

TECHNICAL PROGRESS REPORT

ANNUAL

For

REPORTING PERIOD
BEGINNING July 12, 2005
ENDING July 11, 2006

Prepared by Mark A. Carl
IOGCC Federal Projects Director

Report Submitted October 9, 2006

For

Department Of Energy Award No.: **DE-FC26-04NT15456**

STATE SUPPORT OF DOMESTIC PRODUCTION

Report Submitted
By The
Interstate Oil and Gas Compact Commission
P.O. Box 53127
Oklahoma City, OK 53127-3127

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights,. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do no necessarily state or reflect those of the United States Government or any agency thereof.

ABSTRACT

The Interstate Oil and Gas Compact Commission (IOGCC) engaged in numerous projects outlined under the scope of work discussed in the United States Department of Energy (DOE) grant number #DE-FC26-04NT15456 awarded to the IOGCC. Numerous projects were completed that were extremely valuable to state oil and gas agencies as a result of work performed utilizing resources provided by the grant. There are numerous areas in which state agencies still need assistance. This additional assistance will need to be addressed under future scopes of work submitted annually to DOE's Project Officer for this grant.

This report discusses the progress of the projects outlined under the grant scope of work for the 2005-2006 areas of interest, which are as follows:

Area of Interest No. 1 – Regulatory Streamlining and Improvement

This area of interest continues to support IOGCC's regulatory streamlining efforts that include the identification and elimination of unnecessary duplications of efforts between and among state and federal programs dealing with exploration and production on public lands.

Area of Interest No. 2 – Technology

This area of interest seeks to improve efficiency in states through the identification of technologies that can reduce costs.

Area of Interest No. 3 – Training and Education

This area of interest is vital to upgrading the skills of regulators and industry alike. Within the National Energy Policy, there are many appropriate training and education opportunities. Education was strongly endorsed by the President's National Energy Policy Development group. Acting through the governors' offices, states are very effective conduits for the dissemination of energy education information. While the IOGCC favors the development of a comprehensive, long-term energy education plan, states are also supportive of immediate action on important concerns, such as energy prices, availability and conservation.

Area of Interest No. 4 – Resource Assessment and Development

This area of interest relates directly to helping maximize production of domestic oil and natural gas resources, including areas that are under explored or have not been adequately defined.

TABLE OF CONTENTS

Disclaimer	Page 2
Abstract	Page 3
Table of Contents	Page 4
Introduction	Page 6
Executive Summary	Page 8
Regulatory Streamlining and Improvement	Page 9
IOGCC-EPA MOU Task Force	Page 9
Appalachian-Illinois Basin Directors Workgroup	Page 10
North American Coastal Alliance Workgroup	Page 10
Technology	Page 11
Web Based Permitting	Page 11
National Data Management Collection	Page 12
Training and Education	Page 12
Performance Measurement	Page 13
Identify Appropriate Learning Resources	Page 14
Petroleum Career Educational Program	Page 14
School Teacher Educational Resources	Page 15
Template for Educating the Public	Page 15
Hands-On Teacher Education Program	Page 18
Training for State Regulators	Page 18
Up-Dating Access to IOGCC Information to the Public Through Innovation and its Website	Page 19
Resource Assessment and Development	Page 20
Coal Seam Natural Gas Assessment	Page 20
Research Alternative Forms of Electrical Power	Page 20
Emerging Issues	Page 20
Conclusions	Page 20

This Page Left Blank Intentionally

INTRODUCTION

The Interstate Oil and Gas Compact Commission (IOGCC) is a 69-year-old state government organization representing the governors of 30 oil and gas producing states and seven associate states. In addition, Venezuela, Egypt, Republic of Georgia, Nova Scotia, Alberta, British Columbia, Newfoundland and Labrador are international affiliates of the IOGCC.

The IOGCC's mission is to promote the conservation and efficient recovery of oil and natural gas while protecting health, safety, and the environment. The organization, a congressionally approved compact of states ratified in 1935, maintains a staff at its national headquarters in Oklahoma City, Oklahoma. The IOGCC is classified as a state government recipient and has received federal funding through the U.S. Environmental Protection Agency, the U.S. State Department, and the U.S. Department of Energy. Since its inception in 1935, the IOGCC has assisted states in the orderly development of oil and natural gas resources in fulfillment of the organization's congressional charter. This mission is accomplished in part through encouraging states to share regulatory expertise and by serving as a unique forum for state and federal regulators, industry, environmentalists and citizens to share viewpoints and concerns.

