

abstracts was issued at the beginning of the year and you can obtain further information from the WPC website www.world-petroleum.org or through the link on the IGU website. The deadline for submitting abstracts for the Madrid Congress is September 1.

PKS

BAS

Report from the "new" Assistant in the Secretariat, Barbara Anette Schmid

Last September I moved to Denmark from the Czech Republic, where I lived for five years in Prague, to work in the IGU Secretariat on secondment from my German employer, RWE Transportnetz Gas GmbH.

My secondment is part of a career plan and the idea at this stage is to develop my understanding of the international energy and gas business. I focus on learning about current energy challenges, future markets and technological trends. I am also familiarising myself with the various international organisations and the key players active in the energy field.

Peter Storm is my mentor supporting me with his vast knowledge and contacts. For him, but also for the President, I write speeches on various issues (recent subjects include the Indonesian and the South American gas markets). I help to promote IGU at international events and also have my own projects such as the IGU Knowledge Centre and a project looking at how to increase the value of IGU membership. I will present my ideas on the latter during the Executive Committee meeting in May.

When the term of the current Secretariat finishes after this year's Council meeting in St Petersburg, I expect to move to Norway to continue in the Oslobased Secretariat.

For me this is a great opportunity to experience a new world of energy organisations and broaden my knowledge. I very much appreciate being part of the small international team in the IGU Secretariat

Report from the "old" Assistant and Webmaster, Lotta Hållén-Kragh

Almost a year has passed since we launched the new IGU website, coinciding with the change in the IGU Presidency. The statistics clearly show that it has been very well received by IGU members, partners and the rest of the world.

One of the major changes compared to the old site is that the webmaster is no longer the only editor. Each Committee has been given rights to add, update and delete content in their own sections of the website. Tremendous work is being done from all sides in this respect with the addition of a lot of good content and other relevant information. Hopefully this trend will continue for the remainder of the Triennium and beyond.

The decision was made to make much more IGU information and knowledge available to the general public, but there is still information meant for IGU members only, so please remember to log in (upper right corner of your screen, just above the flower band). In case you have forgotten your password you can always have it resent by contacting the Secretariat.

Since January Intergas Marketing (IGM) has been an integrated part of IGU again as the IGU Marketing Committee, retaining its abbreviation. (IGM was originally spun off from the Union back in 1951.) Here in the Secretariat we handle many of the practical issues of IGM such as organising meetings, and a lot of good work is already being done in the new Committee. There is splendid cooperation with the other Committees, all working towards achieving more IGU synergy. IGM is open to all IGU members and more information about its work is available from the IGU website.

On a personal note I would like to thank all my IGU colleagues for your warm welcome and excellent cooperation. Taking over after Lisbeth Koefoed has not been easy but you have all helped me succeed. It has been a pleasure getting to know you all and I look forward to meeting you again somewhere soon.

LHK



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The First Council Meeting of the 2006-2009 Triennium in Lima, Peru

By Mark Blacklock

As IGU's newest Charter Member and with a rapidly growing gas industry, Peru was a fitting host for the October 2006 Council meeting, which was attended by a total of 98 delegates and 40 accompanying persons. This was only the second time the Council had convened in South America, the first occasion being in Buenos Aires in 1998.

The Council meeting was held at the Swissôtel in the San Isidro district of Lima on October 18, following sessions of the Coordination Committee and the Executive Committee. The meetings were organised by the Charter Member for Peru,

Perúpetro, together with Pluspetrol Perú, and sponsored by Aguaytía Energy, Cálidda, Hunt Oil, Petrobras Energia Perú, Pluspetrol Perú, Repsol YPF, SK Corporation, Sonatrach, Tecpetrol and Transportadora de Gas del Perú. General coordination was carried out by Global Eventos.

Set up in 1993, Perúpetro is a state enterprise charged with promoting investment in the country's oil and gas sectors, and supervising the operation of contracts once in place. It currently supervises the 57 petroleum and gas contracts in force in Peru of which 18 cover production and 39 exploration. "In the last three years alone, 33 contracts have been signed," says General Manager José Chávez Cáceres.

Although Peru has produced some gas for many years, and the Aguaytía gas and power project in the north of the country started operations in 1998, the industry really took off when the first phase of the Camisea project came onstream in August 2004. Gas from Camisea's Block 88 is piped to



The map shows the pipelines transporting Camisea production of natural gas (orange) and natural gas liquids (red), whose construction faced major technical and environmental challenges with a rise in height to 4860 metres to cross the Andes before descending to the coast. A third pipeline will branch off and supply the Peru LNG plant which is being built in the district of Cañete.



the Lima/Callao metropolitan area for residential and industrial use including electricity generation and transportation. Concessions are being let to extend the pipeline distribution network to the provinces of Ica, Ayacucho and Junín, and further expansion is under evaluation. A separate pipeline carries natural gas liquids to the Pacific coast at Lobería. The second phase of Camisea development from Block 56 is expected to begin production of natural gas liquids in 2008, with production of natural gas for export as LNG by 2010.

