www.thedialogue.org October 26-30, 2009

INTER-AMERICAN DIALOGUE'S
LATIN AMERICA ADVISOR ▸ ENERGY

FEATURED Q&A

Does Peru Have Enough Gas for Domestic and Export Markets?

Q Over the past few months, Peru has seen a renewed debate over the amount of natural gas present in its Camisea fields, and whether those reserves will be able to meet domestic demand before being exported as part of the Camisea LNG project. Why does Peru currently find itself in this situation, when initial projections predicted there would be enough gas to go around? How should the demands of the domestic and export markets be balanced? How will the current discussion affect the success of the various components of the Camisea project—upstream, pipeline and export?

A Aurelio Ochoa Alencastre, director of Energie Consult in Lima and former hydrocarbons director of PetroPeru: "Peru finds itself in this situation because the initial predictions of reserves lacked sufficient technical backing, which meant that during the past three years the reserve figures were manipulated politically, gradually increasing in order to justify exports. So it shouldn't have been a surprise when in the middle of 2009, it was revealed that new figures from private certifier GCA, hired by the Camisea Consortium itself, yielded 8.79 trillion cubic feet (TCF) and not the 14 or 17 TCF that had been consistently advertised. How should the demand between the domestic and export markets be balanced? Simply by investing aggressively in exploration, with the goal of increasing reserves to allow sufficient hydrocarbon resources for both markets. Meanwhile, in the midst of a gas shortage (which is now the case in Peru), the internal market should be the priority, as occurs in any part of the world. Even the business sector (industry and power producers) has protested the inability of the Camisea Consortium to supply them. The answer has been to announce upcoming auctions for modest volumes of gas, which implies recognition of scarcity and a rationing of gas. If we include the fact that

Continued on page 4

Guatemala and Mexico Inaugurate New Power Link

Mexican President Felipe Calderon (L) and his Guatemalan counterpart, Alvaro Colom, on Monday activated a new $55 million power link between the two countires. See story on page 2.

Photo: Guatemalan Government.

Inside This Issue

ENERGY SECTOR BRIEFS

Petrobras Sells $4 Billion in Bonds to Repay Bridge Loans

Brazilian state oil company **Petrobras** last Friday sold $4 billion in bonds, the largest debt issue in Brazil since 2000, to repay bridge loans made earlier this year, wire services reported. The company issued notes in two tranches; the first $2.5 billion issue maturing in 2020 carries a 5.88 percent yield and the second $1.5 billion issue maturing in 2040 carries a 7 percent yield, Petrobras said Friday. Including the latest offering, Petrobras has so far raised $6.75 billion this year in international capital markets.

Uruguay, Paraguay, Bolivia Discussing Loan for Pipeline

Uruguay, Paraguay and Bolivia are working to secure a loan from the World Bank for the construction of a natural gas pipeline that would connect the three countries, Uruguay's deputy minister for industries, energy and mining, Roberto Kreimerman, told Bloomberg News in an interview Tuesday. Uruguay and Paraguay are net importers of natural gas while Bolivia holds the continent's second-biggest gas reserves. The pipeline would have to go through either Argentina or Brazil.

Brazil Will Increase Diesel Biofuel Content to 5 Percent

President Luiz Inacio Lula da Silva last Friday approved a new measure to raise the biofuel content of diesel in Brazil to 5 percent from 4 percent, Reuters reported. The measure, which will go into effect in January, will likely increase the country's biodiesel output to 2.3 billion liters by next year. Lula said biofuel producers should avoid relying on edible soy for production in order not to affect food supplies.

