

MINUTES OF THE 2007 ANNUAL MEETING
OF THE
DIRECTORS OF THE CIRCUM PACIFIC COUNCIL

MONDAY, MARCH 26, 2007

The meeting was called to order by Chairman Nahum Schneidermann at the Meeting Center of the Hotel Alameda in the City of Morelia, Mexico. Those in attendance included Directors Gerardo Hiriart, Guillermo Salas, Robin Falconer, Yoshihiko Shimazaki, Zhai Guangming, Zhang Xiangning, Vaughan Barrie, Manuel Arguello, Oleg Chudaev, David Howell, Michael McWalter, Patrick Leahy, Harold Lian, Erick Mack and Jean Weaver, USGS Regional Specialist for South America, Central America and the Caribbean, representing the Council Secretariat. Jerry C. Wilson attended as proxy for Director Ed Saade. Directors Gerardo Hiriart, Researcher at the National University of Mexico (UNAM) and Guillermo Salas, Director General of Mining, State of Sonora, Mexico were thanked for organizing the meeting. Guests introduced included Maria Villoreal de Hiriart, Professor at the State University of Michoacan, Francisco Escandon, Director General, Geological Survey of Mexico and other members of the Chinese delegation to the meeting, He Wengyun and Chen Yongwu, China National Petroleum Corporation and Cui Baochen of PetroChina Company, Ltd. A photo of the participants is included as Attachment 1.

Minutes of the 2006 Meeting of CPC Directors in Wellington New Zealand were reviewed and approved. President David Howell in welcoming remarks noted George Gryc had resigned as CPC Treasurer because of health problems. Gary Greene has agreed to assume these duties and a motion to elect him Treasurer of the Council was approved as well as a motion to thank George for the many years of service he has rendered to the Council both as a Director and as an Officer.

DIRECTORS REPORTS

LATIN AMERICA

Chile- Moyra Gardeweg, Vice President for Latin America, attended the CPC sponsored Water and Energy Symposium at UNAM in Mexico City and stressed the importance of CPC in providing opportunities for professional contacts at a personal level.

Costa Rica-Manuel Arguello updated Directors on RIMSIM activity in Latin America. Workshops were held in Mexico City (with 60 attendees) and in Morelia preceding this meeting. Local governments and communities in Mexico have shown active interest in this project. The English version of RIMSIM has now been translated into Spanish, Chinese, Russian and Japanese.

OCEANIA

New Zealand-Robin Falconer, Vice President for Oceania, reviewed a series of political crises in the region that hindered scientific interchange (Fiji, Solomons, Tonga and Vanuatu). CPC has been instrumental in making people of the region better aware of natural hazards and has promoted the concept of identifying and preserving fisheries habitats. A CPC sponsored workshop on such habitats is scheduled for New Caledonia in May of this year. Falconer reported that he had met with scientists in Valparaiso Chile to discuss gas hydrates and geothermal energy and stressed the importance of the valuable contacts made through CPC. He noted that Director Peter Cook of Australia has continued work on carbon sequestration.

Papua New Guinea-Michael McWalters reviewed the current state of the oil and Gas Industry in Papua New Guinea and the establishment of a Mineral Resource Authority to license offshore for subsea minerals. He also affirmed the difficulties in exploration for fresh water in the country.

NORTH AMERICA

USA-Pat Leahy, Vice President for North America, reported that owing to cooperation with former CPC Director A. Guzman the USGS was able to publish an Oil and Gas Assessment of the Burgos Basin. Michele O'Meara has been appointed to replace Nancy Zeigler in the CPC Secretariat. Chairman Schneidermann expressed CPC's thanks to the USGS for hosting the Council's Secretariat and for the fine work performed by Nancy during her tenure. Leahy noted that the US National Academy of Science expects to have strong representation from the US scientific Community at the CPC sponsored Energy Symposium in Beijing. Having just attended the CPC sponsored Water and Energy Workshop at UNAM, he suggested that CPC should be more proactive on water issues in the Pacific. Jean Weaver outlined for the Directors the recently installed Caribbean Tsunami Warning System in which the USGS plays a major role. Leahy closed by saying that his agency believes that climate is changing and CPC should look into a workshop dealing with the interactions between climate and energy.