Peru's annual domestic demand for gas is forecast to reach 4 billion cubic metres (bcm) by 2011 compared with 1.6 bcm in 2005 and Peru LNG will have a capacity of 4.4 mtpa or approximately 6 bcm.

"The development of the Camisea gas fields and of the transmission and distribution networks constitutes the most important and complex energy project developed in our country," declares José Chávez Cáceres. "With this major growth of the gas industry we decided to join IGU to share experiences with our colleagues around the world."

Sadly, just as many of those colleagues were arriving in Lima, Dr Valentín Paniagua Corazao,



Peru is promoting gas as a transportation fuel and aims to have 12,000 vehicles running on CNG and 12 filling stations in the Lima/Callao area by the end of 2007, thanks to a government programme that lends drivers the upfront costs of conversion (typically \$1000 for a car). An electronic chip is fitted and the loan is paid off by taking a share of the 50% savings in fuel costs each time the driver fills up.

who was President of Peru when the Camisea contracts were signed in 2000, died. A day of official mourning was declared for October 17, although the meetings of the Coordination Committee and the Executive Committee scheduled for that day went ahead.



Hosts and delegates at the gala dinner on the Tuesday – to the left of the President and Secretary General are José Chávez Cáceres of Perúpetro, Antonio Tella of Pluspetrol Perú and Gustavo Navarro Valdivia from the Ministry of Energy and Mines.

Russia, Iran and Qatar have 58% of the world's natural gas reserves.

So what does that mean for the rest of us?







Ernesto López Anadón was convening his first Council as President.

Council business

Convening his first Council as President, Ernesto López Anadón began by thanking the former Dutch Presidency for organising an excellent World Gas Conference (WGC) in Amsterdam in June. He then started business by asking delegates to approve the minutes of the previous Council held immediately before WGC2006 and some changes to Charter and Associate membership.

The Charter Members for Brunei and Switzerland are now the Brunei Energy Association and Swissgas respectively, while the former Swiss Charter Member, the Swiss Gas and Water Association, has become an Associate Member. Additionally, DanaGas of the UAE and Gazbir of Turkey have become Associate Members. This brings total IGU membership to 95 – 67 Charter Members and 28 Associate Members. There is currently no Charter Member for Romania, the country being represented by Associate Member Romgaz, and delegates approved the conversion of Romgaz's membership to Charter status subject to final confirmation from the Romanians.

The Secretary General, Peter Storm, noting that "the economy of the Union is in very good shape" then presented the budget for 2007, which was approved by the Council. He was followed by Alexander Lipatov of the Russian delegation, who gave a short presentation on St Petersburg, the

venue for the 2007 Council meeting to be hosted by Gazprom, October 22-25.

Next up was the Dutch delegation to present their final report on the 23rd WGC. Immediate Past President George Verberg gave an introductory overview, while Bert Panman, the former Coordination Committee Chairman, Robert Doets, Chairman of the National Organising Committee (NOC), and Daniël Vlugt, Chairman of the Exhibition Committee, went into more detail about the conference and exhibition, the achievements and the lessons learned. Delegates were given a printed report on WGC2006 and the full proceedings and a selection of pictures on CD-Rom, both of which are available from the IGU Secretariat. The last issue of the IGU Magazine also covered WGC2006 in depth.

• The new Triennium

After the coffee break, Coordination Committee Chairman Roberto Brandt took the floor to give a presentation on the 2006-2009 Triennial Work Programme (TWP). He said that nominations to Committees had got off to an excellent start with 602 received by the end of September, and outlined some changes to the Programme Committees:

• The addition of a third Study Group to PGC A is under evaluation;



- PGC C's title has been amended to "Developing Gas Markets"; and
- The scope of PGC D's Study Group D3 has been widened under the brief "Creative solutions for new LNG facilities".

He went on to inform delegates that Marc Hall (Germany) had been elected as the Chairman of the new IGU Marketing Committee, taking over from Urs Zeller the outgoing President of the old IGM, and that Horacio Cristiani (Argentina) had been appointed as the IGU representative on IANGV's Executive Committee, taking over from Bert Panman.

He wound up by giving the key dates for the run-up to WGC2009, which start with the call for papers on June 1, 2008, after which the TWP was approved by delegates.

IGU is directly involved with two important conferences before WGC2009, and the respective Chairmen of the NOCs for LNG-15, Juan Pons, and the IGU Research Conference (IGRC), Daniel Paccoud, took the opportunity to brief delegates on preparations and enlist their support. LNG-15 is taking place shortly after the publication of this issue of the IGU Magazine in Barcelona, Spain,

while IGRC is scheduled for October 8-10, 2008, in Paris, France. (A separate report on IGRC2008 appears on pages 178-179.)

