

The Energy Sector: Towards New Scenarios/ Dimensions

By *Edgardo Curcio**

The energy sector is passing through significant changes more and more linked to environmental problems. Market liberalisation is one of the main features of the energy policies of industrialised countries as well as of developing countries that are adapting their markets to global rules.

The development of new technologies and lower production costs from the North Sea are determining a new scenario for mining investments.

Another change is represented by the new structure of the former USSR that offered Caspian Republics the opportunity to set forth independent policies regarding their considerable oil and natural gas resources.

Great changes are in progress as far as the OPEC countries' attitude towards the adoption of policies not purely "political" are concerned. Despite the apparent progress and exceptional economic growth connected to unilateral decisions on prices, producing countries have realised the narrowness of such policy. Oil companies of these countries developed new downstream strategies (refining and distribution) through an integration process with the economies of consuming countries.

The increased number of operators from producing countries marketing to consuming countries, including the Europeans, offer the prospect of a more reliable supply relationship to countries that are the most dependent on oil imports.

Even the Gulf crisis showed that the move towards downstream integration of countries such as Saudi Arabia, Kuwait, Venezuela, Mexico and Libya is well-grounded and their policies are no longer based on the simple control of mineral resources, but on a more complex strategy to protect the role played by oil.

Europe's trend towards liberalisation is increasing more and more: in the framework of large offerings and favourable conditions for buyers, the energy business is opening again to private initiatives which have bought shares of public, privatised companies or undertaken new projects.

The United Kingdom played a key role in public company privatisation as well as in market liberalisation.

In other countries, privatisation was more gradual: first of all, through the opening of private investments of public-controlled companies and/or the change of public bodies into private ones.

The liberalisation process of European energy markets was undertaken not only by national governments; the European Commission played and keeps playing a fundamental role even after the coming into force of the European Union's Treaty, signed in Maastricht on February 2nd, 1992.

Many initiatives are being promoted to harmonise the various realities, e.g., the fiscal system, standards, price transparency, the adoption of directives on specific markets characterised by poor competition such as electricity and natural gas.

The harmonisation of these two sectors will take place in the next few years with the adoption of the electric and gas

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directives (respectively, on December 1996 and December 1997), based on progressive systems involving the reduction of thresholds for eligible customers and/or increasing the percentages of market opening.

In particular the gas directive provides for a market opening based on a progressive system involving the reduction of the thresholds for eligible customers and increasing of the percentages of market opening (20% as the directive comes into force, 28% after 5 years, 33% after to 10 years) (art. 18).

On the critical issue of take or pay contracts, the directive provides for a system of derogations by governments or national independent bodies in close consultation with the Commission (art. 25).

Finally, on the matter of temporary derogations for emerging regions an agreement was reached (art. 26).

The differences between national markets did not facilitate the search for a compromise.

On one side, North Sea discoveries and the coming on stream of a series of fields not far from the coasts of Great Britain and other North European countries, in addition to solving energy dependency problems there, created, in that area, the best conditions for the development of competition in sectors that spread from upstream operations to thermo-electric production, to industry, and civil uses markets.

Most of the areas of Southern Europe have kept long term contracts for gas supply with producing countries that are not members of the European Union. This represents a structural peculiarity that is likely to affect gas market growth in the framework of the forthcoming adoption of the above directive.

The transition of the Italian market represents a very interesting case.

This has led to the revision of the traditional institutional set-up with the dismantling of many of the energy sector's policy and control structures to the privatisation of public owned companies, i.e., the transformation into shareholding companies open to a wide range of investors of the bodies which had operated with various responsibilities until the 1980s.

Up to 1998, Italy focused on a planning policy, but once the Energy Plan was approved for 1998, it was absolutely clear that the creation of a new structure of the energy market could not be postponed.