Mexico-Gerardo Hiriart, CPC Director of Renewable Resources, discussed the UNAM-Engineering Institute's activity in the Sea of Cortez related to desalinization and renewable energy projects. CPC co-sponsored the recent workshop in Mexico City on Water and Energy.

Canada-Vaughn Barrie discussed the recent focus by the Canadian Government on climate change and renewable energy. Researchers are currently working on a 700 megawatt wind farm (300 turbines). Preserving marine habitats for benthic fish habitats is an area of concern and collaborative programs are underway with the Australian Geological Survey on habitat mapping and natural hazards in the Pacific.

ASIA

Thailand-Chen Shick Pei, Vice President for Asia was unable to attend the meeting and sent his apologies. He is resigning from the Board of CCOP and retiring after a successful tenure as Director General of this Institution.

Japan-Yoshihiko Shimazaki gave a brief report on the follow up to the CPC co-sponsored Aggregates Workshop held in Fiji last year.

Russia-Oleg Chudaev discussed the current status of the oil industry in his country. He also noted that President Putin had earmarked the equivalent of US 10 billion dollars for government investment in the Vladivostok region in the next 4 years. Chudaev plans to host a workshop on water issues in the fall of 2008 and will seek CPC sponsorship. He reported that he has been promoting RIMSIM with natural disaster agencies in his country and is working on ocean energy and geothermal energy projects.

China-Zhai Guangming advised that his team had worked hard to set up the organization, academic commission and meeting program for the CPC co-sponsored Energy Symposium to be held in Beijing Oct. 16-18, 2007. The first Circular had been mailed out and the proposed technical program prepared. The meeting program was tabled for review in the afternoon session. Chairman Schneidermann expressed the Council's appreciation and thanks to the Chinese team for their efforts to ensure a successful Symposium.

FINANCIAL REPORT

CPC Account- After deducting expenses for the current Directors Meeting in Morelia, total balance in this Account is \$ 35,034.20. CPC expenses for this meeting totaled \$10,983. Gerardo Hiriart, Maria Villoreal de Hiriart, Guillermo Salas and their corresponding Institutions were again thanked by the Directors for their support of this Meeting.

PTR Account- Balance in this Account totals \$ 44,508.05.

The Directors expressed thanks to Chevron for a donation of \$ 25,000 for its continuing support of the Council's programs.

The morning session concluded with a showing of a video clip about CPC prepared by the "Heartbeat of America" organization for US television audiences. It was suggested that an edited version of the clip be added to the CPC website along with additional information about the current slate of CPC Directors. Howell agreed to work with the "Stanford video" staff to edit the clip to produce a product that would showcase the activities of the council. Approximate costs for this editing is estimated to be \$1000. Chairman Schneidermann thanked Gary Greene and David Howell for their roles in the video clip project. He also called for better communication among the Directors and the need to submit progress reports on CPC related projects regularly to the Secretariat.

BEIJING ENERGY SYMPOSIUM

The afternoon session concentrated on reaching a consensus among the Directors about the topics for the technical program and other aspects of the Beijing Symposium.

It was agreed that Symposium Topics would be as follows:

Current Situation of Pacific Oil and Gas Exploration and Production

Latest Technology in Oil and Gas Exploration and Development
Offshore Petroleum Exploration and Development Technology
Potential Alternate Energy Strategies and Tradeoffs
Regional Cooperation for Energy Development

Framework of the Symposium would be as follows:

Plenary and Topical Sessions
Keynote Speakers and Thematic Presentations
Presentations will be by Invited Keynote Speakers
An Abstracts Volume will be provided to Attendees

Aims of the Symposium would be as follows:

To Study Energy Distribution and Future Demand, particularly Oil and Gas
To Strengthen Regional Understanding of Energy Development and Associated Impacts
To Discuss Alternative Potential Energy Sources in the Pacific
To Exchange Technical, Economic and Management Ideas and Experiences in Energy Exploration and Development
To Promote Pacific Energy Planning and Achieve Sustainable Energy Security for Future Years (2007-2020)

TUESDAY, MARCH 27, 2007

Chairman Schneiderman opened the session and then turned the meeting over to David Howell and Zhai Guangming to discuss the agenda, technical program and speakers for the Beijing Symposium. Results of this session and the corresponding program decided for the Symposium are include as Attachment "2" to these Minutes.