Oil & Gas News

Repsol and Petrobras to Explore Offshore Blocks in Uruguay

Brazilian state oil company **Petrobras** and Spain's **Repsol YPF** last Friday won a joint contract to explore for oil and gas in two blocks off of Uruguay's coast, Mercopress reported. The two companies submitted a joint bid for Blocks 3 and 4, located 340 and 210 kilometers respectively off the coast of Punta del Este, but would each explore one block, state oil company Ancap said. "If the government approves the recommendation, the contracts will be signed in about a month," Ancap Chairman German Riet was quoted as saying by Reuters. Petrobras and Repsol YPF will invest $16 million in the two blocks during the first phase of development, Uruguayan daily *El Pais* reported. The two blocks were the only ones that garnered interest out of 11 blocks encompassing 8,000 square kilometers being offered as part of the government's "Ronda Uruguay 2009." After the eight-year exploration contract is signed, the companies would begin exploring in January and assume all risks and costs, Mercopress reported. If exploratory efforts lead to a commercially viable well, Ancap would negotiate with Petrobras and Repsol to participate in production. In related news, Repsol YPF is still planning an initial public offering for its Argentine subsidiary, president and CEO Antonio Brufau said Tuesday during an energy conference in Spain, Reuters reported. Brufau told reporters that while the "markets are recovering," the company must "look for the most opportune moment" for the IPO. Repsol-YPF had planned for the IPO a year ago, but postponed it due to deteriorating market conditions.

The two blocks were the only ones that garnered interest out of 11 blocks being offered.

Venezuela, Brazil to Sign Accords Needed for Joint Refinery Project

Venezuelan and Brazilian officials are expected on Friday to sign a series of accords to finalize a joint venture in the Abreu e Lima refinery in Brazil's northeastern Pernambuco state, EFE reported Wednesday. During an upcoming visit by Brazilian President Luiz Inacio Lula da Silva to the Venezuelan city of El Tigre, representatives from the countries' state oil companies will sign accords including "the statute, the shareholders' agreement, the contract for the purchase and sale [of oil] and the investment plan" for the $12 billion refinery, said Marcelo Baumbach, a spokesman for Lula, EFE reported. Brazil's state-owned oil company, **Petrobras**, began work on the refinery last year even though it hadn't reached a final agreement with Venezuelan state oil company **PDVSA**. The refinery is expected to begin operations by 2012 with a capacity of 230,000 barrels per day. The two governments originally announced plans for the refinery in 2005, but the project has encountered several delays. Both Lula and Venezuelan President Hugo Chavez, have expressed dissatisfaction with the snags in negotiations. Lula, who is expected to arrive in Caracas Thursday, will also open a new office for Brazil's consulate general as well as a branch of Brazilian state-controlled bank **Caixa Economica Federal**.

Lula, Chavez and Edison Lobao, Brazil's energy minister, at Abreu e Lima in 2008.

File Photo: Petrobras.

Power Sector News

Mexico, Guatemala Inaugurate $55 Million Electricity Line

Mexico and Guatemala on Monday inaugurated a new electricity line that will allow Guatemala to purchase electricity more cheaply from the neighboring country, the Mexican government announced, according to Reuters. The $55 million link between the two countries runs from the Mexican border town of Tapachula to Retalhuleu, Guatemala. Mexican President Felipe Calderon said the new line is a step toward efforts to connect all of Central America's power grids to those of Mexico and Colombia. A study in January 2008 said that effort would cost approximately $395 million. With the new link, Guatemala will buy 120 megawatts of electricity from Mexico's government-controlled **Federal Electricity Commission**. Power demand in Mexico this decade has been less than expected, giving the commission the capacity to generate surplus power.

Ram Power, Subsidiary Win Bid for Nicaragua Geothermal Concessions

Reno, Nev.-based **Ram Power** and subsidiary **Polaris Geothermal** have won a bid for two geothermal concessions in Nicaragua with Canada's **Magma Energy**, Ram Power said Tuesday. Future exploration of the concessions, known as Volcan Mombacho and Caldera de Apoyo, will be carried out under the terms of a joint venture agreement in which Polaris will act as managing partner and each company will contribute equally to costs of the project. "We are pleased with the award of these two concessions, which will enable us to make significant impact on changing the energy matrix in the country," Tom Ogryzlo, Ram Power's senior vice president for Latin American operations, said in a statement. The Volcan Mombacho concession is 10 kilometers south of Granada and the Caldera de Apoyo concession is located 10 kilometers south of Masaya. Each concession is 100 square kilometers. The companies plan to spend approximately $50 million to determine the potential of the concessions. They plan to begin exploration, which will take about 27 months, during next year's first quarter. Preliminary studies of the concessions indicate reservoir temperatures in excess of 220 degrees Celsius.