Even the development of the hydrocarbons sector has been significant due to the removal of exclusive rights of ENI in Valle Padana for hydrocarbons production and transportation, the abolition of ENI's right of first refusal with respect to the purchase of natural gas produced offshore Italy, and the implementation of a third party access system for the domestic transportation of natural gas. According to Law no. 474 on July 30, 1994 (the "Privatisation Law") November 1995 brought the placement on the market of a first *tranche* of shares (15% of stock capital) of the oil and gas company ENI, whose structure had been changed into a shareholding company earlier. In November 1996 and June 1997 two other *tranches* were sold for a total of 49% of the company shares.

As for the structure of the electrical sector and the terms of ENEL's shares placement on the market - both being respectively connected - many issues seem to be still unsolved.

Although no definitive approach has been adopted, the

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Energy Management	Nuclear Power Issues
Energy Policy Issues	Renewable Energy Issues
Environmental Issues & Concerns	Forecasting Techniques

- **Newsletter:** The *IAEE Newsletter*, published four times a year, announces coming events, such as conferences and workshops; gives detail of IAEE international affiliate activities; and provides special reports and information on an international basis. The newsletter also contains articles on a wide range of energy economics issues, as well as notes and special notices of interest to members.
- **Directory:** The *Annual Membership Directory* lists members around the world, their affiliation, areas of specialization, address and telephone/fax numbers. A most valuable networking resource.
- **Conferences:** IAEE Conferences attract delegates who represent some of the most influential government, corporate and academic energy decision-making institutions. Conference programs address critical issues of vital concern and importance to governments and industry and provide a forum where policy issues can be presented, considered and discussed at both formal sessions and informal social functions. Major conferences held each year include the North American Conference and the International Conference. IAEE members attend a reduced rates.
- **Proceedings:** IAEE Conferences generate valuable proceedings which are available to members at reduced rates.

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The Energy Sector: (continued from page 28)

attitude seems to be the separation between the various phases – production, long-distance transportation and distribution.

Particularly, the production phase has seen great initiatives on the industrial level through new Italian and foreign operators that will probably bring about considerable changes both industrially speaking and through the setting up of a more competitive market for big industrial users, eligible customers as set forth by the EU Electricity Directive adopted on December 1996.

New scenarios are also envisaged for the natural gas sector where the application of the European directive will undoubtedly facilitate a stronger activity of foreign and domestic operators.

As for prices, many changes took place: industrial prices of oil products, except for fiscal tariffs, are no longer fixed by public administration bodies, while the compliance with market rules and the control of opposing attitudes by the various operators have been assigned to the antitrust authorities.

Issues relating to electricity and natural gas prices are also marked by evolution, following Law 481 of 14 November 1995, establishing the Authority in charge of managing

public services, of setting electricity and gas tariffs according to efficiency criteria for noneligible customers who will have the opportunity to choose their suppliers of electricity and natural gas on the EU market.

The objective of having a market with many competing companies, in which only the most advanced and those meeting customers requirements with respect to environmental rules will obtain greater market shares, is no longer a long shot.

**GEE/IAEE European Conference on:
Energy Markets: What's New?**

Berlin, September 9-10, 1998

Topics Include:

- How to define a new corporate strategy in a deregulated framework?
- How to cope with new environmental policies?
- How to take advantage of spot, options and futures?
- How to reduce CO₂ emissions through joint implementation?

Participants in this GEE/IAEE European Conference will have the opportunity to attend the 64th International Conference of the Applied Econometric Association on *Modeling Energy Markets* at a reduced fee. This conference will be held in Berlin on September 10-11, 1998, immediately following the GEE/IAEE European Conference. For more information contact Georg Erdmann at the above address/fax.

For more information contact:

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Latvian Affiliate Has Busy Schedule

The Latvian Affiliate of IAEE has organized two workshops on DHS. Latvia, as other CEE countries, have so-called "SU type" DHS systems which work with considerable losses and low efficiency, resulting in excessive fuel consumption and high energy prices. In the first workshop, attention was focussed on heat pipeline grid reconstruction based on western technology. The second workshop discussed the possibility of small CHP installations as a way to improve DHS.

