Melissa Cristina Pinto Pires Mathias WORLD NATURAL GAS INDUSTRY: AN INDUSTRY IN TRANSFORMATION

Rua General Roca, 194/506 – Tijuca – Rio de Janeiro – Brazil – 20.521-070 Phone: +55 21 3229-4570, Fax : +55 21 3229-4565, Mobile : +55 21 8128-6524 e-mail: melissacristinamathias@yahoo.com.br

Overview

During the 80's and 90's, a number of countries have restructured and liberalized their utilities sector. Brazil started its liberalization at the mid 90's, and the reforms are still in process. In 1995, the Government began liberalizing oil and gas industries, through a constitutional amendment witch authorized the Government to deal with public or private companies to promote activities in oil and gas research and exploration; oil refining; and transport, imports and exports of oil, oil products and natural gas. In 1997 the Brazilian Government enacted Law n° 9.478/97, also known as "Oil Law", witch is the Brazilian oil and natural gas industry main framework. This Law established competitive principles, like open access to pipelines. It also created an independent regulator, the National Petroleum Agency (ANP), whose functions included regulation, supervision and control of the oil and gas industry, as well as the biofuel market. Its activities include improvement of market competition and protecting consumer interests as to price, supply and quality of fuels.

Methods

The paper discusses the Brazilian natural gas industry reform witch is still in progress and presents why the results of the reform model proposed on last decade were not reached. This incomplete reform resulted in new proposals by industry agents, and the most important one was the creation of a specific Law to natural gas industry: the "Gas Law". The Brazilian Congress is analyzing two different "Gas Law" Projects. The first one was proposed, in 2005, by the Senate and the other proposed, in 2006, by the Republic Presidency. We use comparative analyze to present the two "Gas Law" Projects, focusing in the most relevant issues like open access regime, the creation of a pipeline system operator, open season obligation to pipeline expansions, storage and tariffs regime.

Results

Brazil is intended to change its natural gas law in a moment when the world natural gas industry is in transformation. Both law projects aim to increase competition in Brazilian natural gas industry, and are concentrated in ways to attract investments, especially in pipeline construction. Some important issues to promote competition, like third-part access, are treated in the "Gas Law" projects that have been analyzed in Brazilian Congress. Others, like security of supply and the use of liquefied natural gas are not included.

Conclusions

The Brazilian natural gas industry is still in an immature stage of its development, and has been experienced an important growing during last decade. Competition has been introduced, although in a small scale, and there is a huge growing potential, especially in industrial segment. In that scenario, it is fundamental to decrease uncertainties through the establishment of industry stable rules.

Law nº 9478/97 does not comprise natural gas as a competitive primary energy source, but as an oil product. In that context, it is very important that the Government has recognized that the Brazilian Natural Gas Industry needs a specific Law.

References

Bajay, S. V. (2006). Integrating Competition and Planning: A Mixed Institutional Model of the Brazilian Electric Power Sector. Energy 31, pp. 865-876.

Baldwin, R. and Cave, M. (1999) Understanding Regulation: Theory, Strategy and Practice. Oxford University Press.

Baumol, W. J.; Panzer, J., Willig, R. (1982). Contestable Markets. New York: Harcourt Brace Jovanovich.

Behrens, A. (1990). Regional energy trade: Its role in South America. Energy Policy, March, pp. 175-185.

Berg, S. V. (1998). Lessons in Electricity Market Reform: Regulatory Processes and Performance. The Electricity Journal. Pp. 13-20.

Besant-Jones, J., Tenenbaum, B. (2001). The California power crisis: lessons for developing countries. Energy & Mining Sector Board Discussion Paper Series, Paper No.1.

Bozo, M. G. (2003). El Negocio del Gas Natural y los Impactos Esperados en Bolivia. Análisis Económico. Unidades de Análisis de Políticas Sociales y Económicas. UDAPE.

Finon, D. (1996). Les Nouvelles Fonctions du Régulateur et du Gouvernement dans les Industries Électriques Liberalisées : Les Leçons des Expériences Européennes. Reveu de l'Energie N. 477, avrilmai.

Finon, D., Midttun, A. (Eds.), (2004). Reshaping of European Electricity and Gas Industry: Regulation, Markets and Business Strategies, Research Report 2/2004. Norwegian School of Management, Sandvika.

IAEA (2006). Brazil: a Country Profile on Sustainable Energy Development. International Atomic Energy Agency, Vienna.

Joskow, P. (1998). Electricity Sectors in Transition. The Energy Journal 19. pp. 25-52.

Juris, A. (1998) Competition in the Natural Gas Industry: The emergence of spot, financial, and pipeline capacity markets. Note No. 137. World Bank. Washington. DC.

Lee, W-W. (2004). US Lessons for Energy Industry Restructuring: Based on Natural Gas and California Electricity Incidences. Energy Policy 32, pp. 237-259.

Mayorga-Alba, (1995) E. Deregulation and Reform of Petroleum Markets: From Monopolies to New Regulated Markets. Energy Note No. 6. World Bank. Washington. DC, September.

MME (2006). Projeto de Lei nº6.673/06, que dispõe sobre a movimentação, estocagem e comercialização de gás natural, altera e acresce dispositivos à Lei no 9.478, de 6 de agosto de 1997, e dá outras providências.

OCDE (2000). Promoting Competition in the Natural Gas Industry. Paris.

Oliveira, R. G. and Marreco, J. M. (2006). Natural gas power generation in Brazil: New window of opportunity? Energy Policy 34, pp. 2361–2372.

Oliveira, R., Mathias, M., Szklo, A. (2004). 'Brazil's Power Sector Reform—Bedlam' paper presented to Third European Congress — Economics and Management of Energy in Industry, 06–09 April 2004, Hotel Estoril, Portugal.

Percebois, J. (1997). La Dérégulation de l'Industrie Électrique en Europe et aux États-Unis : Un Processus de Décomposition-Recomposition. Revue de l'Energie, N. 490, septembre.

Senado Federal (2005). Projeto de Lei 226/05, que dispõe sobre a importação, exportação, processamento, transporte, armazenagem, liquefação, regaseificação, distribuição e comercialização de gás natural.

Szklo, A. S. Soares, J. B., Tolmasquim, M. T. (2004). Economic Potential of Natural Gas-Fired Cogeneration — Analysis of Brazil's Chemical Industry. Energy Policy 32, pp. 1415–1428.

Velasco, P. (2001). The Mineral Industry of Bolivia. In: U.S. Geological Survey Minerals Yearbook—2001

Vickers, J. (1995) Concepts of Competition. Oxford Economic Papers.