AIPG's Conference brought Members, officials, and specialists together to exchange information and discuss issues. Geologic knowledge and practice can contribute to evolving statutes and policies governing the Outer Continental Shelf and its critical resources.
President's Message
Report on the 1990 Governmental Affairs Conference

Susan M. Landon

On April 2, 1990, AIPG hosted a Governmental Affairs Conference in Washington, D.C. The theme of the conference this year was the Outer Continental Shelf and our Keynote Speaker was Manuel Lujan, Jr., Secretary of the Interior. His comments are published in this issue of TPG. The remainder of the morning program was designed to put the OCS in perspective with respect to the current and developing governmental policies, the geological framework, and economic and environmental reality.

Charles G. Groat, Louisiana State Geologist and Vice Chairman of the OCS Policy Committee, presented an overview of the resource potential, status of exploration and development, and the position of the states. Dr. Groat made the point that the significant resource potential of the OCS is not exclusively an oil and natural gas issue, but that resources include sulfur, aggregate, minerals, and metals (phosphate and manganese).

The revenue from the Gulf of Mexico is second only to the IRS in contribution of money to the U.S. Treasury, but the states receive a very small percentage of the income generated by exploitation of the resources off their coast lines. As a result of offshore activity, the state assumes responsibility for the staging areas, added work force, and strains on services which must be supplied to people and industries with minimal economic benefit. The state coastline also assumes the risk of environmental impact and the remote chance of a catastrophe. Dr. Groat pointed out that there was little in development of offshore resources for the state except for negative consequences.

Dr. Ina Alterman, Senior Program Officer with the National Research Council of the National Academy of Sciences, reported on the procedures which had been utilized by the Committee on Undiscovered Oil and Gas Resources. Charles J. Mankin, CPG 1415, is the Chairman of this Committee. Dr. Groat is also a liaison member of the Committee. To date the Committee had, among several reports in preparation, finalized, "Evaluation of the Hydrocarbon Resource Estimates for the Offshore Areas of Northern and Southern California and Florida South of 26 degrees Latitude." This report is available from the Board on Earth Sciences and Resources, 2101 Constitution Avenue, N.W. Washington, D.C. 20418.

The Department of Energy released their interim report on the National Energy Strategy the same morning as AIPG's meeting and Linda G. Stuntz, Deputy Under Secretary of the Office of Policy, Planning and Analysis, came directly from the press conference to report on the status of the Strategy. The interim report is a summary of the comments which were collected by the Department of Energy from the general public at a series of meetings conducted across the country. The Department of Energy must now distill those comments and integrate them with the goals of the Administration to develop the National Energy Strategy later this year. The comments made by Secretary Stuntz were direct and to the point: although a balance must be reached, domestic energy security is the primary goal of any strategy to be adopted.

The concept of a balanced approach to exploration and development in the OCS was addressed by Daniel P. Beard, Staff Director of the House Interior Subcommittee on Water, Power and Offshore Energy Resources. From Mr. Beard's perspective on Capitol Hill, Congress is listening carefully to constituents' perceptions of environmental hazards associated with petroleum and may be expected to side with environment over development in all OCS issues.

The Conference concluded with a luncheon address by Barry A. Williamson, Director of the Minerals Management Service. MMS is the organization charged with the administration of the leasing program in the OCS and is currently attempting to develop a new 5 Year Plan of lease areas and schedules. The climate in which the MMS is currently operating is difficult and the Administration will have to address such issues as equitable revenue sharing with the states.

The Conference was attended by approximately sixty individuals representing agencies, congressional staff, press and our own Members. Our goal, of providing accurate information on issues which impact the profession of geology to those people who make public decisions and policy, was attained. Thanks to all those individuals who contributed to a successful Conference, especially William L. Fisher, CPG 2398, who worked on the program and the Headquarters staff who made everything work.

Photographic coverage of the Conference was by Tamara Liller.
I am happy to have this opportunity to address this conference of the American Institute of Professional Geologists. I'm especially glad that you have asked me to address what I believe is one of America's most important frontiers - the Outer Continental Shelf.

As a nation, we are becoming increasingly more aware of our need to exercise better care over our environment. We recognize that there are serious environmental problems facing our Nation, and that we must clearly define those problems and decide what we are going to do to solve them.

Maybe it comes from my service on the House Science, Space and Technology Committee or maybe it's just common sense but I believe we must seek out the most reliable scientific data possible in determining the scope of those environmental problems before we go off fighting castles in some Don Quixote fashion.

Geology encompasses all aspects of how humans interact with the planet Earth. The earth's inorganic inventory - the water, mineral and energy resources - provide humans with the raw materials used in every day living, everything from tableware to advanced computers and the fuel to run our factories and automobiles.

Geologic resources are often hidden buried in the soil, in rocks, or found under ocean waters. The geologist is the detective looking for clues as to where these resources are hidden.

I am proud of the work being done by our Interior Department scientists. Our Minerals Management Service employs more than 300 geologists, geophysicists and petroleum engineers in their resource evaluation program.

The work MMS is doing in estimating possible resources for lease sales, developing fair market values and reserve estimates is critical to our OCS program.

This afternoon, you will be hearing from our MMS Director, Barry Williamson, who manages what I believe is one of the most professionally astute agencies in the Federal government.

Our Geological Survey is also making important contributions in this area. The Survey has mapped and characterized our mineral and energy resources in the United States Exclusive Economic Zone (EEZ), encompassing more than 3.5 million square miles of seabed.

We are using sonar to map the EEZ sea floor. But before we can utilize this knowledge, and begin to talk constructively about expanding our OCS program, we have a lot of work to do on the nonscientific side of things. We must convince the American people that these offshore resources are vital to our Nation's energy needs, and that they can be developed in a sound environmental manner.

