	5.90	6.31	6.57

NOTES: Prices represent volume-weighted averages of the most recently reported gas sales contracts and price negotiations. \*Denotes pricing at Alberta Energy Co.'s marketing hub in southeastern Alberta. R=Revised.

## Scoreboard ...

(continued from page 7)

ward price risk than to upward price risk. "The risk of supply is very real," he said.

"We really never have a time when forecasting is an easy thing, there's always something on the horizon to make it precarious," Freedenthal said.

"What we have is what I would call a *deja vu* market, this year looks a lot like last year," Petak said.

Price forecasts in the previous Scoreboard for the third quarter of 2007 were a bit high, which is understandable given a relatively mild summer and a lack of hurricane impact.

The actual *Natural Gas Week* composite spot wellhead price for the third quarter came out at \$6.11 — 55¢ under the \$6.66 average offered by the analysts. But the Energy Information Administration fared more poorly with its forecast of \$6.72.

**Michael Sultan, Washington**

## November ...

(continued from page 1)

player on ICE last week that was super-aggressive and buying everything in sight," one futures trader in Texas said. "It's obvious that, who ever it is, is long and attempting to capitalize on the run in oil. But any way you slice it, he was a real driver behind keeping gas prices elevated."

Last week, November natural gas futures failed to ward off the ongoing speculative exuberance in crude oil, which exceeded \$92/bbl. In fact, a majority of technical indicators suggested that gas had all the signs of a lower-trending commodity. While prices did manage to briefly fall below \$7 last week, speculative influences in the OTC market managed to underpin it.

Market bulls also largely ignored bearish weather forecasts. But harder to ignore in the near-term is the effect that mild temperatures will have on gas storage for the balance of the refill season.

Last week, the Energy Information Administration reported injections of 68 billion cubic feet for the week ended Oct. 19, raising gas in storage to 3,443 Bcf. The report brought storage to within 15 Bcf of last year's record refill, which topped out during the same week last year at 3,458 Bcf. Looking ahead, the tentative outlook for storage this week is for a build of 58 Bcf to 61 Bcf, with a possible build of 18 Bcf to 30 Bcf to be reported for the week ended Nov. 2.

But this week, the biggest influence in driving gas futures prices either higher or lower may center on action in the crude oil pit.

In terms of crude's potential to climb even higher, traders are anxiously awaiting the decision from the Federal Reserve on whether to raise interest rates during their two-day meeting beginning Tuesday. If another surprise 50-basis point cut comes from Fed Chairman Ben Bernanke, then the US dollar will undoubtedly fall. Then, because of its inverse relationship with the greenback, crude oil could potentially rally toward \$100, dragging natural gas futures along for the ride.

About the only brake gas would have is if the upcoming weekly gas storage build is above 50 Bcf, bringing inventories close to 3,500 Bcf.

In spite of the multitude of arguments and reasons for crude's ascent, such as tight supply, the weakening US dollar and geopolitical worries, some traders expressed outrage at the general market activity.

"This market is about the most absurd market I've seen in years," one gas futures trader in Florida said. "You simply don't have crude climbing more than \$3 in a day to hit new record highs unless there's a catastrophic hurricane in the Gulf that's just taken out massive production. People don't understand how inflationary these oil and gas prices are going to be. It's just another nail in the coffin for our economy."

Currently, in terms of crude oil speculation, bets are leaning toward the bulls. As of Friday, open interest on the December crude oil futures contract showed \$100 strike price call options at 57,200 contracts, which is comparably large to the next closest strike of \$90 call options with 47,635 open interest. Consequently, many traders expect the November contract expiration to be in line with last November's price of \$7.15.

Down on the floor of the Nymex, the November gas futures contract gained 3¢ Friday to close at \$7.218/MMBtu, up 17.7¢ for the week. December crude oil futures soared to a record high \$92.22 Friday before closing at \$91.86/bbl, tacking on an impressive \$3.26 for the week.

Technical indicators for November gas are mixed, but lean bullish at the moment. On the upside, key resistance is seen at \$7.218, while \$7.32 and \$7.55 are the next upside targets. If the latter is violated for more than 40 minutes, bulls may try to test \$7.69 and \$7.875. Downside potential shows key support between \$6.883 and \$6.687, followed by \$6.64. If the latter is breached, it would take at least two consecutive closes below the mark to open the door to a move to \$6.51, \$6.27 and \$6.

Friday's Commodity Futures Trading Commission's Commitment of Traders report for the week ended Oct. 23 showed noncommercials in about 63.2% short futures-only positions for the week.