They were followed by Shahrzad Rahbar, Vice President for Strategy and Operations at the Canadian Gas Association (CGA), who announced that the Association would be celebrating its centenary in 2007. A highlight of the year will be an executive forum entitled "Energy Solutions for the Future" to which she extended a warm invitation. CGA is organising the forum in conjunction with the Canadian Association of Petroleum Producers and the Canadian Energy Pipeline Association, and it will take place in Ottawa, June 6-7.

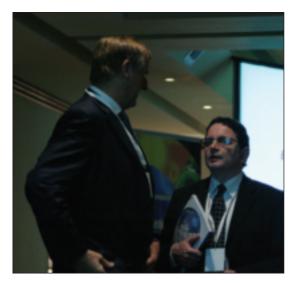
Next up was Eduardo Ojea Quintana, Chairman of the NOC for WGC2009, who gave a presentation on the initial preparations for what will be the 24th WGC. His detailed report is on pages 46-48.

To round off the second session, Ernesto López Anadón invited representatives of two international energy organisations to give presentations. These were Daniel Hec, Secretary General of Marcogaz, and Pierce Riemer, Director General of the World Petroleum Council (WPC).



Delegates enjoying the first Council meeting of the Triennium.





CC Chairman Roberto Brandt confers with his predecessor, Bert Panman, just before the afternoon session gets underway.

Marcogaz is affiliated to IGU and is a European technical association with 16 members. In his presentation Daniel Hec identified third party interference as the most serious threat to gas pipelines and has contributed an article on this subject to the Magazine (see pages xx-xx). He said that he wanted to see closer cooperation with IGU in the current Triennium and that Marcogaz representatives would be active on a range of Committees.

Pierce Riemer briefed delegates on recent WPC activities and invited them to the 19th World Petroleum Congress, which will take place in Madrid, Spain, from June 29 to July 3, 2008. A notable WPC project has been the digitisation of all the papers from previous Congresses going back to the first one in 1933, and a fully searchable DVD is now on sale via the WPC Secretariat.

Afternoon session

After lunch the Council reconvened for the third session, which followed the now regular format of having a presentation and debate, this time looking at regional energy developments. There was an initial presentation from the host country, followed by a round table with five panellists and general discussion.

Daniel Saba de Andrea, Chairman of Perúpetro, set the scene by describing the positive impact the development of natural gas is having on the Peruvian economy. Foreign direct investment in exploiting gas reserves is set to reach \$4.5 billion by 2008, and the gas industry has been one of the factors fuelling an average annual GDP growth rate of 6% over the last three years.



The round table panellists with moderator Sylvie D'Apote at left.

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Tucking into the farewell buffet.

Daniel Saba said that while the domestic market has priority, with the share of natural gas in primary energy consumption forecast to reach 26% by 2015 compared to 10.9% in 2005, there was plenty of scope to develop export markets. Indeed, Peru is already exporting LPG with LNG to follow. He also said that there were plans to re-enter the petrochemicals market, noting that South America's petrochemicals plants are concentrated on the Atlantic coast leaving potential for Pacific developments. (A plant was started up in Talara in northern Peru in the 1970s, but this was subsequently closed down.)

Moving to a regional focus, the round table looked at "Gas Market Integration in South America" and was moderated by Sylvie D'Apote, Associate Director, Southern Cone Energy in the Rio de Janeiro office of Cambridge Energy Research Associates (CERA). The panellists were Enzo Quezada Zapata, Regional Director of Fuel at Endesa Chile; Sydney Granja Affonso, Executive Manager for Natural Gas Logistics and Partnerships at Petrobras; Norberto Benito, General Manager of Pluspetrol Perú; Luis Alberto Santos, Gas Business Development Manager at Repsol YPF; and Álvaro Ríos Roca, Executive Secretary of the Latin American Energy Organisation (OLADE).

Within South America there are currently international gas transport connections by pipeline linking Argentina with Bolivia, Brazil, Chile and Uruguay, and between Bolivia and Brazil. More pipelines are being evaluated, most dramatically the \$20 billion proposal to link Venezuela with Brazil, as well as LNG import and export terminals. However, the regional gas trade has been affected by disputes over reduced supplies and prices, while there is a need for greater harmonisation in terms of standards and quality.

Enzo Quezada Zapata said that Chile had invested \$6 billion in cross-border pipelines only to see Argentina reducing supplies in the wake of its financial crisis, while Sydney Granja Affonso referred to the protracted negotiations on price between Brazil and Bolivia.

Norberto Benito pointed out that the challenge was moving from a patchwork of bilateral agreements to a multilateral framework, and said that the expertise of existing regional agencies could be of great help in reaching agreement on regional energy integration.

Luis Alberto Santos called for common regulations and standards across the region, and Álvaro Ríos Roca highlighted the lack of a legal framework.

Summing up, panellists agreed that there was clear need for an independent entity to resolve conflicts, that concerns over security of supply could be met by a diversified mix of LNG and piped gas, and that, faced with rising energy demand, the costs of not integrating the regional gas market would be high.