Our Minerals Management Service has this goal as a top priority. President Bush has said that, "Our environment and our economy are interdependent. The interests of environmentalists and entrepreneurs must be held in common."

I don't believe there is a person in this room who doesn't realize the new prominence of environmental responsibility in our society. This will be the environmental decade. It should be. Those industries that succeed, will be those that act most decisively in promoting responsible, environmental practices within their operations.

America is used to running on a relatively cheap, secure, but not completely reliable supply of energy. The plain truth is that without a secure energy future, America's future cannot be secure.

We are engaged in efforts to develop a National Energy Strategy. In fact, an interim report is scheduled to be released today, with the final report being issued in December of this year.

At the Department of the Interior we have a particular interest in the development of this strategy. Much of our domestic energy production comes from Federal sources: nearly 20 percent of our coal, 15-20 of our oil, and, as you well know, 30 percent of natural gas production.

These energy resources come from Federal lands, onshore and offshore, including the 1.4 billion acres of the submerged continental shelf. Both the lands and the vital resources contained within them belong to all the American people. So, management of this land and these resources must be conducted by policies that make the most sense for all our people.

Many view these public lands as the staging area for a collision between environmental and energy interests. This has been particularly evident with regard to the Outer Continental Shelf. In reality, these public lands must be a common ground where energy production and sound environmental responsibility are carried out in harmony.

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continued from page 3

In the Seventies, with gas lines, the emergence of OPEC, the printing of rationing coupons, and shortages of home heating fuels, Americans were committed to pursuing a policy of Energy Independence - whatever the costs.

Today, with the Exxon Valdez accident and a rash of other tanker spills, medical wastes on our beaches, and toxic waste dumps in our neighborhoods, Americans are expressing their commitment to preventing the threat of pollution - whatever the costs.

The American public views the threat to our environment as more real than the threat to our energy supplies. And this perception is driving policy decisions everywhere.

And if you think that the Congress is going to buck this trend and vote the other way, and try to educate their constituents later, I can tell you from experience - that it's just not going to happen.

Daniel Webster said "an enlightened democracy depends on a well-educated electorate." I'm afraid, that so far, we have not done a great job in educating the public about our resources, their potential, and the important benefits our OCS program bestows on all our people.

The future of America's energy production is important to every American. By working together, I'm convinced we can form a new consensus in America. It must be a consensus that puts our commitment to the environment and energy security above partisan rancor. The goals are too important to be thwarted by negativism.

The magnitude of our mission was put into perspective by a former Director of the Geological Survey, the late Dr. Vincent McKelvey. He observed, that as our industrial society continues to increase its reliance on mineral resources over the next several decades, we will need to find and produce as many raw materials to fuel our economy as we consumed during the previous 200 years.

This is a great challenge - especially in light of our commitment to the environment. But, it is not an impossible challenge.

I applaud the contributions America's geologists are continuing to make in the advancement of our society. As we forge on into the uncharted waters of the future, we will continue to rely on your skill and expertise.

Thank you for what you are doing and thank you for having me here this morning. ●

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Excerpts from the Conference

Excerpts selected by the Editor from the addresses of other conference participants follow. The full texts can be obtained from AIPG Headquarters.

The Outer Continental Shelf

Charles G. Groat, State Geologist of Louisiana
Vice Chairman, OCS Policy Committee

...The majority of the oil and gas resources are in the Gulf of Mexico. Now that doesn't mean there aren't resources in other places. There is significant potential in the Pacific and the Alaska area. There is potential in the Atlantic ...and this is one of the issues that we face up to in the future of OCS development...

...We tend to think of the OCS only in terms of oil and gas. Those are the most contentious issues that surround the OCS but we also have to recognize the fact that there's a significant non-fuels mineral potential in the OCS.

...The issue surrounding hard mineral development is the OCS Lands Act itself. Is it the appropriate vehicle for developing hard minerals? The Department of Interior says yes and they promulgated regulations to deal with exploration and development. Many states say no. The industry tends to say no.

...The states share in some fashion in onshore resources on federal lands in lieu of taxes, they don't share in OCS revenue... So there is still a large, strong contingency of people in the states who feel that there isn't anything in it for them to see the OCS developed.

...we've got to find a way to convince people ...to understand that less development offshore means more imports by tankers, means more chance of risks from oil spills. We also have to recognize that transportation from the OCS is of greater concern to most people than is the production.

...we're hoping that the national problem can be solved, that the public can be educated, that OCS development can, as it should, because its justified, take place around the margins of the country. And secondly, that the recognition of the importance of the Gulf, the fact that most of the production and future is in the Gulf, is recognized by the federal government, and the cooperation with the states who support that program increases so that we can be true partners. ●
The National Academy of Sciences Study

Ina Alterman, Senior Program Officer
National Research Council

...In 1989, at the request of the USGS and the MMS, the NRC convened a committee to review the manner in which the USGS and the MMS arrived at their conclusions in the National Assessment of Oil and Gas Resources, for undiscovered oil and gas resources. Shortly after convening that committee, MMS requested of the National Research Council an evaluation of the data base for the George's Bank area of the North Atlantic OCS. And that was to address issues related to the moratorium on exploration and development in that area...When the President's Task Force was organized in early of 1989, MMS again asked the NRC to evaluate the data base and resource evaluation methodology of the three lease sale areas of interest at the time, Northern California, Southern California and Southern Florida Basin south of latitude 26. That study was released in October...