Earnings Results

Pemex's Loss for Third Quarter Narrows on Lower Import Costs

Mexican state oil company **Pemex** posted a net loss of 3.7 billion pesos in the year's third quarter as oil sales and crude production decreased from the same period last year. Total sales fell 21 percent to 293 billion pesos, while crude production dropped 6.8 percent to 2.6 million barrels per day, led by a decline in the Cantarell field, Pemex said Tuesday in a statement to Mexico's stock exchange. The company's third-quarter loss narrowed from the 14.4 billion pesos posted last year due to lower costs of imported products and a decrease in taxes.

Endesa Chile Sees Net Profit Up 61 Percent Through September

Chilean power producer **Endesa Chile** on Wednesday posted a net profit of 509 billion Chilean pesos (US$ 967 million) for the first nine months of 2009, up 61 percent from the year before. The figure was mainly due to higher operating margins, which increased 44 percent over the same period in 2008, the company said in an earnings release. The company saw better results across most of its countries of business, which, in addition to Chile, include Argentina, Colombia and Peru. Consolidated operating costs were reduced by 20 percent compared to same period in 2008, mainly due to the reduced cost of liquid fuels for thermal generation, especially in Chile and Peru, which benefitted from more rain that could be used for hydropower this year. In Chile, Endesa's main market, physical energy sales were up 1 percent in the first months of 2009, while in Argentina and Colombia, sales rose by 22 percent and 3 percent respectively. Sales fell in Peru by 2 percent over the period.

Biofuels News

Louis Dreyfus Announces Takeover of Brazil's Santelisa Vale

France-based commodities group **Louis Dreyfus** on Tuesday announced its takeover of Brazilian sugar cane and ethanol processor **Santelisa Vale** in a deal worth at least 800 million reais ($U.S. 468 million), Reuters reported. The new company, dubbed **LDC-SEV**, will be the world's second-largest sugar processor behind Brazil's **Cosan** with 13 sugar and ethanol mills and an annual crushing capacity of 40 million tons. Louis Dreyfus and a group of financial backers will put 800 million reais into the new venture and assume an undisclosed amount of debt. The Brazilian unit of Louis Dreyfus will control 60 percent of the new company, while Santelisa Vale shareholders will own 18 percent and other investors will control 9 percent. **Goldman Sachs** and Brazilian development bank BNDES will hold the remaining 13 percent of LDC-SEV's stock. "Brazil has currently 40 percent of the global sugar market and this should increase in the coming years. Also, local demand for ethanol will grow and the potential for [ethanol] exports is huge," Bruno Melcher, the new company's CEO, was quoted as saying by Reuters. Melcher estimated the new company was worth 8 billion reais and predicted that integrating the two companies' operations should save 100 million reais annually. He also said LDC-SEV would continue to seek new investors to finance growth and could launch an IPO in the "near future" depending on market conditions. Brazil's sugar cane industry has seen an increase in consolidation after

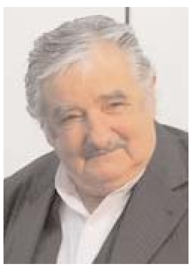
The new company will be the world's second-largest sugar processor behind Brazil's Cosan.

the global economic crisis left some highly leveraged companies unable to access credit. [Editor's note: See related Q&A in the Nov. 28, 2008 issue of the *Energy Advisor*.]

