



Bureau of Economic Geology, Jackson School of Geosciences
The University of Texas at Austin

New Recent Reports

April 10, 2007

CSIS Western Hemisphere
National oil companies working paper
OIES US natural gas prices to 2015
Offshore LNG
Estimating costs for mega pipelines
Guide to Electric Power in Mexico

Work in Progress – Upcoming Reports

Comparative research on energy regulators
LNG community benefits
World energy guide
Energy, economy, environment analysis and modeling

Dear Colleagues –

We at CEE-UT are pleased to announce the following new research and working paper releases. For more information about these releases or for questions about our research and public education programs, please contact us at energyecon@beg.utexas.edu. For our full announcement and details on all new publications featured in this notice, as well as for information about CEE-UT, please refer to the CEE-UT web site, <http://www.beg.utexas.edu/energyecon/> and CEE-UT publications page <http://www.beg.utexas.edu/energyecon/publications.php>.

CEE-UT Contribution to CSIS Western Hemisphere Report...

ENERGY COOPERATION IN THE WESTERN HEMISPHERE: Benefits and Impediments

Center for Strategic and International Studies, Washington, DC
Edited by Sidney Weintraub, with Annette Hester and Veronica R. Prado
Foreword by Luis Alberto Moreno

CEE-UT researchers Michelle Michot Foss, Miranda Ferrell Wainberg and Dmitry Vokov authored **Chapter 16, “Hydrocarbon Regulation and Cross-border Trade in the Western Hemisphere”**. The authors note that, “Overall, our analysis demonstrates the importance of private investment, market determination, and appropriate regulatory oversight for Western Hemisphere hydrocarbons production and trade. A critical conclusion is that private participation can overcome institutional and governance constraints. More productive, efficient hydrocarbon regimes lead to improved regional trade. Gains from trade in turn create increased incentives for private investment. The critical challenge to be drawn from our research is how best to attain public acceptance and support for these principles...Much of our discussion in this chapter centers on the particular attributes and performance of sovereign, national oil companies, or NOCs. NOCs today exist in both domestic and international environments. Many forces within those environments can overwhelm a NOC’s own management structure, decisionmaking processes, and performance outcomes. These forces may be mutually exclusive or interact strongly, often creating conflicts for the NOC, its government, and society.”

The CSIS book can be purchased online at <http://www.csisbookstore.org/index.asp?PageAction=VIEWPROD&ProdID=163>. An appendix with detail on the countries included in the CEE chapter is available from

[CEE-UT Working Paper on National Oil Companies...](#)

As a companion to our CSIS contribution, and part of a long term research effort on national oil companies (NOCs), CEE-UT is releasing a working paper on **Commercial Frameworks for National Oil Companies**. Based on progress thus far, and using public information, CEE-UT researchers Michelle Foss and Miranda Wainberg are able to demonstrate NOC commercial performance relative to stated goals and measure non-commercial performance against explicit and implicit targets for social and economic development. The CEE-UT team also analyzed key factors embedded in the commercial frameworks for NOCs—public sector governance, corporate governance, fiscal regimes, commercialization, and hydrocarbon regulation. In sum, findings indicate the importance of how governance structures for NOCs are established; the difference in commercial performance relative to flexibility in tax and capital budget regimes for the NOCs themselves; and, crucially, the importance of upstream competition as a positive contributing factor to NOC and country hydrocarbon sector performance and fiscal contributions. The CEE-UT authors also raise questions with respect to appropriate metrics for analysis of NOC performance. CEE-UT's work on NOCs is linked to our annual program, **New Era in Oil, Gas & Power Value Creation** and our international energy sector development assistance projects. Our NOC working paper can be downloaded from

http://www.beg.utexas.edu/energyecon/documents/CEE_National_Oil_Company_Mar_07.pdf.

Information on CEE-UT's New Era program and the upcoming **May 7-19, 2007** session can be obtained at <http://www.beg.utexas.edu/energyecon/new-era/>.

[United States Natural Gas Prices to 2015...](#)

Can a credible case be made for lower natural gas prices in the U.S.? **Oxford Institute for Energy Studies (OIES)** posed this challenge. The result is an extensive review by Michelle Foss of U.S. natural gas market conditions and prevailing supply and demand factors that impact U.S. pricing. A price band of \$3-6/MMBtu emerged as consequence of structural changes in natural gas consumption. In particular, with industrial and electric power demand approaching parity, electric power generation has become, and will prevail, as the marginal application with respect to natural gas price discovery. Fuel switching capacity will continue to shrink as a proportion of total electric power generation and dispatch. Other generation fuels and technologies will compete, and efficiency gains—especially among larger customers—will impact electric power demand. The U.S. has a large natural gas resource base which remains prospective within this price band; higher cost resources from unconventional plays may require more robust wellhead prices until exploitation is proved up. However, higher cost domestic production or higher prices to attract LNG also both constrain demand. Conditions that could exert strong upward or downward pressure on prices are summarized. The OIES press release can be downloaded from <http://www.beg.utexas.edu/energyecon/>; the full paper can be downloaded from the following link. <http://www.oxfordenergy.org/pdfs/NG18.pdf>