...the report does conclude tentatively, that the various procedures used by MMS in its resource estimates, tend to produce conservative numbers, at least in the California OCS. And some the practices that they believe lead to this kind of conservative approach, are the emphasis on structural traps, and the deemphasis on stratigraphic traps and other conceptual plays, the multiple risking approaches, and the economic screening.

...There is presently a report being reviewed on the resource data base of the North Atlantic, George's Bank Basin, that is due at the end of April. And the final report for the National Assessment with detailed analysis of MMS methodology on this OCS resource evaluation will be released in the late spring.

National Energy Strategy

Linda B. Stuntz, Deputy Under Secretary
Department of Energy

...First and I would say the overwhelming theme that we heard... We need to increase the efficiency of energy use in all sectors.

...Second, secure future energy supplies.

...Third, we have to respect the environment.

...Finally, we need to fortify our foundations. And again this group is very important. What do I mean by that? Well we mean basic science and research.

...What are the next steps? Really, the hardest choices, the real choices, are ahead of us. This document that we released today does not make conclusions, does not contain recommendations... We need response, reaction, and public debate on this interim report and on additional documents that will be coming out in the months ahead. ...we expect to present to the President hopefully early in December a final report that will lay out for him a relatively small sets of options on a panoply of issues across the board. Depending upon his views of those options we would expect to publish the National Strategy policy sometime between January and March of next year.
A Political Prospective

Daniel P. Beard, Staff Director
House Interior Subcommittee
Water, Power and Offshore Energy Resources

...Our subcommittee has jurisdiction for the House Interior Committee for the OCS program. OCS jurisdiction rests with our committee... and is shared with the Merchant Marine and Fisheries Committee.

...There are some shrill earth-firsters, but the real problem with the OCS program comes from a growing legion of establishment politicians from all coastal states who have raised problems with the program, who have not received fair treatment from the department or the agencies or the industry, and those politicians have struck back. Where are we today? I think the program has essentially ground to a halt. We've almost reached a state of political gridlock...

...I think all of us are searching for ways in which we can get this program unstuck. We all realize the importance of the industry and the program, its a significant source of oil and gas production in this country, it is a significant counterbalance to increased imports, it is also fundamental to energy security. So there is no doubt in anybody's mind, at least on Capitol Hill, that this program must be improved...

...first is a question of whether or not to repeal the area-wide leasing concept.

...The second area of concern and focus will be how can we give the states a meaningful role in the administration of this program.

...A third area of concern and focus will be the Environmental Studies Program.

...A fourth area will be to examine the whole question of changing the burden of proof.

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The Future of the OCS Program

Barry A. Williamson
Director, U.S. Minerals Management Service

...I want to emphasize the importance of the OCS in the Nation's energy future. The OCS accounts for one-eighth of domestic oil production and one-fourth of domestic natural gas production. We believe the OCS holds undiscovered, conventionally recoverable resources of 16 billion barrels of oil and 145 trillion cubic feet of natural gas - about one-third of the undiscovered recoverable resources estimated to remain in this country. Access to these resources, however, will require meeting the public's demand for environment protection.

...The OCS program has a bright future. Trends in the energy markets and the need for clean fuels like natural gas point to continued offshore activity.

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Summary of Executive Committee Meeting

Larry R. Rhodes, Secretary

The Executive Committee held its quarterly meeting on March 31, 1990, at 8:00 AM in Washington DC. The following is a brief summary of the business conducted.

The 1990 budget was approved. Additional funds were added over last year's budget for:

- Hiring an additional staff member for the Headquarters office
- Purchasing a new traveling display unit
- Producing a media relations kit for the sections
- Starting an advertising program for TPG and the Directory
- Starting a continuing education program.

Thanks to extra efforts made by the Executive Committee and Headquarters staff, funds were reduced from last year's budget for the general expenses at Headquarters and Executive Committee travel.

Editor Robert R. Jordan indicated in his report that advertising revenues from the 1990 Directory were below expectations, but represented an appropriate first step into advertising. Executive Director William V. Knight advised of plans to further develop advertising in TPG and the Directory.

Editor Jordan brought to the Committee the Virginia Section's request for a publication policy limiting either the content or distribution of TPG. After considerable discussion it was determined that no changes in policy are desirable.

Executive Director Knight discussed the "State-Net" information service, which produces information on both state and federal regulations and legislation. It was decided that the Institute will subscribe to "State-Net" for a one-year period. Information from the service will be distributed to the respective Sections as appropriate. Director Knight discussed a variety of group insurance plans, a legal plan, and a portable pension plan which are under consideration for the membership.

President Susan M. Landon submitted the slate of officer nominees for 1991 which was prepared by the 1990 Nominating Committee (chaired by Past President Richard J. Proctor). The slate was approved and consists of:

President-Elect
Daniel N. Miller, Jr., CPG 64, Wyoming
Russell G. Slayback, CPG 2305, Connecticut

Vice President
Robert H. Fakundiny, CPG 4977, New York
R. Stephen Friberg, CPG 6502, Nevada

Treasurer
Dale O. Reese, CPG 2381, Texas
Bruce H. Mason, CPG 3762, Indiana

Editor
Thomas Z. Jones, CPG 3441, Georgia
Frank S. Turek, CPG 4788, Arizona

Advisory Board Representative Lawrence Austin discussed the "Affiliation with Young Geologists Program." His recommendations for implementing the programs were presented. More information will be forthcoming to the Members as soon as procedures are set and application forms can be produced. "Student Affiliate" and "Candidate for Certification" are the new categories of affiliation.

The proposed changes to the Public Mining Law were discussed, and an ad hoc committee will prepare an AIPG position paper on the subject for Executive Committee consideration.

The meeting was adjourned at 5:58 PM.
FROM WASHINGTON...