The afternoon was devoted to a field trip to the Tiripetio Convent and Museum, followed by a visit to the town and nearby lake of Patzcuaro.

WEDNESDAY, MARCH 28, 2007

The morning session was convened in the auditorium of the Centro Cultural Universitaria. Guest Lecturer, Dr. Katherine Ettinger, Dean of the Graduate School of Architecture, UNAM, highlighted how an area and a city such as Morelia gets selected as a "World Heritage Site". A second Guest Lecturer, Dr. Francisco Escandon, Director General of the Geological Survey of Mexico gave a presentation on "Mining in Mexico- from Pre-Hispanic Times to Present". Following these speakers, Chairman Schneiderman presented CPC Merit Awards to the following;

Gerardo Hiriart-for organizing and convening the Energy and Water Symposium at UNAM in Mexico City.

Maria Villoreal de Hiriart-for organizing all details of the CPC 2007 Annual Meeting of Directors in Morelia.

Mauel Arguello Rodriguez-for his work on RIMSIM and translation of the Game into Spanish.

Dr. Sergio Alcocer M., Director del Instituto de Ingenieria, UNAM, for his help as host and sponsor of the Water and Renewable Energy Symposium at UNAM and his support of this meeting in Morelia.

The Michel T. Halbouty Award, for a young person who exemplifies the tenets of CPC within the Region where the Annual Meeting of Directors is held, was presented to

Salvador Espinola Hernandez of UNAM for his work and dedication to resolving problems in the applications of Geothermal Energy. This award also carries a stipend of US\$ 500.

Following the Award Ceremony the morning meeting reconvened in the Meeting Hall of the Hotel Alameda to hear and discuss additional reports from Directors:

China, Beijing Energy Symposium- The Chinese team will set up a website for the Beijing Meeting .The final Symposium Brochure will be completed by Michael McWalters and he will communicate directly with the Chinese team. CPC Chinese contact for the Symposium will be Wong Guangjun (wgjun@petrochina.com.cn) and David Howell for the US (dghowell@stanford.edu). Registration on line will be \$300 and on-site \$400. Accommodations and Symposium Venue will be "The Beijing Oriental Sun City Guest House International Hotel" and the email address for the Symposium will be cpcenergysym@petrochina.com.cn.

Japan-Yoshihiko Shimazaki amplified his earlier report on activities in Japan by noting that his colleagues think that gas hydrates should be one of the topics discussed at the Beijing Symposium. He also reported that the Government of Japan had conducted a RIMSIM this past year and concluded that local culture needs to be considered in the Game to make it more applicable. Non-ferrous (copper, lead, zinc) mining companies in Japan are actively seeking new sources of supply abroad and the Government is trying to diversify the country's sources of oil supply from abroad. The other CPC Director from Japan has recently been transferred out of the Geological Survey of Japan and the Survey is looking to replace him on the CPC Board.

PROPOSED WATER WORKSHOP

Oleg Chudaev proposed to convene under CPC auspices a "Water Workshop " in Vladivostok in early September.2008. He has already contacted water professionals in the US and China about such a meeting and advised that water quality was a major issue in eastern Russia. Pat Leahy suggested it would be a worthwhile endeavor for CPC to characterize the water situation in the individual nations around the Pacific. Manuel Arguello suggested that we also consider water transport between nations. David Howell suggested that Water is such a broad issue CPC would probably have to limit somewhat the scope of the Workshop. The Directors approved the concept and appointed a team of Leahy, Falconer, and Arguello to work with Chudaev to create a workable agenda for the workshop.