The affiliate has also taken part in the EFCEE study on *The Integration of the Central and Eastern European Countries in European Energy Economics* under Pieter Vandermeiren. The *Country Analysis: Latvia* was completed in 1997. The latter touched on the problems of Latvia's integration in European energy economics and how to solve them. A special report on energy market liberalization in Latvia was presented at the December BIEE conference.

Victor Zebergs

Conference Proceedings

18th North American Conference

San Francisco, California, September 7-10, 1997

The Proceedings from the 18th Annual North American Conference of the USAEE/IAEE held in Boston, MA, are now available from IAEE Headquarters. Entitled *International Energy Markets, Competition and Policy*, the proceedings are available to members for \$75.00 and to nonmembers for \$95.00 (includes postage). Payment must be made in U.S. dollars with checks drawn on U.S. banks. To order copies, please complete the form below and mail together with your check to:

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New Shape Of Things: (continued from page 26)

those disappearing into oblivion? For one thing, PG&E Corp. has reorganized its corporate structure into what may be a model for successful operations in the post-restructured market: five more-or-less autonomous divisions each focused on a new business area (see chart). Only one of these divisions will remain regulated and relatively risk-free (and, therefore, subject to a capped earnings potential). More importantly, as time goes on, the non-regulated divisions are expected to grow, perhaps to the point of dwarfing the regulated subsidiary - which is currently the country's largest investor-owned electric and gas combination utility.

*Perry Sioshansi is a Partner with Convector Consulting Inc. in Menlo Park, CA. He edits and publishes the *EEnergy Informer*, a monthly newsletter on the North American electric power industry. This is an edited version of an article which appeared in the April 1998 issue.

Publications

Electricity in South-East Asia. Price: \$616.00. Contact: FT Energy Publishing, Maple House, 149 Tottenham Court Road, London W1P 9LL. Phone: 44-171-896-2241. Fax: 44-171-896-2275. E-mail: eninfo@pearson-pro.com

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Independent Power Producers in Asia. Price: \$650.00. Contact: FT Energy Asia Pacific, 159 Telok Ayer Street, Singapore 068614. Phone: 65-323-6373. Fax: 65-323-4725. E-mail: ppsing@singnet.com.sg

Environmental Modeling & Assessment. Price: \$235.00. Contact: Baltzer Science Publishers, PO Box 37208, 1030 AE Amsterdam, The Netherlands. Phone: 31-20-6370061. Fax: 31-20-6323651. E-mail: publish@baltzer.nl

China's Role in Central Asian Oil and Gas Scene. Price: \$8.00. Contact: Xiaojie Xu, Huayan Beili, #49-905, Chaoyang District, Beijing 100039, P.R. China. Phone: 86-10-6238 8219. E-mail: xiaojie@iname.com

Geopolitics of Oil and Gas in the New Century (in Chinese, 1998). Price: \$480.00. Contact: Xiaojie Xu, Huayan Beili, #49-905, Chaoyang District, Beijing 100039, P.R. China. Phone: 86-10-6238 8219. E-mail: xiaojie@iname.com

Calendar

1-2 June 1998, Economic Restructuring: Paradigm Shift in the Asian Oil & Gas Insutry. Shangri-La Hotel, Kuala Lumpur. Contact: AOGC '98, Registration Desk, Level 34, Tower 1, PETRONAS Twin Towers, Persiaran KLCC, 50450 Kuala Lumpur, Malaysia. Phone: 603-5813654. Fax: 603-5811543.