E. G. Newton & Associates, Inc.

U.S. Coal Resources

The U.S. Geological Survey estimates that the U.S. has about 1.5 Tt (1.7 trillion st) of identified coal resources. These are coal deposits whose location, rank, quality, and quantity are known from geologic evidence and supported by engineering measurements. However, if likely, but as yet undiscovered coal deposits were included, the total resource base may be nearly 3.6 Tt (4 trillion st).

The Energy Information Administration reports the U.S. has 431 Gt (475 billion st) of demonstrated coal reserves. This is coal that could potentially be mined economically using existing technology. At current consumption levels, that is enough coal for 300 years. The equivalent energy value is more than triple that of the world's known oil reserves.

The World Energy Conference estimated that U.S. coal reserves account for 35 percent of total world proved, recoverable reserves, and has 25 percent of the world's proven petroleum.

Other pertinent coal facts:

America's 431 Gt (475 billion st) of demonstrated coal reserves are 43 percent greater than the world's combined known oil and natural gas reserves.

Railroads transport about 60 percent of total U.S. coal production. The remainder goes to market by barges, trucks, conveyors, tramways, and slurry pipelines.

Most coal used in the U.S. - about 88 percent - is used by utilities to make electricity.

Between 1980 and 1988, coal used by utilities increased substantially - by about 170 Mt (187 million st). But, during the same period, sulfur dioxide emissions from coal-fired plants declined eight percent.

[Minning Engineering]

Arizona Land Use - Stars Versus Squirrels

A dispute over the use of the peak of Mount Graham, northeast of Tucson, involves an unlikely set of protagonists. Not the environmentalists against "rapacious developers" this time, but environmentalists against astronomers. It seems that the summit of Mount Graham is one of the few places in the continental United States where the heavens can be observed without having to contend with light pollution, the unnatural glow in the sky that wipes out faint stellar objects.

A consortium of astronomical heavy hitters, including the University of Arizona, the Smithsonian Institute, the Max Planck Institute, and the Vatican Observatory, wants to put a $200 million world-class observatory on an eight-acre site on the peak. It has already gotten the right to build on the site, via an act of Congress, and hopes to break ground this spring.

But, the opposition is formidable. It includes environmental activists, the Apache tribe, and the Mount Graham Red Squirrel. The environmentalists claim that the observatory will despoil a pristine area that's home to many rare species, including the squirrel, of whom only 100 are believed to exist. The astronomers pooh-pooh that, saying they and the squirrels will co-exist quite nicely. The Apaches may be another matter. To traditionalist tribe members, Mount Graham is home to the mountain spirits, who taught their ancestors how to hunt. Some hint dire events may follow if the spirits are disturbed.

[Land-use Planning Report]

Plan For Native American Mineral Royalty Payments

A plan to improve royalty payments to native American tribes for minerals produced on their land has been released by the Minerals Management Service. The report recommends that a study be conducted to show whether MMS should disperse royalties directly to the tribes rather than turning the money over to the Bureau of Indian Affairs.

MMS developed the plan in response to a report from the Senate Select Committee on Indian Affairs. The report was critical of the Interior Department’s system for dispersing to the tribes royalties paid by companies who drill and mine on Indian leases. MMS collects the royalties and is responsible for making sure the correct amount is paid, but the payments are distributed to the tribes by BIA.

The plan was developed by a task force that included representatives from MMS, the tribes, industry, and state governments. Among the recommendations in the report are expediting auditing of Indian leases, working with BIA to improve explanation-of-payment reports, hiring a bigger staff to resolve individual royalty payment problems, and performing a study to see if an MMS takeover of dispersing the funds would improve the system. The report also recommends manual, rather than computerized, monitoring of severance tax deductions on Indian leases and instituting appropriate enforcement actions. Legislation is recommended to establish civil penalties on solid mineral leases for intentional violations of the law, similar to the penalty system for oil and gas leases. Amendment of the Federal Oil and Gas Royalty Management Act to provide coverage of Indian oil and gas leases under the rewards program is also a recommendation.

Some of the ideas in the so-called "action plan" are already being implemented, MMS said.

[Inside Energy]
Earthquake Hazard Reduction Training

The USGS, in cooperation with the Central United States Earthquake Consortium recently conducted a series of comprehensive training courses in Memphis, Tennessee. These courses were designed to cover all aspects of earthquake hazard reduction for the central United States, which includes the states of Missouri, Illinois, Ohio, Kentucky, Arkansas, Tennessee, and Mississippi, with emphasis on the New Madrid seismic zone. The four 1-day courses were held between October 17, 1989 and January 9, 1990, and emphasized the goals of the International Decade for National Disaster Reduction.

Five Mineral Processing Wastes Now Under Strict RCRA Control

The Environmental Protection Agency (EPA) has placed five mineral processing wastes under the Resource Conservation and Recovery Act (RCRA). The wastes include sulfate processing waste acids from titanium dioxide production; process waste water from primary lead production; air pollution control dust sludge from lightweight aggregate production; sulfate processing waste solids from titanium dioxide production; and furnace offgas solids from phosphorous production. Generators of the five wastes must now keep detailed records of quantity of waste generated; meet labeling, storage, transport, and disposal standards; and submit annual reports to the EPA or designated state agency.

Selected Federal Register Notices (3-90)

EPA

MMS
Proposed rule 30 C.F.R. Part 250 Oil and gas and sulphur operations in the Outer Continental Shelf. Contact: Gerald Rhodes (703) 787-1600. 55FR8485.

DOI

DOE

OSMRE

EPA

DOE

Forest Service
Final rule 36 C.F.R. Parts 228 and 261 Oil and gas resources. Effective date: April 20, 1990. Contact: Stanley Kurecal (703) 235-9715. 55FR10423.