The Multi-State projects of the IOGCC focus on issues including training and education, Technology, regulatory streamlining and improvement, and resource assessment and development.

Technology projects include work on developing a steering committee of Information Technology (IT) professionals to identify and coordinate activities relating to IT projects such as Web based permitting and national data management collection/reporting.

The Training and Education projects included coordinated and conducted workshops, seminars and training programs to educate and inform state and federal regulators, as well as industry and the public on oil and gas related exploration and production issues. Also included is education on infrastructure security efforts and performance measurement assistance to states for program evaluation and improvement. Additionally, Naturally Occurring Radioactive Materials (NORM) training and State Oil and Gas Regulatory Field Inspector Certification Exams were administered to requested member states inspectors.

Regulatory Streamlining efforts included discussions on current and future EPA regulatory agendas and rulemakings related to oil and gas exploration and production activities through the IOGCC-EPA MOU Task Force Meetings; EPA Regional Meetings with state oil and gas directors; meetings of the Appalachian-Illinois Basin Directors Workgroup, the North American Coastal Alliance Workgroup and the Council of State Regulatory Officials.

The following pages contain an evaluation of efforts by the IOGCC involving the Multi-State projects in support of state regulation of domestic petroleum and production.

EXECUTIVE SUMMARY

The Interstate Oil and Gas Compact Commission (IOGCC) identified several areas of interest as designated in the abstract portion of this evaluation report. The continuation of this extensive project will better prepare the oil and gas industry, state and federal regulators, and the environmental community in this 21st Century and the energy problems associated with the changing needs of the world.

The principal issue areas that the project funded were:

- Regulatory Streamlining and Improvement
- Technology
- Training and Education
- Resource Assessment and Development

The IOGCC will meet these issues through a cooperative effort of IOGCC committees, their subcommittees, and the numerous volunteers provided by the states and industry. The IOGCC operates through standing committees and their subcommittees/workgroups, each consisting of members appointed by IOGCC governors or their official representatives. Standing committees involved in providing invaluable assistance in the various areas of this grant are:

- Energy Resources, Research and Technology Committee
- Environmental and Safety Committee
- Legal and Regulatory Affairs Committee
- Public Lands Committee
- Public Outreach Committee

The commission establishes the goals and activities of the IOGCC through development of a Strategic Plan and periodic resolutions, which address various targeted, emerging issues.

Area of Interest No. 1 – Regulatory Streamlining and Improvement

This area of interest continues to support IOGCC's regulatory streamlining efforts that include the identification and elimination of unnecessary duplications of efforts between and among state and federal programs dealing with exploration and production on public lands.

Item 1:

IOGCC-EPA MOU Task Force Meetings:

Two task force meetings were held during the 2005-2006 grant period. The first meeting was held in Jackson Hole, Wyoming in conjunction with the 2005 Interstate Oil and Gas Compact Commission (IOGCC) Annual Meeting held September 18-20. Members of the task force met on October 17th immediately prior to the start up of the IOGCC meeting. There were 10 EPA participants, 12 IOGCC participants.

Topical issues discussed included:

- Review and approve the draft annual report for the IOGCC Chairman and EPA Administrator.
- Renewal of the MOU for two additional years.
- Outreach strategy/Mechanisms
- Legislative forecast/new developments
- SPCC Inspections and characterizing small operators
- EPA Region 8 air initiative
- OPA'90/Coast Guard Reauthorization Act
- UIC funding for states: Partnership with GWPC & ECOS
- EPA's future plans for the hydraulic fracturing issue
- EPA's CO2 Sequestration Task Force
- Tribal treatment as states issue
- Joint training opportunities
- EPA regulatory status update

The second meeting was held on April 6, 2006 in Denver, Colorado at the offices of EPA Region 8. There were 9 EPA participants, 8 IOGCC participants and 1 DOE participant at this meeting.

Topical issues discussed included:

- Renewal of the MOU for two additional years
- Legislative forecast/new developments
- SPCC Inspections and characterizing small operators
- EPA Region 8 air initiative
- OPA'90/Coast Guard Reauthorization Act
- UIC funding for states
- EPA's future plans for the hydraulic fracturing issue
- EPA's CO2 Sequestration Task Force
- Tribal treatment as states issue
- Joint training opportunities
- EPA regulatory status update

Item 2.