**Alan Lammey, Houston**

## Alberta ...

(continued from page 1)

a minimum of 5% to a high of 50%, with the taxable price capped at C\$17.50/MMBtu (US\$18/MMBtu). The different tiers now in effect will be eliminated, but an incentive program aimed at eliminating natural gas flaring will be retained.

Rates begin rising when gas hits C\$7/MMBtu, rather than the C\$6 the panel recommended. Changes to gas royalties mean a C\$470 million revenue hike for 2010 versus the C\$740 million in the panel report.

Operators in the Foothills deep gas play had been concerned they would lose the provisions that addressed their higher operating costs, but the government's new plan will include new incentives consistent with the current program. These would be implemented "to support development of costly deep reserves," the province said in a statement.

Conventional oil producers also will pay higher royalties on a sliding formula based on price and production. The new rates will be as high as 50%, with a \$120 per barrel cap.

(continued on page 15)

## Alberta ...

(continued from page 14)

The greatest impact continues to be on oil sands projects, where base royalties will start at 1% when West Texas Intermediate is priced above \$55/bbl. The maximum rate will be 9% when oil prices are \$120/bbl or higher. The net royalty will start at 25% and increase for every dollar prices are above \$40/bbl, up to 40% when oil hits \$120 or more. Base royalties are collected until a project reaches payout. The net royalty then kicks in.

The current fiscal scheme for oil sands was established in the 1997 when oil prices were \$22/bbl, on their way down to \$10. The attractive terms were designed to encourage development of the massive bitumen deposits in northern Alberta.

Though no one is saying so publicly, the new regime is intended to slow development down to reduce the enormous pressures on public infrastructure and services in the Fort McMurray area, where most of the projects are located. The region is short of practically every commodity, from labor to sewage treatment capacity to schools to medical services. Thousands of workers, many with families, have relocated to take advantage of the high wages the oil sands projects offer.

Stelmach released the details of the new royalty framework at a press briefing broadcast over the Internet. He said the terms would give the oil and gas industry the fiscal certainty and predictability necessary to continue development of the province's oil and natural gas resources while ensuring that all Albertans receive "a fair share" of the benefits of higher prices and increased production.

"The new royalty regime is a winner for all Albertans," Stelmach said. "At the end of the day, Albertans will get their fair share."

The government calculates that under the new framework total royalties paid into provincial coffers will increase by some C\$1.4 billion in 2010, or 20% more than projected under the current revenue estimate for that year. The province's take in 2006 was about C\$10 billion.

The new policy will go into effect on Jan. 1, 2009, which

gives government and industry time to address potential unintended consequences or other issues that arise during the transition. For example, provincial Energy Minister Mel Knight said he expects a number of discussions around costs, which have escalated unceasingly as activity in the oil sands has driven up the prices for all types of services, equipment and labor. "We continue to monitor that," Knight said at the briefing.

Simultaneously, the provincial government will have to update various legislative, regulatory and other systems to reflect the changed terms.

Major Canadian producers, including EnCana, ConocoPhillips, Canadian National Resources and Talisman Energy, had threatened to reduce investments in the province by \$2 billion if the initially proposed terms were adopted (NGW Oct.22,p12). Analysts don't see the companies restoring their Alberta budgets and believe a good bit of the redirected funds will come south to the US.

"Now we'll see if this was bluster or fact," said Tudor Pickering Energy analyst Dave Purcell. "We're guessing fact." He anticipates a pause in activity over the next two quarters, followed by a downturn through the end of 2008, if not longer. The resulting decline in spending will be negative for the Canadian oil service industry as fewer wells will be drilled and fewer pipelines built.

Purcell identified a silver lining for US producers, as reduced Canadian output means lower exports to the US, boosting prices for US gas producers as supplies tighten from today's surplus. "The pace of drilling slowdown will determine the pace of supply reduction, but perhaps there is now some glimmer of hope to offset 2008's burgeoning liquefied natural gas imports," he said.

While the additional upstream spending will boost US drilling, Tudor Pickering doesn't expect operating costs to rise. The reason is that Canadian equipment will follow the money to the South. "In a US market that already has too much of just about every asset used to drill [and] produce oil and gas, additional Canuck equipment is bearish for oil service utilization and pricing," Purcell predicted.

**Barbara Shook, Houston**

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## Despite Supply Glut, Gas-Oil Disconnect Will Only Go So Far

With the November oil contract soaring to \$90 per barrel-plus record highs on the back of blatant speculative fervor, \$100/bbl crude seems all but inevitable. But it is still unclear if that could foster the mother of all disconnects from natural gas.

US domestic natural gas prices will be struggling to hold over \$7, given the storage glut and the probability of an extraordinarily warm winter ahead. But there is every reason to believe that crude could soon provide a significant prop, as it scales heights that would make even Goldman Sachs nervous.