EPA

Decision on Bridger-Teton Oil and Gas Leasing

The Forest Service has issued a final decision on the Bridger-Teton National Forest land management plan that will allow leasing for oil and gas exploration on 1.9 million acres of the forest in Wyoming, outside of wilderness areas. However, 42 percent, or 796,000 acres will be unavailable for surface occupancy due to the presence of steep slopes and unstable soil conditions. The plan development, a joint effort between the FS and BLM, requires consideration of additional environmental analyses prior to leasing.

Waste Not!

According to EPA data, each American citizen annually contributes 1300 lbs of "garbage" to local dumps. A group of "landfill archaeologists" at the University of Arizona studied the contents of a variety of landfills. Their findings indicate that 41 percent of landfill volume is combined paper and paperboard items; 14 percent is newspapers; 1.5 percent is disposable diapers; and less than 1 percent is fast food packaging.

To correct production errors in the March "From Washington," please note that Rep. Arthur Ravenel is an advocate of the Arctic Wilderness Bill and Rep. Don Young is from Alaska.-Ed.
Registration: Give Us Your Thoughts

by

William V. Knight, Executive Director

It has now been a year since I became your Executive Director. If you read TPG, you know what I have been doing, so there is no point in boring you with a recapitulation. In my travels about the country, I have found a wonderful group of very nice people who are deeply concerned about our profession.

Far and away, the issue of most concern to our Members is registration and its nuances. I have encountered a wide variety of views, among Members, non-members and the general public, concerning both registration and specialty certification of geologists and other professionals. It is a subject that inevitably arises wherever I go. This comes as no surprise to me and probably to most of our Members.

The purpose of this column is to open discussion in TPG among our Members as to the course AIPG should follow in the near term and, also, in the longer term. These two may not necessarily be the same or mutually exclusive. I will try to set the stage in the following paragraphs, advocating no position myself. Then, you Members should address letters to the Editor on the subject as you view it. This discussion must be based on logic, reality, and the interest of the total profession, not on emotion and narrow individual self-interest. We seek light, not heat. (A word of advice: Try to keep your letters to one typewritten page, concise and well reasoned. We will want to print as many as possible, but editorial selection and abridgment obviously will be necessary. I know our Editor can be relied upon to present a balanced and representative selection.) This is not an opinion poll. It is a search for logical reasoning.

A group of geologists from various organizations, including AIPG, is currently struggling to draft model legislation. Your timely comments should help them significantly.

As we move forward, the future existence of our profession, as a profession, is at stake. Events are moving rapidly. We cannot afford many mistakes, if any.

We have been told by some in other professions that, to quote one, "Geologists have given up more work than they will ever have." And those saying this have thanked us. Because, as they point out, they are reservoir and geotechnical engineers, soil scientists, hydrologists, and others whose professions may not now exist or be as broad if geologists had not abandoned the field. With the developing trend to register appraisers (including oil, gas, and minerals) and environmental consultants are we in danger of giving up more?

On one end of the registration/certification/definition spectrum is outright, vehement opposition to anything form of statutory control, including "definition." On the other end is aggressive advocacy of registration, with examinations and continuing education required for both initial and continued registration, along with required specialty certification, and required professional liability insurance or bonds.

There are all shades of differences between these two extremes. The entire profession is struggling with the question of where we should finally land. The course we take must be that which serves the profession best while still protecting the public interest.

There is a saying in medical circles, "First, do no harm." This might be a starting point for geologists when considering the various options open to our profession. We certainly do not want to harm ourselves or our colleagues in the practice of our profession. Nor do we want to cause harm to the public.

The current position of AIPG is stated on page 45 of our 1990 Directory. In summary, we believe our own certification program best serves both the profession and the public. We do recognize that some statutory standing may be necessary for some aspects of practice in some jurisdictions. Where this is true, we will support our Members in efforts to obtain that which is appropriate to that jurisdiction. Further, we advocate uniformity of standards so that geologists' mobility will not be impeded.

AIPG has no policy on registration or certification of specialties, except that which may be implied by our other policies. We are, after all, an organization representing all specialties within the geological profession.

Perhaps we can learn, and profit, from two other professions with long histories of specialty development.

The American Medical Association takes the position that all physicians should be capable of providing for the basic medical needs of the patient, to recognize those situations in which specialized capabilities are required, and to recommend specialty consultation when it is needed. They oppose specialty certification by statute or regulation, taking the position that those who practice the specialty are best qualified to define and administer it.

The National Society of Professional Engineers takes a similar position. They "...support the identification of engineering specialties through recognized certification programs sponsored by technical societies on a voluntary basis as a means of identifying competence in a specialized field of engineering following establishment of basic qualifications through registration under the applicable state engineering registration laws."

Unlike geology, both of these professions have long had statutory requirements for licensing or registration in all states. In neither profession are specialties commonly defined by statute. The practices of these professions are very different from geology in some ways, but very similar in others. It might be instructive and helpful to our thinking for each of us to identify for ourselves some of these differences and similarities.

The stage is now set. This is your opportunity to express your views on registration and on specialty certification. What you say very likely will have a great influence on the future of many young people who are now in our profession or who are considering entering it. So, consider your responses carefully. The past is behind us. Our profession's future direction is in your hands. What will it be? •
Time to Police the Appraisers

One of the many seedy facets of the massive savings and loan industry scandal involved the use of "daisy chains" among colluding companies to hype the book value of assets far above their real worth.

In such scams, conniving S&Ls would resell properties back and forth among themselves at ever higher mark-ups - carrying each new inflated sale on their books as an "asset" to make themselves look solvent even as they became dangerously overexposed.

