New Shape Of Things: From Regional Utilities To National Energy Companies

By Perry Sioshansi*

The introduction of competition in the wholesale, and increasingly retail, electricity markets brings major challenges to the traditional way of doing business. While the status quo will remain in place for the poles and wires segment of the industry, the same cannot be said about generation or energy retailing. This brings a great deal of anxiety to the hearts of many within the industry who are struggling to reinvent themselves into whatever will be profitable and sustainable in the future. The problem is, nobody knows for certain what will be profitable, and what the critical assets, skills, and core competencies for success will be in the new environment.

However, a few major players are moving along, with an abundance of confidence (and usually abundant cash) that they know how to succeed in the restructured energy markets of the new millennium. It is too early to say if their strategies will lead to profitability in the post-restructured markets, but at least they are not sitting idle. Moreover, the options available to these well-endowed players are not generally available to the smaller, less imaginative players.

suppliers.

One of the companies redefining what the future energy business in the United States may be like is PG&E Energy Corp. It has all the necessary ingredients for being a major player. With over \$30 billion of assets, it has the clout and resources to emerge as a dominant player. Its chairman, president and CEO, Robert Glynn Jr., is proactive and driven. It already is active in one way or another in 28 states, in anything it can get its hands on: generation in the Northeast, natural gas pipelines in Texas, and natural gas holdings in the Pacific Northwest, to name a few.

Mr. Glynn has chartered a course for where he wants to lead PG&E Corp. In a special issue of the San Francisco Chronicle (March 22, 1998), he made a simple observation – perhaps the most obvious first step for any traditional utility, namely the acceptance of the fact that the status quo is no longer an option. Mr. Glynn said, "an energy company either has to get into the new business world or will likely disappear as the industry consolidates over time." Many analysts expect a major consolidation and industry shakeout over the next several years, leaving perhaps as few as 20 dominant mega players with national presence across the country.

How will PG&E Corp. make certain that it is not one of (continued on page 31)

PG&E Corp. Parent Company Based in San Francisco, CA

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PG&E	PG&E Energy Services	PG&E Energy Trading	PG&E Gas Transmission	US Generating Company
Regulated Subsidiary	Unregulated Subsidiary	Unregulated Subsidiary	Unregulated Subsidiary	Unregulated Subsidiary
Based in San Francisco, CA	Based in San Francisco, CA	Based in Houston, TX	Based in Houston, TX	Based in Bethesda, MD
The old PG&E minus most of fossil-fueled generating plants. Subject to CPUC regulations.	New energy service company competing with retailers & ESCOs in CA and elsewhere.	New wholesale energy company trading in electricity and natural gas.	New gas transmission company with 10,000 miles of natural gas pipeline, 7 Bcf of natural gas storage & 9 gas processing plants.	Has been in operation for several years, major growth in the last 2 years. Maintain & operate fossil plants nationwide.
Primary Business	Primary Business	Primary Business	Primary Business	Primary Business
Maintain & service poles, wires & pipes, transmission lines and provide re- tailing & service for customers who do not switch	Provide energy services in com- petition with retailers and ESCOs nationwide.	Trading in whole- sale electric & gas, providing risk man- agement and other services to other divisions of PG&E Corp. and others.	Transmission, supply, distribution, and storage of natural gas nationwide.	Own & operate generation facilities in major regional markets, including Northeast and possibly elsewhere.

An examination of the chart points out a few other significant things – not just about PG&E Energy Corp., but where the industry as a whole may be heading. To be successful as a major integrated energy service company with national presence in the future, one needs to invest beyond the traditional utility business. If all goes according to the script, the five divisions can buy, sell, and trade with each other in ways that may be hard for other, smaller players to match. New synergies may evolve between the subsidiaries that would save time and money. Not every utility, of course, has the will and the resources to do what PG&E is trying to do. Mr. Glynn is philosophical about the changes in the industry. He told the Chronicle, "to put the coming change in perspective, consider that the natural gas and electricity industry is roughly the same size as the nation's long-distance telephone market, plus the domestic airline market, plus the computer software market."