Political News

Mujica Receives Most Votes in Uruguay, But Runoff Needed

Former guerrilla leader Jose "Pepe" Mujica on Sunday won the most votes in the first round of Uruguay's presidential election, but fell just short of the 50 percent needed to avoid a runoff on Nov. 29. Mujica, the candidate of the ruling left-wing Broad Front coalition, won 47.5 percent of the vote, while former president and National Party candidate Luis Alberto Lacalle garnered 28.8 percent. Pedro Bordaberry, the Colorado Party candidate, won 16.6 percent of the vote. Mujica acknowledged Sunday night that a runoff would be needed, Bloomberg News reported. "We have more support than the other top two parties combined," Mujica told reporters in Montevideo after the polls were closed, the Associated Press reported. "How can we not be happy about the indisputable fact that we are headed to a victory." Mujica, 74, has vowed to continue policies of President Tabare Vazquez. The current president's administration has slashed unemployment from 12.3 percent in 2005 to 7.2 percent in 2008, according to data from the National Statistics Institute, Bloomberg News reported. Lacalle, 68, who was president from 1990 to 1995, has sought to paint Mujica as a radical and has said the country needs a stable leader. Mujica in the 1960s and 1970s was among the leaders of the Tupamaros guerrilla movement that fought military rule in Uruguay. [Editor's note: See related Q&A in the Sept. 30 issue of the daily *Advisor*.] About 90 percent of Uruguay's 2.6 million voters cast ballots on Sunday, according to the country's National Statistics Institute. The Broad Front also won a parliamentary majority for a second mandate, securing 16 senators in the 30-member upper chamber and 50 seats in the 99-seat lower house.



Mujica

File Photo: Agencia Brasil

Honduras Factions Agree to Restart Dialogue After US Diplomatic Push

Representatives of ousted Honduran leader Manuel Zelaya and de facto President Roberto Micheletti said Thursday the two sides had agreed to resume talks after a delegation of top U.S. diplomats arrived in Honduras this week to help mediate the political crisis stemming from June 28 coup that ousted Zelaya, Reuters reported. "Due to instructions from President Zelaya, today we are going to sit at the table with them," Zelaya negotiator Rodil Rivera told HRN radio, according to Reuters. Micheletti representative Vilma Morales confirmed that the two sides would return to the negotiating table, but do not indicate any specific proposals. The State Department sent Assistant Secretary of State for Western Hemisphere Affairs Thomas Shannon, his deputy Craig Kelly and National Security Council Senior Director for Western Hemisphere Affairs Dan Restrepo for two days of talks with Micheletti and Zelaya. State Department spokesman Ian Kelly said it is imperative that the two sides reach an agreement before Honduras' Nov. 29 presidential election. "I think it's getting quite urgent," Kelly said Tuesday,

Featured Q&A

Continued from page 1

neither is future demand in southern Peru guaranteed with tangible resources through the southern Andean pipeline (Cusco-Puno-Arequipa-Moquegua-Tacna), the scenario could become complicated for all parties, including all the components mentioned in the question—upstream, pipeline and export. How do you think residents of the region that provides the gas (Cusco) will react when they find out that their demand for gas is not being met, while exports continue unchanged, even at lower prices than the internal market?"

A Jaime Quijandría, senior partner at Laub & Quijandría in Lima and former minister of energy and mines under President Alejandro Toledo: "Since the beginning, Camisea has seen strong ideological opposition due the fact that the state plays the role of promoter and regulator but doesn't participate in financing or operation. Now that the project is ready in its first stage and is generating clear benefits, there are those who want to change the legislation that allowed its construction. There are also political opportunists who make headlines in the media by criticizing Camisea and the exportation of gas. Proven reserves, as established in the energy and mines ministry's official record, have been consistent since the beginning of the project up to the present. A certification of reserves carried out by a private consultancy hasn't been adequately explained, and has been confused with the ministry's official figures. What's certain is that Camisea holds 16 TCF of natural gas in proven and probable reserves, which is enough to ensure internal consumption for the next 30 years based on an optimistic projection of 6 TCF. The concern also arises from comparisons between the constant stock of gas reserves and the pattern of internal consumption through 2028 under the hypothesis that not one more molecule of gas will be discovered in Camisea or in the neighboring lots. Since the beginning of the project in 2004, local gas consumption has been 0.4 TCF and in 2009 it will be 0.1 TCF. The promised exports to Mexico over 18 and half years will demand 4.2 TCF. The proven reserves and those that will be developed in the coming years will cover in excess the projected local demand, even based on an annual GDP growth rate of 6 percent. The discussion is essentially political and will probably increase in intensity as regional and national elections approach. Without a doubt, some political groups will propose nationalization of gas, probably with little electoral success. It's paradoxical