[Offshore LNG and mega-pipeline projects...](#)

Two research reports by CEE authors were featured in PennWell Petroleum Group publications. The latest addition to CEE-UT's **Online Guide to LNG in North America** is a briefing paper on **Offshore LNG Receiving Terminals**. This briefing paper addresses the technologies, development hurdles, and commercial and technical considerations associated with offshore LNG receiving and regasification designs. Examples are provided of projects proposed or under development in North America (including discussion on the permitting regime in the United States) and elsewhere. Authored by Dr. Mariano Gurfinkel, Dmitry Volkov, Michelle Foss, and Mr. Fisoye Delano, Managing Director, Nigeria Petroleum Development Company (NNPC Group), the full briefing paper can be accessed from CEE-UT's LNG web site,

<http://www.beg.utexas.edu/energyecon/lng/>. An excerpt of the report, **"Novel offshore LNG terminals address some, not all issues"** authored by Mariano Gurfinkel, Dmitry Volkov, Ruzanna Makaryan and Michelle Foss was published by **LNG Observer**, January 2007. A report on estimation techniques for large scale pipeline projects, with application to Alaska natural gas transportation, was featured in an **Oil & Gas Journal** article, **"Historical data provide low-**

cost estimating tool” by Mariano Gurfinkel, Dr. Gürcan Gülen, Dmitry Volkov and Michelle Foss, November 2006. For information on PennWell publications see <http://www.pennwellpetroleumgroup.com/index.cfm>.

CEE-UT Energy Guides: Guide to Electric Power in Mexico...

The most recent entry in CEE-UT’s collection of energy guides, **Guide to Electric Power in Mexico** clearly lays out the organization, structure, and numerous issues embedded in Mexico’s electric power system. Co-authored with Dr. Francisco García, emeritus faculty member in economics at Mexico’s prestigious ITESM-Monterrey campus, the Mexico power guide is an essential tool for understanding the myriad issues and challenges in Mexico’s power sector. Both English and Spanish versions are available from our website http://www.beg.utexas.edu/energyecon/documents/Guide_To_Electric_Power_in_Mexico.pdf and http://www.beg.utexas.edu/energyecon/documents/Guide_To_Electric_Power_in_Mexico_esp.pdf.

And forthcoming publications from major new research projects...

Watch the CEE-UT web site, www.beg.utexas.edu/energyecon for upcoming releases associated with major research projects underway.

Comparative research on energy regulators...In tandem with CEE-UT’s ongoing research on national oil companies, a research effort focused on energy regulators is underway. A first working paper led by Gürcan Gülen is in development, and reflects new work at CEE-UT on institutional economics. *Anticipated release date: Summer-Fall 2007.*

LNG community benefits...The next installment in CEE-UT’s online guide to LNG will present results from research to identify and quantify benefits and costs associated with LNG receiving and regasification terminals. While focused on U.S. projects, the research report will have broad applicability to LNG receiving and regasification projects outside of the U.S. as well as to other major energy infrastructure facilities. The CEE-UT research addresses the need for clarity on local benefits for local host communities and investors; provides mechanisms for identifying host community benefits; incorporates practical considerations stemming from LNG safety; and will improve the knowledge base on long term benefits associated with international LNG trade. *Anticipated release date: Fall 2007.*

World energy guide...In response to the need for better public information on energy technologies, economics, investments, and trade offs associated with energy technologies and fuels CEE-UT is developing an online guide to energy. The guide will include tools for understanding economic and environmental metrics, interactive modules for energy investments and other components. This major effort will target both basic and advanced audiences. Interested organizations are invited to contact CEE-UT regarding sponsorship of the online guide. *Anticipated launch date: Fall 2007-Spring 2008.*

Energy, economy, environment analysis and modeling...CEE-UT researchers are expanding our analysis resources and modeling activities to deal with complex issues and decisions. We anticipate research outputs on energy/economy and energy/environment for special studies, ongoing assessments in the U.S., and new challenges stemming from carbon management and emerging new value chains. Periodic reports and peer reviewed publications

For information on activities at the Bureau of Economic Geology, see <http://www.beg.utexas.edu/> and for updates on the Jackson School of Geosciences, see <http://www.jsg.utexas.edu/index.html>.

Best regards from the CEE-UT research team -

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Bureau of Economic Geology
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The University of Texas at Austin