8-11 June 1998, PQA '98 North America: Power Quality in a Competitive Advantage. Phoenix, AZ. Contact: Megan Boyd, EPRI, 3412 Hillview Avenue, Palo Alto, CA 94304. Phone: 650-855-7919. Fax: 650-855-2166. E-mail: mboyd@epri.com

8-11 June 1998, 9th Global Warming International Conference & Expo. Hong Kong University of Science & Technology. Contact: Dr. Sinyan Shen, Chair, International Program Committee, Global Warming International Center, PO Box 5275, Woodridge, IL 60517-0275. Phone: 630-910-1551. Fax: 630-910-1561.

11-12 June 1998, Selling Environmental Impaired Utility Real Estate Assets. Philadelphia, PA, USA. Contact: King Communications Group, Inc., 627 National Press Building, G-29, Washington, DC 20045. Phone: 202-662-9710. Fax: 202-662-9719. E-mail: kingcomm@kingpublishing.com

14-18 June 1998, National Energy Conference CNE'98: Energy for Tomorrow - Reconciliation of Efficiency and Competitiveness with the Sustainable Development. Neptun, Romania. Contact: Mrs. Ella Ratu, CNE'98 General Secretariat, 8 Energeticienilor Blvd., 79619 Bucharest 3, Romania. Phone: 401-321-4465. Fax: 401-321-1010. E-mail: srai@mail.gsci.vsat.ro

15-26 June 1998, Fourth International Training Program on "Utility Regulation and Strategy." Gainesville, Florida. Contact: Public Utility Research Center, PO Box 117142, Matherly Hall 205, University of Florida, Gainesville, FL 32611. Phone: 352-392-6148. Fax: 352-392-7796. E-mail: purecon@dale.cba.ufl.edu

17-19 June 1998, EPRI's 1998 Innovative Approaches to Electricity Pricing Conference: Pricing in the Competitive Business Environment. Washington, DC, USA. Contact: Ms. Lori Adams, EPRI, 3412 Hillview Avenue, Palo Alto, CA 94304-1395. Phone: 415-855-8763. Fax: 415-855-2041.

22-23 June 1998, Private Power in Central America. Miami, Florida, USA. Contact: Registration Dept. The Center for Business Intelligence, 500 W. Cummings Park, Ste 5100, Woburn, MA 01801. Phone: 781-939-2438. Fax: 781-929-2490. E-mail: registrar@cbinet.com

23-25 June 1998, E3 - Electricity and Energy Congress '98. Hotel Intercontinental, Berlin. Contact: ICBI, 8th Floor, 29 Bressenden Place, London SW1E 5DR. Phone: 44-171-915-5103. Fax: 44-171-915-5101.

24-25 June 1998, Gas in Central & Eastern Europe: Consumption and Transit. Kempinski Hotel Corvinus, Budapest. Contact: Business Seminars International, Ltd., Sussex House, High Street, Battle, East Sussex, TN33 0AL, England. Phone: 44-

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Conference Proceedings

19th IAEE International Conference Budapest, Hungary, May 27-30, 1996

The Proceedings from the 19th International Conference of the IAEE held in Budapest, Hungary, are now available from IAEE Headquarters. Entitled *Global Energy Transitions, with Emphasis on the Last Five Years of the Century*, the proceedings are available to members for \$55.95 and to non-members for \$75.95 (includes postage). Payment must be made in U.S. dollars with checks drawn on U.S. banks. To order copies, please complete the form below and mail together with your check to: Order Department, IAEE Headquarters, 28790 Chagrin Blvd., Suite 350 Cleveland, OH 44122, USA

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171-490-3774. Fax: 44-1424-773334.

28-30 June 1998, 1998 CERI International Petrochemical Conference. Alberta, Canada. Contact: April Wright, CERI, Conference Division, Suite 150, 3512 - 33 Street, NW, Calgary, AB T2L 2A6, Canada. Phone: 403-282-1231. Fax: 403-289-2344. E-mail: ceri@ceri.ca

6-7 July 1998, European Electricity. Europa Inter-Continental Hotel, Brussels. Contact: Business Seminars International, Ltd., Sussex House, High Street, Battle, East Sussex, TN33 0AL, England. Phone: 44-171-490-3774. Fax: 44-1424-773334.