The Appalachian/Illinois Basin Directors Workgroup

Since July of 2005, efforts of the Appalachian/Illinois Basin Directors have focused on completion of the Appalachian/Illinois Basin Potential and Reserves report. Bradley J. Field, Director of the Division of Mineral Resources of the New York Department of Environmental Conservation, currently serves as chairman of the group.

DOE/Akoya delivered a final draft of the report at the 2005 IOGCC Midyear Meeting in Anchorage, AK. This draft incorporated final draft text and design elements and was submitted for final comment by the Appalachian/Illinois Basin Directors to their respective state organizations and the IOGCC members. The comments and changes from this last review were incorporated for final report publication. The final report entitled, "Mature Region, Youthful Potential: Oil and Natural Gas Resources in the Appalachian and Illinois Basins" was presented at the 2005 IOGCC Annual Meeting in Jackson Hole, Wyoming held September 17-20. The initial printing was for 12,000 copies to be distributed through a comprehensive communications plan developed by the IOGCC communications department. The IOGCC publicized the report by submitting a press release to national and local media, as well as general IOGCC constituents. The report was distributed to state oil and gas directors; state geologic surveys; state, regional and national oil and gas associations; state governors and their energy advisors; federal and state legislative energy committees; The U.S. Department of Energy; national and local media; and other IOGCC constituents. The report was sent to reprint in January of 2006 where another 6,000 copies were produced. The report is also available through the IOGCC web site at www.iogcc.state.ok.us.

The Appalachian Illinois Basin Directors met on May 21, 2006 at the IOGCC MidYear Summit in Billings, MT. The group discussed how to implement Basin-wide Strategies as seen in "Mature Region, Youthful Potential". Possible projects included; writing a letter to Industry depicting strategies/Lobby support for group, gather feedback from states in Basin as to steps to facilitate strategies, review Orphaned/Abandoned well situation in the Basin, survey Basin states on their current prioritization plugging schedules and address the Oilfield Safety/Workforce issues and Stormwater issues. It was also decided that the group would call for a new Chariman at the IOGCC Annual Meeting in Austin, TX.

The North American Coastal Alliance

Since July of 2005, efforts of the North American Coastal Alliance (NACA) have primarily been focused on completion of a report that provides a comprehensive inventory of potential offshore oil and natural gas resources that are currently under some form of moratoria or restriction to drilling in North America. Daniel Seamount, a Commissioner on the Alaska Oil and Gas Conservation Commission, and Sandy MacMullin, Director of Resource, Assessment and Royalties at the Nova Scotia Department of Energy served as co-chairman of the group through May of 2006. Currently Hal Bopp, State Oil and Gas Supervisor at the Department of Conservation, Division of Oil, Gas and Geothermal Resources of California and Sandy MacMullin serve as co-chairmen of the group.

The NACA group met in conjunction with the IOGCC 2005 Issues Summit in Anchorage, Alaska. Work continued on the potential offshore resources report and further work assignments were allocated where additional information was needed or where data needed to be updated. The group decided to submit a first draft of the report at the IOGCC 2005 Annual Meeting in Jackson Hole, Wyoming in September. The NACA's goal was to provide information that policy makers and citizens can utilize to make sound judgments in this very important area of energy planning. The NACA views this project as necessary to properly evaluate the impact future exploration activity within these areas could have on North America's future energy supply. Decision makers can use this as a quick reference document which summarizes the supply potential that is currently inaccessible due to administrative directive.

Offshore potential resources described in the report are the mean values of *undiscovered technically recoverable resources*, defined as "the portion of the hydrocarbon estimated on the basis of geologic knowledge and theory to exist outside known accumulations." Current or future economic feasibility is not considered in these estimates. A copy of the draft titled "Untapped Potential" was provided at the 2005 IOGCC Annual Meeting in Jackson Hole, Wyoming. The moratoria study was completed in February 2006 and the report has been published and includes potential resources located offshore Mexico, U.S.A., and Canada. Included in this study is a comparison of areas which are accessible to oil and gas exploration and development with an overlay of areas that are presently off-limits due to formal or informal moratoria or restrictions on drilling. The initial printing was for 10,000 copies to be distributed through a comprehensive communications plan developed by the IOGCC communications department. The IOGCC publicized the report by submitting a press release to national and local media, as well as general IOGCC constituents. The report was distributed to state oil and gas directors; state geologic surveys; state, regional and national oil and gas associations; state governors and their energy advisors; federal and state legislative energy committees; The U.S. Department of Energy; national and local media; and other IOGCC constituents. The report is also available through the IOGCC web site at www.iogcc.state.ok.us.