One common thread in such scams was that, at some point, the properties had to be appraised at much higher than their true market values.

That's why Congress, as part of the 1989 bailout of the savings and loan industry, required states to regulate real-estate appraisers to help prevent such abuses. Thursday, the Colorado Senate Local Government committee will consider a bill to establish such appraisal standards, as unanimously recommended by the "Sunrise" committee that reviews proposed new regulations.

The fact that a few appraisers took part in shady dealings should not discredit the whole profession. In fact, honest and competent appraisers have been the loudest voices calling for standards to protect the public.

Unfortunately, the state doesn't have such standards now. Most appraisers belong to one of eight national organizations that span the industry by its specialties - such as commercial, residential or farm properties. But while such groups support high standards, they can't impose them on nonmembers. Right now, any Coloradan who wants to send $50 to an out-of-state diploma mill and get back a piece of paper certifying him as an "appraiser" can ply the trade.

In contrast, the proposed law, SB 34, sets standards for competence, conflicts of interest and disciplinary procedures for appraisers. Existing appraisers and new ones alike would have to meet the standards to be licensed in Colorado.

While no group has formally called for defeat of the licensing bill, some organizations have asked the legislature to exempt their members. The lawmakers should view such loopholes warily.

The Colorado Department of Highways asked to exempt the appraisers on its payroll, as did some county assessors. But why should government employees whose decisions can affect all citizens be subject to lower standards than private appraisers?

Similarly, some real estate brokers have urged wider exemptions for their industry. But brokers and sales people who prepare evaluations for listings (as opposed to making formal appraisals that go to financial institutions) already are exempt. To go beyond that reasonable exemption and create a yawning loophole for unregulated appraisers could invite the very conflicts of interest and abuses the proposed law is intended to prevent.

With permission from the Denver Post.-ED.

EXECUTIVE DIRECTOR'S ITINERARY
(subject to change)

The Executive Director is visiting various Sections, agencies, campuses, and other organizations. He is both talking and listening, exchanging information and ideas. Members are encouraged to attend these meetings wherever and whenever possible. His itinerary for the next six months, as presently scheduled, is:

April 29 - May 1: Minnesota Section and universities
May 2-4: Wisconsin Section, agencies, and universities
May 6-10: Michigan Section, agencies, and universities
May 16-18: Utah Section, agencies, and universities
June 2-6: American Association of Petroleum Geologists, San Francisco, CA
June 7-8: American Association of Petroleum Landmen, San Antonio, TX
June 8: Texas Section Members, San Antonio, TX
June 26: Florida Registration Board, Tallahassee, FL
July 14-15: Executive Committee, Arvada, CO
July 22-23: Washington Section, Seattle, WA
August 6-22: Meetings with geologists in Moscow, Tbilisi, Khar'kov, and Leningrad, USSR
September 10-12: Kansas Section, agencies, and universities
September 25-28: Indiana and Ohio Members, agencies, and universities
October 1-2: Association of Engineering Geologists, Pittsburgh, PA
October 3-5: Pennsylvania and West Virginia Sections, and universities
October 8-13: Annual Meeting, Long Beach, CA
October 23-24: New Mexico Section agencies, and universities.
October 27 - November 1: Geological Society of America, Dallas, TX.
LETTERS TO THE EDITOR

Energy Actions

I applaud Roy Guess' recent article "An Energy Boom is Possible" (TPG, February, 1990) in which he proposes that on investment tax credit for future oil and gas production derived from new field discoveries be extended to industry. The tax credit envisioned by Guess is rather similar in some ways to the Crude Oil Windfall Profit Tax Act of 1980, which successfully stimulated exploration, delineation, and development of nonconventional natural gas resources such as gas shale and coaled methane in several areas. These resources may not have received significant industry attention, had a production tax credit not been available. Guess' tax credit would probably help increase interest in domestic oil and gas exploration in a similar manner, and ultimately increase our level of domestic energy independence.

I further suggest that the federal government phase in a user fee on gasoline and diesel fuel over a period of several years. Such increases would almost assuredly incite anger amongst the consumer population and be labeled as yet another form of governmental taxation. Additional taxation is admittedly abominable. However, sooner or later the energy situation is this country is going to be a formidable problem that will not simply disappear. The revenues that would be generated from such a fee could be allocated, as aptly suggested by Guess, towards mitigation of the alarming federal deficit, and exploration that is sorely needed to replace domestic reserves. A portion of the funds could also be used, for example, to (1) help increase public awareness of the energy problem, (2) increase student interest in careers in the petroleum industry, (3) increase levels of funding for academic and industry research on better methods for finding and producing oil and gas, and (4) develop new methods of transportation, such as natural gas-powered cars.

Recent, disastrous oil tanker spills have served to decrease the empathy of lawmakers and the public towards the petroleum industry. The resulting stance against opening exploration areas such as the Arctic National Wildlife Refuge (ANWR) is but one example of anti-petroleum industry sentiment. Sound arguments both for and against opening up such areas can be formulated. However, I suspect that either argument is immaterial at this point, because the downstream effects of even a very significant find tomorrow would be felt several years ahead. Additionally, the new influx of petroleum from such find would probably not significantly decrease our reliance on imports over the longer term. Similarly, even if only a portion of Guess' ideas were passed into law and then implemented in the near future, a positive effect on reserves replacement would not be realized for several years.

This most certainly does not mean that such legislation should not be brought up for discussion and hopeful approval. It is all too easy to be apathetic about directly contacting Congressional members and voicing opinions concerning national energy security. Only through persistent long term efforts will legislation such as Guess' tax credit be brought to the table, let alone approved. Advice concerning methods to contact lawmakers is of course available from AIPG.