Jane Carter Prize Awarded

The essays submitted for the 1996-97 award of the *Jane Carter Essay Prize* were judged anonymously by Gordon MacKerron, Chairman of the British Institute of Energy Economics; David Jones, past Chairman of the BIEE and Dick Tinson, Director of the National Energy Foundation, acting for the Association for the Conservation of Energy. The judges commented as follows:

"A number of interesting essays were submitted, one stood out – *Implementation of the Home Energy Conservation Act. A Review of Progress and Proposals for Facilitation.* This is a well structured report on an interesting piece of original research into the reports and bids made under the Act which came into force in England on 1 April 1996. Although some aspects of the essay might have been more fully developed, it is, in general, knowledgeable and professional and makes a range of useful policy proposals It is in a tradition of which Jane Carter would have approved and we recommend that it should be awarded the Jane Carter Prize for 1996-97."

The prize-winning essay was written by Emma Jones, being an abridged form of her Msc thesis submitted as part of her Msc in Environmental Technology, undertaken at Imperial College.

The BIEE, IAEE and ACE have decided that the *Jane Carter Essay Prize* should, in the future, be awarded every two years. The next prize competition will be in 1999. The invitation to submit essays will be issued later in 1998.

Environmental/Water/Energy Economist Central Asian Republics

The Harvard Institute for International Development seeks an economist with expertise in water and/or energy resources to serve as a resident policy advisor in the Central Asian Republics. The position begins in early summer, 1998 and is located in Almaty, Kazakhstan. It is funded under a contract with the U.S. Agency for International Development.

Required education, experience, and skills: Advanced degree in economics, public policy, or related field. Ph.D. with focus on environmental, water, or energy economics strongly preferred. Minimum three years' experience as an advisor on economic development or environmental, water, or energy policy issues in transition or developing countries. Experience in the former Soviet Union or Eastern Europe and proficiency in Russian highly desirable.

Duties and responsibilities: Assists national, regional, and local governments in the Central Asian Republics in formulating and implementing policies, laws, and regulations that integrate economic development and environmental protection, particularly in the areas of water and energy resource management. Manages activities under workplan, conducts policy analysis and supporting research, coordinates local working groups, organizes and leads workshops, and recruits consultants. Ensures recommendations are appropriate in the national and international context. Coordinates activities with other organizations and USAID projects. Frequent travel within Central Asia required.

Contact: Human Resources Office, Harvard Institute for International Development, 14 Story Street, Cambridge, MA 02138 USA, fax (617) 495-0527.

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It might not be possible to ignore it indefinitely in Europe and North America.

- Government policies and measures should work with the market a recurrent theme but what does it mean? As was pointed out, the removal of market distortions alone is not sufficient to promote efficiency in the use of energy and the introduction of innovative technologies like renewable energies. Government action is needed to counterbalance those aspects of market structure which work against environmentally friendly developments.
- It will be necessary to find ways of involving the developing countries in global measures to mitigate climate change. This will require a sensitive approach which recognizes that the priorities of these countries are economic development and the alleviation of poverty and which builds on the synergies between solutions to local, national and global environmental problems. It was encouraging that the need for this sensitive approach was recognized by speeches from EU and other governments and from business. It is to be hoped that political pressures in the United States will not prevent the U.S. government showing similar sensitivity.
- The flexibility mechanisms of the Protocol were an essential part of the political compromise reached at Kyoto. They offer prospects of mitigating climate change in the most cost effective way and of a transfer of resources and technologies to the developing countries but they also constitute a potential loophole which could undermine the Protocol. The detailed rules to be negotiated must close the loopholes while retaining the advantages of flexibility and political support for the Protocol.
- The policies being developed at both the global and national level post Kyoto cannot be considered in isolation from the wider context. Emissions trading raises a whole set of issues about the distribution and transfer of wealth between the developed and the developing countries. National policies for the promotion of energy efficiency and renewable energies have to be coordinated with social, agricultural, transport and land use policies. It was encouraging to hear how the IPCC plans to broaden its analysis into the social and economic fields.
- Implementation of Kyoto and further development of policy requires more and better data and analysis and consistency of data between countries.
- Business has an important part to play. The attitude of the
 business speakers at the conference was positive. How far
 is this typical of business as a whole? Examples were given
 of changing attitudes particularly in large business but it
 was disturbing that, as several speakers pointed out, at the
 Davos Economic Forum a meeting on climate change
 attracted a derisory audience.

Resolution of these and other issues will require much effort combined with political realism and sensitivity on the part of governments, business, NGOs and the wider environmental community. Above all, it will require clear and fresh thinking. In the words of Einstein quoted by one speaker, "the problems we have today cannot be solved by thinking the way we thought when we created them."

David Jones