FORGING NORTH AMERICAN ENERGY SECURITY

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Abstracts

INCREASING NORTH AMERICAN ENERGY SECURITY

April 1st, 2004
Room Continental - 9:00 to 10:30 a.m.

Energy security means more than uninterrupted oil supply at reasonable price levels. It also refers to the integrity of critical infrastructures, energy efficiency, and alternative energy resources, all of this being crucial to economic development. Can North American partners agree on a shared vision of energy security?

CHAIR

Robert A. PASTOR

Vice-president of International Affairs, American University

Robert Pastor established and directs the Center for North American Studies that teaches students about Canada, Mexico, and the United States and conducts research on ways to facilitate integration and improve relations among the three countries and peoples. Dr. Pastor has a Ph.D. from Harvard University and is the author or editor of 14 books, including Toward a North American Community: Lessons from the Old World for the New (Institute for International Economics, 2001) and, with Jorge G. Castaneda, Limits to Friendship: The United States and Mexico (Knopf, 1988). Dr. Pastor was the Director of Latin American Affairs on the National Security Council from 1977-81.

SPEAKERS

Lourdes MELGAR

Independent energy consultant

Lourdes Melgar was Deputy Assistant Secretary for International Affairs at Secretaría de Energía. During her tenure, she participated in the development and implementation of Mexico´s efforts to stabilize the international oil market. She also headed the Mexican delegation in the North American Energy Working Group. As a member of the Mexican Foreign Service, Dr. Melgar served as Counselor in the Mexican Permanent Mission to the OAS; she was also Director of Economic Relations with Central America and the Caribbean at SRE. Dr. Melgar holds a Ph.D. in Political Science from the Massachusetts Institute of Technology. She is currently on leave from the Foreign Service and works as consultant.

ABSTRACT
Energy Security: a North American Approach
by Lourdes Melgar, Ph.D.

Energy security is a strategic factor in ensuring the economic development and stability of North America. Since the oil shock of 1973, diversifying and guaranteeing its energy supply has been a priority for the United States. The establishment of the International Energy Agency, with its Coordinated Emergency Response Program, represented, at the time, a creative approach to lessen the dependency on Middle-East oil. Yet, despite the efforts to increase energy efficiency and develop alternative energy sources, energy security has continued to be equated with uninterrupted oil supply at reasonable price levels.

The oil crisis of 1998-2000, brought into question the concept of energy security. For the first time, two North-American partners found themselves at the center of the debate. The sense of urgency heightened as an electricity crisis hit California and tensions between the U.S. and the Middle East increased. Early in their Administrations, Presidents Bush and Fox found similar answers: NAFTA partners should be North-American energy partners. This shared idea, however, came rapidly into question: it was viewed as if the U.S. wanted to ensure its supply of oil, gas and electricity at the expense of Canada's and Mexico's own needs.

For the United States, energy security is a priority of its trade and foreign policy; for Canada, it is a matter that directly concerns its Provinces; for Mexico, it is a sovereignty issue. After September 11th, for the three countries the concept has become broader, encompassing not only supply but also the integrity of critical infrastructure.

Is it possible to consider energy security from a North American perspective? This paper will argue that a trilateral concept of energy security is feasible and can lead to policies that promote the actual energy integration of the region. Yet, the perspectives of such integration ought to be assessed taking into account the existing resources of the region and their potential, as well as the political, economic and legal possibilities of each country.

Considering the energy map of North America --including supply and demand, reserves for the next 25 years, existing interconnections, physical and legal limitations--, the paper will address how to further energy integration and guarantee energy security in North America by taking advantage of existing opportunities. Moreover, it will argue that North American energy markets can be render more dynamic through mutual understanding and minor physical and regulatory changes. Finally, an attempt will be made to imagine the future, and arrive at a definition of North American energy security that translate into policies that lead to a win-win situation for the three countries, as has been the NAFTA agreement.

Mick K. O'Keefe

Advisor, Corporate Planning, Exxon Mobil

Mick O'Keefe is an Advisor to the Corporate Planning Department of ExxonMobil Corporation. His responsibilities include forecasting energy demand, evaluating potential impact of existing and emerging technologies on energy trends, and analyzing economic and policy issues that influence these trends. Before Dallas, Mr. O'Keefe handled Asia energy forecasting for Corporate Planning of Exxon Company, International. From 1977 until 1990, he was involved in Exxon's management of large projects. Prior to joining Exxon, Mr. O'Keefe spent five years in engineering of nuclear generation facilities. Mr. O'Keefe holds a Bachelor's in engineering, and a Master of Science in Business Administration.