Just how long gas can hold out against the gravity of \$90-\$100 or more oil is anyone's guess. The November contract, due to expire today, saw a midweek surge in reaction to a concurrent rally in the oil pit.

Meanwhile, cash prices slipped as much as 70¢ behind the contract last week because of light demand and growing storage. If demand — or forecasted demand — doesn't pick up soon, there is little fundamental reason for buyers to pay up for the commodity. But don't bet that will make much difference.

"A disconnect can happen, but it always scares me when people call for a fundamental shift in something," a North Texas-based trader said. "Just last year the home builders were saying they had structured the business so that they would not have problems in downturns, and now look at them. The last big fundamental shift I saw was when cats became dogs."

While it's true Asian LNG contracts are normally tied to crude, which forges an oil-gas price link in those markets, the physical rationale for them is tenuous. An official at a large Japanese utility recently asked me if they were nuts to link LNG contracts to oil when US LNG contracts are tied to the Henry Hub price. And he couldn't think of a good reason for doing so, except to say that's the way it's always been done.

The opportunity for fuel switching exists, but it's increasingly limited as dual-fuel capacity is phased out. Perhaps the best reason for Japan to pay \$9-\$11 per million Btu — even if it moved away from oil-tied contracts — is that the country is the global equivalent of Transco Zone 6 New York — a huge consumer at the end of the supply chain.

But just as cats don't become dogs, a link — whatever the reason — between oil and gas is intractable, and gas consumers could soon pay a hefty price, given that the current price ratio produces \$8-\$9 gas against \$100 oil. A \$7 gas floor could emerge if crude becomes locked into an \$85-\$100 range as the price ratio slides from 11- to 14-to-

## GAS PRICE REPORT

(\$/MMBtu—Spot)  
October 29, 2007

	Interstate Wellhead		Intrastate Wellhead		Delivered To Pipeline		Delivered To Utility	
	This Week	Bid Week for Oct	This Week	Bid Week for Oct	This Week	Bid Week for Oct	This Week	Bid Week for Oct
<b>CALIFORNIA</b>								
South	—	—	6.19	5.42	6.39	5.62	6.39	5.62
North	—	—	—	—	6.54	5.65	6.46	5.65
<b>ROCKY MOUNTAINS</b>	2.91	1.08	2.88	1.05	3.03	1.20	3.36	1.53
<b>NEW MEXICO</b>	5.75	4.94	—	—	5.92	5.11	6.07	5.26
<b>TEXAS</b>								
Gulf Coast, Offshore	6.18	6.23	6.19	6.24	6.25	6.30	—	—
Gulf Coast, Onshore	6.15	5.97	6.17	5.99	6.23	6.05	6.38	6.20
Central	6.21	N/A	6.21	N/A	6.30	N/A	6.47	N/A
West	6.05	5.35	6.05	5.35	6.12	5.42	6.20	5.50
<b>MID-CONTINENT</b>	5.80	5.32	5.78	5.30	5.90	5.42	6.15	5.53
<b>LOUISIANA</b>								
Gulf Coast, Offshore	6.23	6.26	6.23	6.26	6.30	6.33	—	—
Gulf Coast, Onshore	6.27	6.34	6.27	6.34	6.34	6.41	6.45	6.56
North	6.19	6.20	6.18	6.19	6.26	6.27	6.40	6.41
<b>MIDWEST</b>	—	—	—	—	6.46	6.07	6.52	6.25
<b>APPALACHIA</b>	6.45	6.47	—	—	6.56	6.58	6.64	6.67
<b>SOUTHEAST</b>	6.37	6.48	—	—	6.52	6.63	6.81	6.92
<b>NEW ENGLAND</b>	—	—	—	—	6.81	6.87	6.84	6.89
					Composite Wellhead	Delivered to Pipeline	12-Month Strip Nymex	
October 29, 2007					6.20	6.38	7.89	
2007 Outlook					6.74	7.04	—	

one, regardless of an absent winter or bloated inventories.

And, geopolitically, the cards are stacked against anyone betting oil will fall far, or for long, from the \$80s anytime soon. Just the ease with which a bit of saber rattling by Turkey, which hardly threatened global oil supply, pushed crude to \$90 shows how jittery — or greedy — oil traders have become. And unless similar, centuries-old disputes plaguing most oil producing regions are suddenly resolved, there will always be a new crisis emerging.

\* \* \*

The *Natural Gas Week* composite spot wellhead price this week is \$6.20/MMBtu, 60¢ less than last week and 98¢ less than the Oct. 30, 2006, average. The spot delivered-to-pipeline price this week is \$6.38/MMBtu, 62¢ less than last week and 98¢ less than last year's corresponding average.

Tom Haywood, Houston

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