Ernesto López Anadón closed the main proceedings by thanking the participants for a lively debate, and the day was drawn to a close by a closing ceremony addressed by the Director General of Hydrocarbons in Peru's Ministry of Energy and Mines, Gustavo Navarro Valdivia.

Mark Blacklock is the Editor-in-Chief of International Systems and Communications.



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IGU and AGA Forge Greater Cooperation

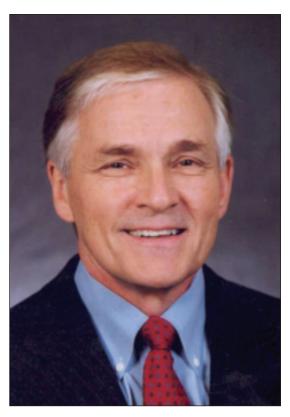
By Mark Blacklock

The goals of the Argentine Presidency include bringing new members into IGU and increasing the involvement of existing members in the Union's activities. Indeed, shortly before opening his first Council meeting as President in IGU's latest Charter Member, Peru, Ernesto López Anadón led an IGU delegation in talks in Washington DC with members of the American Gas Association (AGA).

Founded in 1918, AGA was an early Charter Member of IGU and its officers and members have a long history of engagement with the Union. AGA joined in 1932 and its then President, Clifford E. Paige, was a speaker at the 2nd World Gas Conference in Zurich in 1934 and an active Council member. The United States went on to hold the IGU Presidency for two Triennia with Robert W. Hendee presiding over the 1952-55 Triennium, which culminated in the 6th WGC in New York, and John Kean Sr serving as President for the 1985-88 Triennium, which culminated in the 17th WGC in Washington DC.

In the following Triennium the US led the Committee for Domestic and Collective Utilisation, with Fred Sullivan as Chairman and Larry Ingels as Secretary, while for 1991-1994 and 1994-1997, the US led the Distribution Committee with Rudy Stys as Chairman and Larry Ingels as Secretary.

More recently Jay Copan, AGA's Senior Vice President for Corporate Affairs and Corporate Secretary, served on a special Task Force, which in 2001-2002 modernised the Articles of Association for the Union, while US representatives chaired Working Committees in the last two Triennia. Terence Thorn was Chairman of WOC 9 (World Gas Prospects, Strategies and Economics) for 2000-2003, and Peter Cistaro was Chairman of WOC 4 (Distribution) for 2003-2006. Larry Ingels



AGA President and CEO David N. Parker, who was elected to IGU's Executive Committee in June 2006.

was also the latter's Secretary and on pages 182-190 he writes about his memories of IGU service.

This is certainly an impressive record but, bearing in mind that the US is the world's largest gas consumer and second largest producer (after Russia) and is increasing imports from outside North America, both IGU and AGA feel that there is plenty of scope to increase US involvement in IGU. This was the rationale behind the meeting last October in Washington DC, which took advantage of the presence of the IGU management team and many AGA members in the US capital for the 3rd World Forum on Energy Regulation, an event whose sponsors included IGU and AGA.

AGA President and CEO David N. Parker, who is also a member of IGU's Executive Committee, sees two key factors encouraging greater international engagement by the US gas utilities.

"Basically we have had a North American gas



market. Now we are going to have to compete in a world market for gas," he declares, adding that the sharp increase in US gas prices and consequent job losses in industries using gas as a feedstock have concentrated minds. The role of imported LNG in meeting US energy demand is increasing and will continue to increase, as AGA's then Chairman, Stephen Ewing, pointed out in a keynote address to the 23rd WGC in Amsterdam last June.

This "push" factor is complemented by the "pull" factor represented by the advantages of deepening IGU involvement. "We saw positive benefits to US distribution companies as a result of Peter Cistaro's chairmanship of WOC 4 in the 2003-2006 Triennium," says Parker, "and we wanted the IGU leadership to talk to some of our members about what the Triennium is all about. Our goal was to interest our members in becoming more involved in IGU's work."

Apart from President
López Anadón, the IGU
delegation included the
Secretary General, Peter
Storm, the Chairman of PGC
B (Strategy, Economics and
Regulation), Mr Pedro
Moraleda, and the Secretary
of the Coordination Committee, Andrés Kidd. They
gave a presentation on the
Union and the 2006-2009
Triennial Work Programme.
During the ensuing discussion
the AGA representatives

expressed great interest in increasing US involvement in the work of IGU beyond the handful of representatives already nominated to the Committees.

In conclusion, President López Anadón expressed his satisfaction with the result of the meeting, stressing that he felt confident that increased involvement would benefit both parties.

Mark Blacklock is the Editor-in-Chief of International Systems and Communications.



Stephen E. Ewing, who was AGA Chairman for 2006, addressed the 23rd World Gas Conference in Amsterdam.