CPC 2008 DIRECTORS MEETING

At the 2006 Directors Meeting in Wellington New Zealand, Oleg Chudaev, although he favored hosting the meeting in 2008, volunteered to hold the 2007 Directors Meeting in Vladivostok in an effort to move the meeting around the different quadrants of the Pacific. His offer was tabled for reconsideration this year after Gerardo Hiriart offered to convene the 2007 meeting in Mexico. Chudaev indicated that good hotels, meeting space and airline connections to Vladivostok are readily available and his Institute is ready to make all the arrangements. He would like to hold the Water Symposium prior to and in conjunction with the Directors Meeting. On motion made Vladivostok was approved as

the site for the 2008 Directors Meeting to be held in conjunction with a Workshop on Water issues.

The afternoon session convened with a review by Vaughn Barrie of the CPC co-sponsored workshop "Geohab 2007" on "Marine Benthic Habitats of the Pacific", a follow up to the workshop held in conjunction with the 2006 CPC Directors Meeting in Wellington New Zealand. Geohab 2007 will be held in Noumea New Caledonia in April/May of this year and is also cosponsored by the Government of New Caledonia , SOPAC, Moss Landing Marine Laboratories and Monterey Bay Aquarium Research Institute. The initiative is to combine ocean floor mapping technology and apply it with biological expertise to better understand renewable (fisheries) resources and not conflict with non-renewable ocean floor (minerals) resources. The concept is that to support fisheries, habitat must be managed. The workshop is oversubscribed and CPC can expect to receive a portion of the expected surplus of \$30,000 for their support.

FUTURE OF CPC

Consensus of the current Directors is that CPC plays a valuable role in forging personal contacts and disseminating information about natural hazards and earth system resources in the Pacific that other entities in academia, industry and government do not provide. The format that has evolved over the past 5 years of holding a major workshop in conjunction with the Annual Directors Meeting appears to work well. Individual Directors have taken ownership of proposals for Workshops and Symposia and CPC has supported them. Still needed is these Workshops and Symposia to be funded by others to the extent a surplus can be recaptured by CPC for future projects. Rehab 2007 is expected to meet this objective. Workshops associated with other big meetings in the Pacific are another possibility to generate additional funds for CPC Projects. Past Workshops have always been to some extent at CPC expense with no return other than goodwill to the Council.

New Directors are needed to keep the Council well balanced in each Region. The Director from Peru is unable to continue and Moyra Gardewig and Pat Leahy agreed to cooperate in finding a replacement. Leahy will follow up as well on a potential candidate from the Philippines. Chen Shick Pei will be contacted about his replacement, as Director of CCOP and Yoshihiko Shimazaki will follow up on a replacement Director from the Japanese Geological Survey. Oleg Chudaev suggested a viable candidate from South Korea. CPC should look for Directors who can pay their own way and are in a position to organize future meetings in their own countries.

The meeting closed with discussion about a possible workshop to be held in conjunction with the 2009 Directors Meeting. Guillermo Salas suggested a workshop focused on earth science education in the Pacific Region or education in social and economic issues as they relate to Earth Sciences with a plan on getting students more involved in CPC. Guillermo Salas, Robin Falconer, Moyra Gardeweg, Manuel Arguello and David Howell were nominated as a working team to explore this possibility to which Stephan Graham, in absentia was also added.

Prior to closing, Nancy Zeigler was elected "Executive Secretary Emeritus" of the Secretariat and a motion of thanks to her was approved for her work as the Executive Secretary of the Council Secretariat since 2003 when it was first hosted by the USGS in Reston, Virginia. Jean Weaver was thanked also by the Directors for her work as the scribe responsible for notes of this meeting.

ACTION ITEMS FROM THE MEETING

- *Better Communication among Directors in between the Annual Meetings**
- *Timely Progress Reports to the Secretariat, particularly from the various working teams**
- *Funding for CPC**
- *Promote the Beijing Symposium**
- *Revise and update the CPC website**
- *Proposal for 2008 Vladivostok Water Workshop**
- *Proposal for 2009 Education Workshop with Student Involvement**
- *New Directors**

For the Board of Directors
Nahum Schneidermann

Erick Mack prepared these Minutes of the 2007 Annual Meeting from notes of the proceedings by Jean Weaver. June 15, 2007