ABSTRACT

ExxonMobil's Long Term Economic and Energy Outlook

ExxonMobil's latest Economic and Energy Outlook through 2020 projects global GDP to increase about 3% annually and world energy demand to expand about 2% percent per year. In 2020, world energy requirements are expected to be about 40 percent greater than 2000, even with significant efficiency improvements assumed in this outlook. Fossil fuels are expected to play a central role in this energy growth through 2020 and probably well beyond.

Worldwide natural gas is expected to grow at about 2.5% annually. North American gas markets are becoming tighter, restraining demand growth and significantly increasing the future role of LNG. Rapid growth is expected from wind and solar energy. However, these renewable energy sources are unlikely to exceed a one-percent share of 2020 world energy demand.

World oil demand is projected to be between 100 and 110 million barrels per day (MBD) in 2020. Transportation is expected to account for more than three of every five barrels of worldwide oil demand growth to 2020. This growth together with the need to replace production from existing fields highlights the need for significant new sources of oil production.

Edward Kelly

Head of North American Gas & Power Consulting, Wood Mackenzie

In the course of his career, Ed Kelly has advised international energy companies on business strategy for the North American natural gas market, and is recognized as an authority on the natural gas midstream. Prior to joining Wood Mackenzie, he was Director of Research, North American Natural Gas with Cambridge Energy Research Associates (CERA), where he was responsible for developing the key market outlook and leading that team's strategy engagements and key research studies. Ed Kelly holds a BA from the University of Chicago and an MBA from the University of Texas at Austin, he is based in Houston.

ABSTRACT

Mexico in the North American Context - a Critical Contributor to the Energy Balance

Mexico as well as the US and Canada have all relied upon natural gas to supply a growing share of power generation, as well as to provide an environmentally friendly source of energy in other consuming sectors. Stagnation and even decline in US and Canadian gas production, however, as well as Mexico's own energy needs have made it more and more critical that Mexico reach it's potential as a net supplier, rather than consumer, in the North American gas market. Mexico is preparing to play this critical role in balancing North American energy markets – especially in natural gas and power – if effective investment can be brought to bear in Mexico's upstream.

This Wood Mackenzie paper addresses the supply sources, demand shifts, and balance in Mexico's natural gas market. It demonstrates that, rather than draining US supplies and Mexico's balance of payments, by 2010 efficient investments in natural gas production could reverse flows at the US-Mexican border, contributing to Mexico's economy as well as to the continent's energy needs. This paper would include:

- Mexican Gas Supply by basin through 2010, and major assumptions behind this outlook.
- Mexican demand by sector through 2010, including the power generation sector.
- LNG imports into Mexico, into both the main grid and Baja.
- Shifts in flows across the US-Mexican border, through the main grid and Baja, annually.
- The US gas market dynamic, and the need for new supplies and imports into the US.
- Wood Mackenzie's outlook for Canadian production.
- Natural gas supply sources and import balances through 2010 for the US.
- Shifts in the Henry/Reynosa pricing relationship through 2010.

While the overall natural gas price will remain high, efficient investment in the Mexican upstream holds the potential to be a key contributor to North American energy supplies.

Bob Taylor

Assistant Deputy Minister, Oil Development Division, Department of Energy, Alberta

During 30 years working in industry, Bob touched most aspects of the exploration and production business from offshore drilling and production operations through to managing the full spectrum of oil and gas activities in Alberta. His last industry role was leading a major oil growth initiative in Alberta's oil sands. Bob Taylor joined the Department of Energy as Assistant Deputy Minister in May 2000, leading Business Units responsible for Oil Sands, Conventional Oil, Resource Land Access and Energy & Aboriginal Relationships. He is a professional engineer and sits on the board of directors of the Alberta Energy Research Institute and the Canadian Energy Research Institute.

ABSTRACT

Alberta's Role as Reliable Energy Source and Hub

The province of Alberta has been the main source of conventional oil and gas from western Canada for the last 50 years and continues to be a significant supplier of natural gas to both Canada and the U.S. In recent years, production of bitumen-derived crude from Alberta's oil sands has been increasingly important, with production recently surpassing that of conventional crude. As natural gas from Arctic sources is pipelined south, the existing Alberta pipeline hub will be a natural distribution node for North America. Continued growth of production from the oil sands will create a similar oil hub in Alberta providing products ranging from diluted bitumen through petrochemical feedstock. To ensure the integrity of these supplies to North America, Alberta has been pro-active in developing plans regarding the physical security of the related assets.