Growing Statoil's gas business

Statoil has an ambition of doubling the group's global gas production between 2005 and 2015. This growth requires that the necessary building blocks are in place in time. The Langeled pipeline to the UK is one such building block. When the Ormen Lange field in the Norwegian Sea comes on stream later this year, Statoil's daily delivery capability to the UK will have increased by 280% compared with mid-2006, from 20 million standard cubic metres to 56 million.

We have been responsible for laying this gas pipeline on behalf of Hydro, the development operator for the Ormen Lange field. Completing this work on schedule and NOK 3 billion below budget reinforces our status as a leader in managing and executing pipe projects.

Over the years to come, Langeled will be highly significant for the UK gas market. As the seventh Norwegian pipeline to Europe, Langeled puts Statoil in a unique position. In addition to fulfilling long- and short-term sales agreements, the group can take advantage of price movements in several major European markets, to serve the needs in these markets and creating value for our owners.

Together with our partners, we are working on additional pipelines which will further increase this transport capacity. The new Tampen Link from Statfjord in the North Sea to the UK opens more opportunities for Statoil in our closest energy market. Greater capacity and flexibility in the transport network also make it possible to take short-term positions in an increasingly liquid gas market. Furthermore, Statoil is working on expanding gas production from the giant Troll field and we plan a new gas pipeline to either Continental Europe or to the UK. The decision on the pipeline's landing point and investment decisions for the increased production from the Troll field will be made during 2007.

▶ Efficient transportation system

Energy security is high on the agenda for governments and our customers in Europe. One aspect of this issue is to make sure that we have an efficient transportation system to serve the markets. The Norwegian pipeline system, the world's largest offshore gas pipeline system, gives us direct links to the markets, and we have always been regarded as a reliable gas supplier.

To retain that position, we work continuously to ensure that our installations are operated safely and with high reliability. Therefore we have over the years completed several updating projects at the onshore gas treatment facilities in Norway. These facilities are key to the Norwegian gas transport and gas treatment system. The onshore terminal at Kårstø has been expanded and updated several times since it was opened in the early 1980s. We are now planning further expansion and updating to take place in 2010 to be able to receive more gas from the fields on the Norwegian Continental Shelf.

Last year we added significant new building blocks to Statoil's natural gas business. The SCP pipeline from Azerbaijan to Turkey has been completed and is ready to transport gas to the markets. Statoil plays a key role in several gas projects in Algeria, bringing gas to the European market from the south. In the autumn of this year the Snøhvit field in northern Norway will start gas deliveries. This Barents Sea field will deliver gas to Spain and give the group access to the USA, with sizeable volumes in the form of LNG. In addition, it will provide the group with an excellent delivery tool because the LNG carriers which serve it can also be sent to various European markets.

Part of the LNG from Snøhvit will be shipped to the Cove Point terminal on the US east coast utilising Statoil's capacity at the terminal. The first turf was cut for an expansion of this receiving terminal at the same time as Langeled became operational. When the enlargement project has been completed in 2009, we will be able to receive some 10 billion cubic metres (bcm) annually at Cove Point over a 20-year period. Snøhvit will account for 2.4 bcm of this volume, and the remaining capacity will be filled from other upstream projects or short-term trading with LNG.

These expansions of Statoil's gas portfolio position the group to capture market share and to meet increased needs for gas in our existing European markets, but also in new markets in Europe, in the US and in Turkey. Statoil is significantly growing its gas business and we are well underway to meeting our ambition to double gas production between 2005 and 2015.



The underground connection to Europe improves continuously.

In October 2006 a new chapter in Statoil's gas operations was written. Langeled was opened from our Slepiner field to England – the first leg of the world's longest subsea pipeline. The pipeline will transport large quantities of North Sea gas to a terminal at Easington, England, and will ensure that the English can continue to enjoy cups of tea for many years to come. The capacity for future supply is also increased. Through Langeled and other North Sea infrastructure Statoil can provide 30 per cent of Great Britain's gas needs.

Langeled is the latest addition to a steadily developing gas pipeline system from the North Sea to Europe. Germany, France, Italy and Spain have long enjoyed stable and secure energy from Statoil's fields. From Azerbaijan and Algeria we also supply gas to Turkey and southern Europe.

In addition we will soon supply Arctic gas from the Snøhvit project, the world's northernmost and Europe's first export facility for liquefied natural gas. From here the gas will be carried by ship to Spain and the east coast of the USA. An estimated 25 per cent of the world's undiscovered oil and gas resources lie here in the Arctic. This will further increase the importance of Statoil as a large, secure and stable gas supplier, and help the world obtain the environmentally-friendly energy it needs.





News from Organisations Affiliated to IGU

There are currently six organisations affiliated to IGU: the European Gas Research Group (GERG), Gas Infrastructure Europe (GIE), the International Association for Natural Gas Vehicles (IANGV) including its Asia-Pacific and European sections (ANGVA and ENGVA), the International Gas Research Conference Foundation (which is separate to IGU's internal IGRC Committee), Marcogaz and Pipeline Research Council International, Inc. (PRCI). In this issue we have a report from PRCI, which became affiliated in June 2006.