Continued on page 6

according to Reuters. The delegation "will urge both sides to show flexibility and redouble their efforts to bring the crisis to an end," Kelly added. The latest round of talks between the two sides broke down last week. Zelaya sneaked back into Honduras Sept. 21 and has taken refuge in the Brazilian Embassy in Tegucigalpa since then. About 35 of the deposed president's supporters and five journalists remain with him at the embassy, which is surrounded by police and soldiers, bathed in floodlights and blasted with loud music at night, the AP reported.

Defense Minister: Colombia Will Sign Pact With U.S. This Week

By the end of this week, Colombia's government will sign a controversial military agreement to give U.S. troops greater access to its military bases, Colombia's defense minister said Tuesday, according to Reuters. Gabriel Silva, who is visiting Washington this week for talks with U.S. Defense Secretary Robert Gates, said the accord would most likely be signed on Friday. "It is another step in a cooperation effort that has lasted for more than 50 years, and specifically aimed at drug trafficking," Silva told reporters, Reuters reported. "The agreement has no geopolitical or strategic connotation other than being more effective in the fight against drug trafficking." The deal gives U.S. troops access to seven military bases in Colombia. The agreement has been criticized by several South American leaders, including Venezuelan President Hugo Chavez, who has said the pact threatens his country. The United States has already allocated $46 million to support the agreement. Most of the money will pay for renovations at the Palanquero air force base. The U.S. government has provided approximately $6 billion in aid to Colombia since 2000. The U.S. military presence in Colombia will remain no higher than the capped level of 800 military members and 600 civilian contractors. [Editor's note: See related Q&A in the July 30 issue of the daily *Advisor*.] In related news, Chavez said Tuesday that Venezuelan authorities have arrested two Colombian spies, the Associated Press reported. Venezuelan officials had previously accused Colombia's DAS security agency of conducting espionage related to the deaths of 10 men who were kidnapped from a Venezuelan soccer field near the border. In a statement, DAS said no agents were authorized to enter Venezuela.

Economic News

Ecuador Seeks Loan From Russia as Correa Heads to Moscow

Ecuador, whose financing options became more limited after the government defaulted on a portion of its sovereign debt last year, is seeking a loan from Russia, Russian Finance Minister Alexi Kudrin told reporters Wednesday, Reuters reported. The request comes as Ecuadorean President Rafael Correa arrived Wednesday in Moscow. He is scheduled to meet with Russian President Dmitry Medvedev and Prime Minister Vladimir Putin Thursday. Energy and defense issues are also among the topics expected to be discussed. Each day, Ecuador produces 500,000 barrels of crude oil and Russia produces about 20 times more. Ecuadorean officials have said they are interested in inviting

Correa (R) arriving in Russia

Photo: Ecuadorean Government.

Russian companies to drill for oil in the country. It has discussed the possibility with companies including Russia's state-controlled **Zarubezhneft**. Ecuador is also looking to bolster its defenses. Venezuelan President Hugo Chavez, a Correa ally, has been building up Venezuela's arsenal with weapons from Russia. Kudrin, who said talks between Quito and Moscow about the loan had not yet started, did not specify the size of the potential loan.

POLITICAL & ECONOMIC BRIEFS

Nephew of De Facto Honduran President Shot and Killed

The nephew of de facto Honduran President Roberto Micheletti has been shot and killed, police said Monday, according to the Associated Press. The body of Enzo Micheletti, 24, was found Sunday in a wooded area near the northern Honduran town of Choloma, according to police. Authorities have found no evidence that the killing was related to the June 28 coup that deposed President Manuel Zelaya and brought Roberto Micheletti to power, police spokesman Orlin Cerrato told the AP.