It is difficult for me to understand the apparent complacency in this country towards development of a long term energy plan. Increasing public opposition against construction and operation of nuclear and coal-fired electrical power plants, be that right or wrong, is in the end merely helping to ensure our dependence upon foreign oil and oil product imports. Currently (early 1990) we import approximately 54 percent of our domestic oil consumption. This fact, when combined with steeply declining domestic production, and reserves replacement in particular, is cause for concern. The sharp decrease in the number of geologists and engineers qualified to find and produce oil and gas, and the lack of influx of new graduates entering the petroleum industry, is perhaps the biggest concern of all.

One can think of any number of scenarios that might trigger a future energy crisis. Historical analogies with the embargo of the early 1970s can be drawn, however, the federal deficit is rather a bit more now than it was then. Another, factor that may have a significant impact on the flow of petroleum to this country will be the ever-increasing petroleum demand in politically progressive Soviet-bloc countries, the Soviet Union itself, and eventually China.

It will indeed be interesting to see how these and other factors influence the price of petroleum, and ultimately the level of domestic energy independence in the near future and longer term. Ironically, I would bet that legislation such as that proposed by Guess will be duly considered only when the domestic energy dependence situation is generally accepted as being alarming. Somewhat perversely, it is then that the petroleum industry will probably experience yet another cycle of explosive interest and growth. Many people can and will disagree, but I believe that the lack of a domestic energy policy will in the end threaten our status as the world power. I hope to be proven wrong.

Jay C. Close, A298

Cleanup Credit

Three cheers for BP America! For the first time in the history of the petroleum industry has an oil company proved itself to be a responsible and environmentally concerned company. BP America responded to the Huntington Beach, California tanker oil spill with great speed and total professionalism.

I have worked in the petroleum industry for 35 years and one of my greatest disappointments is to see how poorly it handles public relations. Considering the resources available the lack of a united effort and proper response in a crisis leaves much to be desired. Now for the first time, we can be proud to see how at least one company responds to an environmentally sensitive accident like an oil spill.

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I am a resident of Huntington Beach and live less than a half mile from the ocean. I visited the beach the day of the spill and every other day thereafter. BP America was immediately on location and on local and national television feeding the "critical" press with all the information good and bad. Not once did BP point the finger of blame or complain how much it was costing to do the job. Neither did they wait in hope of maybe getting someone else to help with the costs. Instead, BP took the initiative and got the job done. The areas of Newport Beach, Huntington Beach, Bolsa Chica, and Seal Beach are now cleaner than they have been in the past 20 years.

The spokesman for BP was on television every night with a report of the progress on the cleanup. The most gratifying and clever report was one of the final reports in the local Huntington Beach Pilot newspaper. This report showed a color picture of the BP America spokesman in a surfing wet suit, floating in the clear blue surf for all to see how clean the water and beaches were left. For the first time in my experience, I heard praise and good things said about one company in the petroleum industry. Hurrah for BP America.

Louis F. Villanueva, CPG 1307

**Appropriate Alert**

Your "Legislative Alert" about estate appraisal was most timely. Enclosed are copies of Alaska House Bill 523 and Senate Bill 470 which might place similar constraints on geological appraisals. The Task Force Leader from the Realty Professionals who are promoting these bills and the Legislative Assistant who has been drafting the bills were unaware of the problem and have pledged to assist in seeing that minerals, hydrocarbons, ground water, and other subsurface values are excluded. I have been invited to submit alternative wording and think I can rectify the problem through amended definitions.

This legislation was necessitated by the Federal Savings and Loan Bill (Title 11) and it is suggested that the AIPG Headquarters attempt to have the obious sections amended at the federal level.

In a somewhat similar situation, the State of Alaska is in the process of adopting regulations which would require that anyone having almost anything to do with public water supply hold certification as an "engineer." Surface waters, test wells, and the abandonment of wells entering an aquifer which may be used as public water supply at some other place or time can be sampled or tested ONLY by a Certified Engineer. Only single family residences are excluded and such an exclusion might be nullified if there is an office in the home. If adopted as now written acoustical and aeronautical engineers with NO training in earth science would be allowed to undertake hydrologic work denied to professional hydrologists and geologists, including those who have been accepted as expert witnesses in court. The Board of Architects, Engineers and Surveyors which governs certification is dominated by engineers gleefully unsympathetic to the plight of geologists and hydrologists. They see this as a turf battle in which they hold the high ground and see no reason to give quarter. I find the statutory definition of engineering is based on mechanical and construction activities and may provide an opening for argument. We are working on this and will keep you advised.

Robert B. Sanders, CPG 6460
President, Alaska Section

**Compass Guidance**

Two items in the March 1990 TPG, "Our Moral Compass," by C. J. Silas and "Legislative Alert" by William V. Knight were most interesting and timely. There have been numerous references to ethics in TPG throughout the 1980s: Ethics Committee Report, revision of Code of Ethics, the inclusion of the term "Ethics" in the masthead of TPG, and articles on ethics such as Mendenhall's "Certification of Ethics"; however, Silas puts it into terms that clearly are on point.

The first part of my career was spent in private industry and therefore I feel that I have an objective viewpoint when it comes to an analysis of geologic documents submitted for my review. During the past 10 years, I have examined over 200 geologic or mining engineer reports prepared by both members of AIPG and non-members. The three recent views of ethics presented by Silas have appeared many times in the reports that I have inspected and, sadly, some were prepared by members of AIPG.