Research Collaboration: The Role of PRCI in Meeting the Research Challenges that Face Energy Pipelines

By George W. Tenley, Jr.

In a constantly changing energy environment – economically, politically and socially – the ability to reliably, safely and efficiently move energy depends heavily upon the soundness and stability of the pipeline infrastructure – within countries and between countries. And, the ability of the infrastructure to play its essential role is heavily dependent upon the development, introduction and deployment of research.* Just as the globalisation of energy issues is the new reality, so too is the globalisation of the solutions to those issues. Due to the constraints generally on corporate research spending, it is only through collaborative processes that the requisite funding can be obtained and the core, prioritised research and development identified, executed and deployed.

Pipeline Research Council International, Inc. (PRCI) is dedicated to assuring the maximum

efficiency of research development and deployment through a highly-leveraged funding model of member and external funding, information sharing, cooperative project development and the broad dissemination and application of its research results.

The Pipeline Research Committee – PRCI's precursor organisation – was established within the American Gas Association by 15 US natural gas transmission pipeline companies to consider the recurring problem of long running brittle fractures in high-pressure natural gas pipelines. Through a concentration of both funding and technical expertise the problem was successfully addressed in a manner that continues to define how PRCI focuses its resources. In 1980, Gasunie joined PRCI as the first non-North American member. In 2003, PRCI became a truly "energy pipeline" organisation when eight oil pipeline companies joined.

Based on its successful 54-year record, and in positioning itself for continuing future success, PRCI has become the pre-eminent technology development organisation "of, by and for" the energy pipeline industry "providing sustainable value to the energy pipeline industry by delivering research solutions that assure safe, environmentally sound, and cost-effective operations worldwide". To achieve this mission, the PRCI operating model focuses on international collaboration among energy pipeline operators, leveraging available funding and optimising research costs. PRCI's current membership includes 34 pipeline operating companies in the United States, Canada, Europe, South America and Saudi Arabia. This membership is augmented by 15 Associate Members who provide essential equipment and services to the energy pipeline industry, as well as direct access to the marketplace for planning and delivering effective technology transfer.

The essential prerequisite today for assuring the sustainability of energy pipeline research – performed within pipeline operating companies or within a collaborative programme such as PRCI's – is that it address the core business, operational and "external" drivers (e.g., political and regulatory) of the

^{*} As used here, research is comprised of two elements developed either independently or, more commonly, in concert: "knowledge", its generation, enhancement and application; and "technology", the development of new mechanisms, tools and equipment used in all aspects of the operation of the pipeline infrastructure.



industry it supports. To meet the demands generated by these drivers, PRCI's research programme is organised under five Technical Planning Committees (TPCs) comprised of member company technical representatives. Each of these five Committees has a distinct focus: Integrity and Maintenance; Design, Materials and Construction; Compressors and Pumps; Measurement; and, Underground Storage. The five Committees have two primary responsibilities: 1) developing and maintaining "roadmaps" of PRCI's research objectives, which comprise the research projects that address the strategic goals of the organisation as set by the PRCI Board; and, 2) providing essential peer review of all aspects of the research programme, from project planning to the approval of PRCI research results.

PRCI's technology programme develops near- to mid-term solutions (of one to four years) to the key issues facing the industry as determined by the Board and the five TPCs. In North America, and increasingly elsewhere in the industrialised world, the focus in pipeline operations is on system integrity, a focus that includes both safety and environmental performance. The majority of the PRCI budget (approximately 65%) is dedicated to pipeline integrity issues such as: mechanical damage prevention; enhanced pipeline inspection, including the inspection of "unpiggable" pipelines; new stronger and more damage-resistant pipe steels; new welding processes and inspection capabilities; more effective right-of-way monitoring to avoid both geotechnical threats and external force damage; and, the detection, assessment and management of all forms of environmental cracking. The remaining portion of the programme focuses on measurement, underground storage and compressor and pump station facilities. This aspect of PRCI's portfolio has grown in recent years due to issues associated with emissions from compressor engines, the efficiency of pumps, the quality of LNG introduced into the existing pipeline infrastructure and the increasing demand on storage as a key to maintaining deliverability.

Critical point for gas research

As confirmed by the IGU Task Force on R&D and reported at the World Gas Conference in June 2006 in Amsterdam, the pursuit of research in the gas industry is at a critical point as recent trends in reduced funding and declining industry leadership undermine sustainability. It is in the face of these trends that PRCI is working to provide a growing and sustainable resource to the energy pipeline industry the world over.

In expanding its programmes and contributions to an increasingly dynamic and diverse industry, PRCI is committed to working in concert with other organisations representing and overseeing the industry, not just in North America but around the world. To that end, PRCI has executed a formal, tripartite Memorandum of Understanding with the European Pipeline Research Group and the Australian Pipeline Industry Association under which the three organisations share in the planning, managing and results of each member organisation. More recently, PRCI has become an organisation affiliated to IGU and is continuing its participation in the R&D Task Force for the 2006-2009 Triennium. Through its affiliation to IGU, PRCI will continue to expand the horizon of its knowledge, contributions and impact.