Argentina's Fernandez Proposes Controversial Political Reforms

Argentine President Cristina Fernandez on Wednesday proposed a controversial package of political reforms, Dow Jones reported. The measures would require political parties to have open primaries and prohibit private campaign financing. Also, it would require parties to maintain a minimum number of members. Fernandez said the package would "promote transparency and guarantee equality for all parties," but opponents say it is an effort to consolidate power before the 2011 presidential election.

Economists Expect Higher Inflation Rate for Brazil Next Year

Inflation will grow next year in Brazil, along with the country's economy, according to a central bank survey of about 100 economists published Monday, Bloomberg News reported. In the survey, conducted Friday, the median forecast of the economists was for a 4.5 percent increase in consumer prices in 2010. The previous survey a week earlier produced a median forecast of 4.41 percent.

Featured Q&A
Continued from page 4

that those who for decades opposed construction of Camisea are now leading the protest of 'gas for Peruvians.' "

A Carlos Herrera Descalzi, dean of the National Engineers Association of Peru in Lima and former minister of energy and mines under President Valentín Paniagua: "The legal framework under which the contracts were bid upon and signed required a significant amount of reserves before starting the export process. At the request of those who favored exportation, that framework was changed to one that required fewer reserves. The government agreed to do it, but maintained the commitment of first supplying the internal market. In the first version, in order to begin exporting, every year you'd have to verify that there would be sufficient gas to meet the needs of the internal market for another 20 years. In the new version, the only requirement was that from the beginning there would be enough gas for 20 years, and the rest could be exported. In 2005, when these changes were made, the official figure of proven reserves was 10.8 TCF. But this year, it was revealed that in 2005, the ministry of energy and mines had a report that showed only 6.97 TCF of proven certified reserves. With an internal demand of 3.97 TCF, 6.97 TCF wouldn't be enough to move ahead with exports of 4.2 TCF. Also, regarding the demand projections, there were erroneous considerations that reduced demand. The same person one year later calculated that demand would in fact be 50 percent higher; instead of the 3.97 TCF initially predicted, 6 TCF would be needed in the next 20 years. Another controversial issue is the price for exports; gas is sold to local industries at $2.70 per million BTUs, while the export price would be $0.51 per million BTUs.

"It's paradoxical that those who for decades opposed construction of Camisea are now leading the protest of 'gas for Peruvians.'"

— Jaime Quijandría

In contrast to the president's statements that national demand will be met first, it appears the government is more concerned with maintaining the export project. They say there is sufficient gas and at the same time that there will be an auction for it; auctioning means there isn't enough for everyone. The people are following these developments and asking: Why are we exporting if there's not enough for the domestic market? These deceptions erode public confidence and could have a social impact, favoring radical positions in the upcoming elections."

The Energy Advisor *welcomes responses to this Q&A. Readers can write editor Gene Kuleta at gkuleta@thedialogue.org with comments.*

Q&A Index

A review of the Featured Q&As in the Energy Advisor *in the month of October.*

Subscribers may pose questions to the Board of Advisors for the Featured Q&A by contacting Editor Gene Kuleta at gkuleta@thedialogue.org.

Latin America Energy Advisor
is published weekly by the Inter-American Dialogue, Copyright © 2009

Erik Brand
General Manager, Publishing
ebrand@thedialogue.org

Gene Kuleta
Editor
gkuleta@thedialogue.org

Matthew Schewel
Reporter, Assistant Editor
mschewel@thedialogue.org

Subscription Inquiries are welcomed at freetrial@thedialogue.org

Latin America Energy Advisor is published weekly, with the exception of some major US holidays, by the Inter-American Dialogue
1211 Connecticut Avenue, Suite 510
Washington, DC 20036
Phone: 202-822-9002 Fax: 202-822-9553