The North American Coastal Alliance met on May 21, 2006 in Billings MT at the IOGCC MidYear Summit. The group reviewed the NACA strategic plan and laid out strategies for 2006/2007; possible projects for the workgroup are LNG, Pipeline landfalls, using existing infrastructure for renewable energy options, decommissioning issues, seismic impacts, mercury study and bonding requirements. A new revised strategic plan was distributed to the group for review and discussion on July, 25, 2006.

Area of Interest No. 2 – Technology

This area of interest seeks to improve efficiency in states through the identification of technologies that can reduce costs.

Item 1:

Web Based Permitting.

The IOGCC's IT work group has reviewed existing applications and will attempt to help states avoid "reinventing the wheel" in relationship to streamlining business processes

via the Web. The IOGCC's information technology work group met Oct. 18-19, 2005 to share experiences in the on-line permitting activities and efforts to justify the cost of technology to top agency management (see pdf agenda attached). Those in attendance included:

- Steve Davies – Alaska
- Michael Stettner – California
- Annie Miranda – California
- Bill Winkler – California
- Marc Fine – Colorado
- Gerry Baker – IOGCC
- Rick Bender – Kentucky
- Terrell Morrison – Louisiana
- Jim Halvorsen – Montana
- Tom Richmond – Montana
- Jim Lindholm – North Dakota
- Jane Prouty – New Mexico
- Ben Stone – New Mexico
- Don Drazen – New York
- Michelle Smith – Oklahoma
- Mary Banken – University of Oklahoma
- Mack McGillivray – South Dakota
- Bowden Hight – Texas
- Rick Marvel – Wyoming

The group had some very interesting discussions on the very different ways in which states have approached their IT business case and project management issues in the past, and the expectations about changes for the future. These issues are complex and costly --- and so states benefited from learning to build on each other's experiences. One of the documents that was shared among participants to provide an example of improving a states' ability to develop cost effective technology management programs was the March 30, 2004 Texas Railroad Commissions Information Technology Services Division report titled *"Post Implementation Evaluation Review (PIER) for Electronic Compliance and Approval Process (ECAP)"*.

Item 2:

National Data Management Collection.

The IT work group has yet to evaluate the direction of this initiative.

Area of Interest No. 3 – Training and Education

This area of interest is vital to upgrading the skills of regulators and industry alike. Within the National Energy Policy, there are many appropriate training and education opportunities. Acting through the governors' offices, states are very effective conduits for the dissemination of energy education information.

While the IOGCC favors the development of a comprehensive, long-term energy education plan, states are also supportive of immediate action on important concerns, such as energy prices, availability and conservation.

General work plan comments: Pre-project planning of expenditures under the training segment includes surveying member states for a more complete understanding of programs they deem most appropriate for management, field and office personnel. It is likely that at least some of these funds will be expended to facilitate state regulators' participation in existing, appropriate programs. Others may have to be specially designed and staffed. 2005 IOGCC Chairman, Gov. Frank Murkowski of Alaska, at his installation at the Annual Meeting, identified the education initiative as a key priority during his chairmanship.

**Item 1.
Performance Measurement.**

OKLAHOMA:

The Oklahoma Oil and Gas Conservation Commission (OGCC) received performance measurement assistance for their oil and gas regulatory program during December, 2005. The workshop assistance was provided by Weidner Consulting from Austin, Texas, from December 12-16, 2005, to the managerial staff of the Conservation Commission. The Conservation Commission regulates oil and gas exploration and production activities in Oklahoma.

The assistance involved the managers of each program spending from 3-5 days looking at the overall mission and vision of the OGCC and also at each OGCC programs mission and regulatory responsibilities from top to bottom. By going through this exercise with the managers they were able to develop environmental and public health and safety measures to track efficiency, effectiveness and improvement over time. A detailed Strategic Business Plan was prepared as a deliverable by Weidner Consulting which summarizes all the work performed during the week.

As a follow up to the in-state workshop assistance a conference call was held to discuss the findings and information Weidner provided to the OGCC as a deliverable, and also to discuss possible next steps. Ms. Lori Wrotenbery, Director of the OGCC was very pleased with the assistance they received from Weidner Consulting and believes it will enhance the program greatly in the near future.