15-16 July 1998, South Asia LPG Markets. Sukhumvit, Bangkok. Contact: Ms. Sukita, Administrator, 5/7 Sala Daeng Road, Bangkok 10500. Phone: 662-266-7767-8. Fax: 662-237-2189. E-mail: BKKCMT@mozart.inet.co.th

9-10 September 1998, Energy Markets: What's New?. Berlin, Germany. Contact: Georg Erdmann, Conference Chairman, Technical University TA8, D-10587 Berlin, Germany. Fax: 49-30-314-269-08.

13-18 September 1998, 17th Congress of the World Energy Council. Houston, Texas. Contact: United States Energy Association, 1620 Eye Street, N.W., Suite 1000, Washington, DC 20006. Phone: 202-331-0415. Fax: 202-331-0418. (<http://www.wec98congress.org>)

4-8 October 1998, BioEnergy '98 Conference: Expanding Bioenergy Partnerships. Madison, Wisconsin, USA. Contact: Fred Kuzel, Council of Great Lakes Governors, 35 E. Wacker Dr., Ste. 1850, Chicago, IL 60601. Phone: 312-407-0177. E-mail: fkuzel@cglg.org

18-21 October 1998, USAEE/IAEE 19th North American Conference. "Technology's Critical Role in Energy & Environmental Markets." Albuquerque, New Mexico, USA. Contact: USAEE/IAEE Headquarters, 28790 Chagrin Blvd., Ste. 350, Cleveland, OH 44122. Phone: 216-464-2785. Fax: 216-464-

2768. E-Mail: iaee@iaee.org URL: www.iaee.org

19 October 1998, SNS Energy Day 1998: Taxation of Energy in an Increasingly Interdependent World. Stockholm, Sweden. Contact: Susanne Rothschild-Lundin, SNS Energy, PO Box 5629, 114 86 Stockholm Sweden. Phone: 46-8-453-99-50. Fax: 46-8-20-50-41.

27-29 October 1998, Externalities in the Urban Transport: Assessing and Reducing the Impacts. Milan, Italy. Contact: Prof. Sandro Furlan. E-mail: evi@feem.it Web-site: www.feem.it

27-29 October 1998, Power Mart 1998: Conference & Exhibition. Houston Astrohall, Houston, TX. Contact: Pasha Publications, 13111 Northwest Fwy., Ste. 520, Houston, TX 77040. Fax: 713-460-9150.

9-11 November 1998, PQA '98 Southern Hemisphere: Power Quality in a Competitive Environment. Cape Town, South Africa. Contact: Marsha Grossman, EPRI, 3412 Hillview Avenue, Palo Alto, CA 94304. Phone: 650-855-2899. Fax: 650-855-8576. E-mail: mgrossma@epri.com

11-14 November 1998, EP China '98, 7th International Exhibition on Energy & Power. Beijing, PR China. Contact: Adsale Exhibition Services Ltd., 4/F Stanhope House, 734 King's Road, North Point, Hong Kong. Phone: 852-2811-8897. Fax: 852-2516-5024. E-mail: aes@adsaleexh.com

19-21 November 1998, 7th International Energy Conference and Exhibition - ENERGEX '98, Manama, Bahrain. Contact: Dr. W.E. Alnaser, Conference Secretariat, Dean, Scientific Research, University of Bahrain, PO Box 32038, Bahrain. Phone: 973-688381. Fax: 973-688396. E-mail: EA607@isa.cc.uob.bh

9-11 December 1998, Power-Gen '98. Orlando, Florida. Phone: 918-831-9160.

12-17 December 1998, 2nd International Non-Renewable Energy Sources Congress and Exhibition - INRESC '98. Tehran, Iran. Contact: URL: <http://www.uic.edu/~mansoori/INRESC.98.html>

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