George W. Tenley, Jr is the President of Pipeline Research Council International, Inc. For more information please visit www.prci.org.

| 300 | Number of industry representatives participating in PRCI | PRCI. |
|---------------|---|---------------------------|
| 1700 | Inventory of PRCI research reports | LEADING PIPELINE RESEARCE |
| \$6.6 million | 2007 obligated funding of the memb | er companies |
| \$8.1 million | Total investment required for the 200 | 7 research programm |
| \$16 million | Total 2007 programme value, including external co-funding | |
| \$23 million | Total value of all ongoing PRCI research engagements | |



Countdown to the 24th World Gas Conference

By Eduardo Ojea Quintana

The next World Gas Conference taking place in Buenos Aires, October 5-9, 2009, should raise widespread interest as several thorough studies reviewing strategies for the global natural gas industry will be presented. It will also be the first WGC to be held in the Southern Hemisphere.

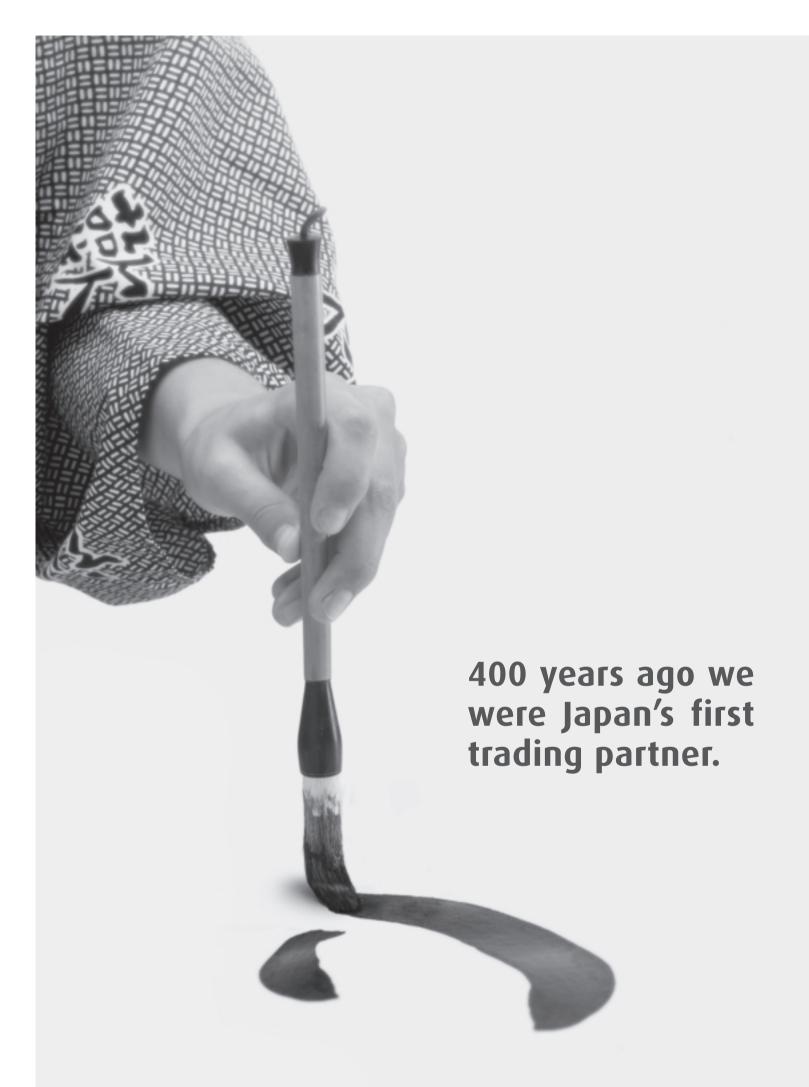
I would like to share with you our progress to date and introduce you to the National Organising Committee (NOC) that is looking forward to working with all of you during the current Triennium. I would particularly like to emphasise that the gas industry in Argentina has united behind the organisation of the 24th World Gas Conference, providing the NOC with corporate and financial support, professional know-how and experience.



Eduardo Ojea Quintana: Argentine gas industry has united behind the organisation of WGC2009.



Vibrant Buenos Aires will be the host city.



The Dutch have earned a place in history thanks to our savvy business instinct. A spirit made famous by our business ties with Japan back in the 17th century, which made us Japan's only western trading partner for more than two hundred years. Essent Trading is an international merchant company whose roots lie in the renowned Dutch spirit of commerce. At Essent Trading we continue to build on our merchant heritage and innovative way of thinking. Thanks to our unique ability to combine our expertise in energy with our financial knowledge, we have emerged as a formidable market leader in energy trading and risk management. Our modern day traders have made us the world's leader in biofuels and renewables. In an era in which energy is becoming a more valuable commodity, we have harnessed the power to change the world. Essent Trading. Get Powered.