UTAH:

The Utah Division of Oil, Gas and Mining (OGM) received the Performance Measurement Assistance from July 10 to 14, 2006 in Salt Lake City, Utah. The workshop assistance was provided by Weidner Consulting from Austin, Texas to the managerial staff of OGM.

The assistance involved the managers of each program within the division spending from 3-5 days looking at the overall mission and vision of the OGM and also at each OGM programs mission and regulatory responsibilities from

top to bottom. By going through this exercise with the managers they were able to develop environmental and public health and safety measures to track efficiency, effectiveness and improvement over time. A total of 20 individuals with the Utah program participated over the week long workshop. A detailed Strategic Business Plan was prepared as a deliverable by Weidner Consulting which summarizes all the work performed during the week.

As a follow up to the in-state workshop assistance a conference call was held to discuss the findings and information Weidner provided to the OGCC as a deliverable, and also to discuss possible next steps. Ms. Lori Wrotenberg, Director of the OGCC was very pleased with the assistance they received from Weidner Consulting and believes it will enhance the program greatly in the near future.

Item 2:
Identify Appropriate Learning Resources.

The IOGCC surveyed member states in January of 2006 to determine states needs for personnel training. Ten states responded to the survey identifying areas they would be interested in receiving training workshops. The areas identified are Global Positioning Satellite (GPS), Blow-Out Preventers, Hydrogen Sulfide, Naturally Occurring Radioactive Materials (NORM), Waste Minimization, Mineral Leasing, Occupational Safety and Health, Spill Remediation, Performance Measures, Spill Prevention Control and Countermeasures, Storm Water Control, Corrosion, Natural Gas Storage, Enhanced Oil Recovery Techniques, Risk-Based Decision Making for Soil Remediation, Land farming/Landfill Operations, Cavern Disposal, Brine Mining and Mechanical Integrity Testing for Injection Wells. States identified a total of 643 individuals to receive training for these workshops.

Due to limitations on funding the IOGCC has only been able to provide NORM training to Texas. A total of 28 individuals participated in this training.

Item 3:
Petroleum Career Educational Program.

The services of the original project leader and concept development team were lost to the IOGCC, which continues to significantly delay implementation. However, through the work of the Blue Ribbon Task Force (BRTF) formed by Gov. John Hoeven of North Dakota, progress continues on this important effort. .

In continuance of the goal set for the BRTF, the IOGCC published *Petroleum Pros*. This award winning publication was released in the fall of 2004. *Petroleum Pros* presents the findings of the BRTF with the intent of interesting students in a career in the petroleum industry.

This publication has received widespread distribution and recognition, including being provided to key public officials, industry leaders and industry press, as well as the popular press.

This publication was so successful that over the past year the IOGCC has been working to update *Petroleum Pros* to address changes and current needs of the states and industry for petroleum professionals.

Item 4:
School Teacher Educational Resources.

The IOGCC will continue to focus its work on educating the public about the importance of domestic oil and natural gas to the national security and economy as well as to the effectiveness of state programs to regulate exploration and development.

Item 5:
Template for Educating the Public.

This program element was completed and submitted to DOE for its consideration. To date, there has been no response to the proposal to establish the Energy Education Coordinating Council.

The Template is included below and was submitted to Mark Maddox, Acting Deputy Administrator for Fossil Energy, at DOE Headquarters in 2004.

**Proposal Summary by the
Interstate Oil and Gas Compact Commission**

March 2004

The Interstate Oil and Gas Compact Commission (IOGCC), with the very direct involvement and support of the U.S. Department of Energy, is proposing an ambitious effort designed to coordinate and champion education for all Americans on the country's largest provider of energy: natural gas and oil. This effort, to be known as the ***Energy Education Coordinating Council***, would represent the first national effort to provide comprehensive information on the issues associated with the country's continued use of natural gas and oil, including environmental considerations, national security implications, economic development, conservation, and the realities of supply, demand, pricing and taxes. The IOGCC believes this long-term project is critical to permitting an informed debate on the country's energy future. While the country is preoccupied with the threat of terrorism on American soil, an even greater threat exists to our country in terms of an interruption of oil imports. The U.S. Department of Commerce confirmed this fact twice in the past two decades.

The Problem

Except for isolated instances of shortages or outages, the America public has enjoyed the luxury of virtually unlimited energy supplies. As a result, few Americans have taken the initiative to learn about energy issues ranging from those that impact prices at the gasoline pumps to the challenges of a hydrogen economy.