All too frequently it was obvious that the author used the premise that ethics is merely what's enforceable; for example, the author will use a range of values for a mineral property much like that which could be attributed to the purchase of a lottery ticket and what that ticket is worth if it is the winning ticket. The rule that is widely accepted by courts is that the existence of deposits in or on land is an element to be considered in determining the market value of such land but is not to be made an award separate from the real estate; however, it has been my experience that the mineral appraiser uses his basis the value range that the client wants and then paints in the report around the value. Many reports simply use the term "value" without clarification. There is no reference to whether the reserves are economic, marginally economic, subeconomic, demonstrated, inferred, hypothetical, or speculative.

In many of the reports I have examined, ethics is usually defined as what is expedient. It seems that if the report is to be presented to a government agency the value that is desired by the client can be adjusted upward or downward depending upon expediency. For example, a property containing sand and gravel located 50 miles from the nearest market for sand and gravel might have a fair market value of $500 an acre, but for tax purposes it might be valued at $50 for an estate or $50,000 for a donation. The general attitude being that there are few in the government capable of understanding the valuation concept and that because it is the government the concept of value is elastic in favor of the client; however, should there be dissent "superior"
credentials will stifle professional criticism by the government.

The last point Silas referred to was that the ability to justify a wrong, or rationalize a deed after it's done, does not make it ethical. In the late 1970s there was a spate of coal mine tax shelters whose basis in fact rested on a "geologic" report prepared by a consultant. Often these reports had buried in the body of the report a reference that the reserve determination was based on records provided by the client. There was no attempt to verify the mineral ownership, the geologic evidence presented, whether the reserve was technically and economically mineable, and that a market existed. In other words, if the report is questioned, it can be easily excused as merely an opinion. Once again the perception being that it is just the government, not the real world so who cares.

All of this leads to the "Legislative Alert" reference that geologists who do mineral appraisals might have to be licensed and certified on a state-by-state level under the "Federal Institutions Reform, Recovery, and Enforcement Act of 1989." In view of our personal experience and the debacle of egregiously overvalued properties in the failed savings and loan industry, that might not be a bad idea. Many appraisers seem to think that ethics must have the force of law to establish clear understanding. Perhaps the better course for AIPG would be to work with the legislative process to assure that geologists are certified to do geologic appraisals and not civil engineers or mining engineers. It is almost as if we are saying that minerals are not a part of the land; however, the valuation of a property is tenuous because courts have consistently held that the value of such mineral deposits cannot be determined independently of the land.

Earl G. Hoover, CPG 2739

**MEMBERS IN THE NEWS**

John V. Brock, CPG 3942, is the new Senior Vice President-Exploration of Hallador Petroleum Company.

Leroy Gatlin, CPG 566, Patrick J. F. Gratton, CPG 2890, and Willis G. Meyer, CPG 2842, each received the SIPES Outstanding Service Award honoring their dedication and service to the Society at SIPES' Annual Meeting, April 20, 1990 in League City, Texas

Geoffrey C. Seibel, CPG 7398, has been promoted to Managing Geologist with O'Brien & Gere Engineers, Inc.

James A. Wheately, CPG 6170, has been appointed Senior Associate at Geraghty & Miller, Inc.

**IN MEMORIAM**

Lee A. Lair, CPG 3417, April 4, 1990.

**NEW APPLICATION FORMS REQUIRED AS OF JUNE 1, 1990**

As noted in previous issues of *TPG*, new policies and procedures for applicant screening were approved by the Executive Committee. In addition, a new design for the AIPG certification application has also been approved and the printing of the forms has now been completed. During the week of April 23, 1990, hundreds of these new forms were mailed from Headquarters to Section presidents, secretaries and membership chairmen; to several state agencies around the country; and to individuals who had previously requested packets from Headquarters.

The Executive Committee asks that each Member take responsibility for informing as many potential applicants as possible that time is running out for the use of the old application forms. The transition time when both old and new forms will be accepted will be limited to April and May of 1990. Any application received at Headquarters on or after June 1, 1990, must be submitted on the new forms.

The new forms were designed primarily to coincide with the updating of AIPG's legal foundation and to satisfy the requirements of recent case law involving professional organizations. In particular, these forms include requests for specific information which was not required only a few years ago. AIPG places both its reputation and the full force of the organization behind each certification issued, so it is imperative that the Institute be fully informed regarding an applicant's credentials before issuing the coveted CPG.

The Institute is currently experiencing a renewal of spirit. This revitalizing process is resulting in increased numbers of geologists applying for AIPG certification. Certainly all qualified geologists are welcome. At the same time, however, the Institute must continue to exercise discipline and restraint so that only those who are qualified receive the AIPG certification.
Applications Received
(as of April 30, 1990)

Applicants for certification must meet AIPG's standards as set forth in its Bylaws on education, experience and competence, and personal integrity. If any member has any factual information as to any applicant's qualifications in regard to these standards, whether that information might be positive or negative, please mail that information to Headquarters within thirty (30) days. This information will be circulated only so far as necessary to process and make decisions on the applications.

BOZNER, John C., 2606 Marlhill Dr., Wilmington, DE 19810. Sponsors: Robert E. Covington, Harold C. Mosher, Cooper B. Land.
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(as of April 30, 1990)

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ANASTASIA, Frank S., CPG 7860, Highland, MD
ARD, Charles L., CPG 7868, Vancouver, MA
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STOCK, Mark D., CPG 7867, Las Vegas, NV
VOIGHT, David S., CPG 7879, Cedarburg, WI
WHITLEY, Donald L., CPG 7880, Katy, TX
WOOTTON, Clyde F., CPG 7881, Tulsa, OK

Re-Certified Member

BILLINGS, Gale K., CPG 2681. Albuquerque, NM