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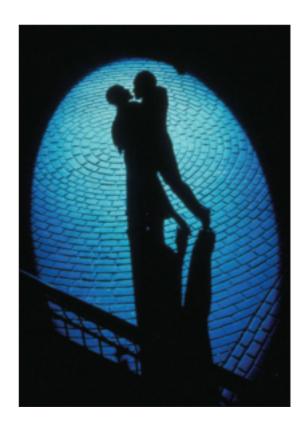




The groups among which this task has been divided have been working for several months now, covering all the related areas including Exhibition & Logistics, External Suppliers, Finance, Marketing, Public Relations & Communications and Social and Technical Programmes. They are led by a selected group of professionals and coordinated by Graciela Ortolá, the NOC Secretary.

Visiting Argentina

Buenos Aires combines world-class style and amenities with Latin warmth, but you should also plan to fit in some time to explore outside the host city. From the resorts of Bariloche and the vine-yards of Mendoza to the dramatic landscapes of Patagonia, Argentina is an outstandingly beautiful country. We boast eight UNESCO World Heritage Sites including the national parks of Los Glaciares, with the colossal Perito Moreno Glacier, and Iguazú. We also look forward to sharing our diverse culture with you. The tango, football, gauchos and





WGC2009 delegates should not miss the opportunity of visiting world-famous heritage sites such as the Iguazú Falls (ABOVE) or experiencing the tango (TOP).





La Rural will be the venue for WGC2009.

estancias are a few of the country's icons, but what strikes visitors most is the Argentine zest for living.

The venue

We have selected La Rural Conference and Exhibition Centre to house the event. Based around a historical building to which state-of-the-art conference and exhibition facilities have been added, La Rural enjoys an excellent location close to the commercial centre of Buenos Aires and within 15 minutes of many excellent hotels. La Rural offers more than 15,000 square metres of net exhibition space, together with numerous conference rooms and opportunities for social events. Please have a look at the venue website www.la-rural.com.ar.

Sponsors

The NOC is extremely grateful to the 23 companies who have helped to provide seed funding for the 24th World Gas Conference through their generous sponsorship. Opportunities for further sponsorship are being developed and will be announced through the official website www.wgc2009.com.

Exhibition sales

In order to focus on making the Conference a success, we have delegated exhibition sales to a professional organising company with principal offices in Buenos Aires and London, as well as several representative offices around the world (see box for contact details).

Marketing

The website www.wgc2009.com is now live with the latest information and the first exhibition sales brochure was mailed out in January. WGC2009 will be promoted at numerous events worldwide to help us spread the word, and we will be participating in several major exhibitions including LNG-15, OTC and the 20th World Energy Congress this year, Gastech 2008 and the World Petroleum Congress 2008. Please come and visit our stands.

Newsletter

The NOC will be announcing key dates over the coming months through the quarterly 24th World Gas Conference Newsletter which is distributed by email. This will cover everything you will need to know in preparation for the World Gas Conference, including the call for papers and the subsequent submission of abstracts, sponsorship opportunities, the conference registration handbook, the exhibitors' manual, the social programme and post-conference tours.

My colleagues and I look forward to welcoming you to Argentina.

Eduardo Ojea Quintana is the Chairman of the National Organising Committee WGC2009.

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Pan American Energy Today

PAN AMERICAN ENERGY LLC is the result of a strategic alliance for the Southern Cone between BP (60%) and Bridas Corp. (40%), and consolidates the international experience, technology, know-how and potential of two leading players in the oil, gas and energy industries.

PAN AMERICAN ENERGY is the second largest hydrocarbon producer in Argentina, is one of the main natural gas suppliers in the Argentine and Southern Cone markets and operates in the richest basins in Argentina and the main producing regions in Bolivia.

PAN AMERICAN ENERGY has an extensive well-balanced exploration block portfolio as well as a robust experience in deep drilling, offshore drilling, inhospitable terrain and success stories in the face of severe geologic challenges.

PAN AMERICAN ENERGY staff count among the Company's major assets and they work under stringent quality, health, safety and environmental protection standards.

PAN AMERICAN ENERGY is committed to development in the natural gas value chain and energy integration of the Southern Cone. This objective has led the Company to join first tier companies in projects addressing the region's need to develop and diversify energy supply using the least polluting fossil fuel: Natural Gas.

A robust financial position and low production costs are key strengths underlying **PAN AMERICAN ENERGY**'s steady growth performance in adverse scenarios. This solid financial position is enhanced by the expertise of its personnel in conducting flexible, brisk negotiations affording each party with the most satisfactory outcome.

Economic and financial power, human quality, professional skills, high safety and efficiency standards, environmental commitment and social responsibility are key elements in the continuous growth of PAN AMERICAN ENERGY.



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