A major national crisis at some point in the future will again focus the public on issues of natural gas and oil supply, demand trends, the value of conservation, the level and impacts of import reliance, access to resources, environmental consequences, national security implications and economic development. The time of crisis is the worst possible time to debate and decide public policy – especially on issues with widespread, dramatic impact, such as energy.

A careful survey by the IOGCC has identified a number of contributors to the country's general ignorance on energy issues.

No. 1 – No organization's has as its mission to educate the public at every level on the issues associated with natural gas and crude oil. There are, of course, organizations stressing conservation, those stressing environmental protection, those stressing the benefits of domestic production and various other narrow viewpoints that tend to polarize, not educate. In a sense, these organizations have served to create very simplistic definitions of problems and solutions and have done little to help citizens and policy makers understand the consequences of today's energy decisions on tomorrow's Americans.

No. 2 – Despite a great deal of education in certain oil and gas producing states, there is no coordination of messages and no national impact. For the most part, only the larger net producing states have an interest in public education regarding natural gas and oil resources. The lack of the development of messages that consider both consuming and producing venues has contributed to misconceptions on both sides of the issue.

No. 3 – There is no "ready-made" constituency that would be willing to support financially the long term effort envisioned in this proposal. Over past years, various sides have lined up with an "us versus them" mentality that places objective energy information at a premium. The most natural ally in delivering messages regarding the nation's energy future, therefore, is government, since this issue really impacts every American. Instead, Administration after Administration has chosen to let competing factions fight it out in the court of public opinion and has distanced itself from significant educational commitments.

It is vital that this work be conducted with the involvement of states and overseen by an organization with proven knowledge of conservation and domestic production yet disassociated from industry. The IOGCC is the only logical parent organization for the Council.

Key Functions of Coordinating Council

Information gathering and measuring public awareness

Develop the capability to quickly understand the public's views on energy issues through ongoing, thoughtful public opinion research. This function is critical to addressing the issues that are important to individual constituencies. The lack of substantive, quantifiable research has contributed heavily to the misinformation and poorly focused educational efforts. Information gathered on a nationwide basis is very

misleading. Opinions and levels of understanding and concern must be based on regional or state data.

Creating forums for public dialogue

Design on-going national and regional events and Web-based opportunities for the public to present views on emerging or existing energy issues. Use the regional and Web events to create national opportunities for direct dialogue type events for the public to ask questions and seek solutions. These would be multi-location, dynamic, often televised events that take participants to the real world of energy production and consumption. These opportunities would create on-location exposure for those involved in both energy production and consumption.

Examples on the production side include discussions aboard an LNG tanker or terminal, on an onshore or offshore drilling rig, at a pipeline station, gas station, fuel oil facility or refinery, aboard a ship patrolling the Persian Gulf, traveling with a field regulator/inspector, the proceedings of an OPEC meeting, actions on the futures trading floor, production facilities in Saudi Arabia, a derrick barge offshore the Gulf and many other venues that allow all sides of the issues to be represented.

On the consumption side would be opportunities with residential, industry and commercial consumers as well as regulators, those responsible for the safe and effective function of infrastructure, gas and No. 2 diesel fuel buyers, energy efficiency experts and researchers, and average consumers dealing personally with various energy issues.

Create proactive communication messages and communication vehicles

Create messages that support the importance of domestic oil and natural gas (not the industry, but the commodity) in the nation's energy picture. The American public is generally unaware of the fact that despite the country's reliance of imported oil, fully 40 percent of the nation's demand is fueled by domestic production. About 85 percent of natural gas needs are met by production of domestic resources.

In this context, conservation through research and development and deploying new technologies is important to the continued contribution of domestically produced oil and natural gas.

Create best practices in school-based energy education

There are many energy education programs in existence; however, none has been evaluated for effectiveness. Identifying best practices for quality energy education on a regional basis would help guide educators through the flood of propaganda that is disguised as education. A national forum for sharing best practices and programs that work would be developed as a resource for education at all levels.

Budget: \$32 million per year; five-year minimum

The first year, approximately \$12 million would be dedicated to baseline and issues-based research; \$18 million to education program development and execution; and \$2 million to best practices in energy education. Years two through five, approximately \$8 million would be dedicated to research, \$23 million to education program

development and execution; and \$1 million to best practices. Each year, results will be measured against baseline data to assess effectiveness and identify emerging priorities.

Some numbers for comparison: this budget is equal to less than one cent per barrel of imported oil (3.285 billion barrels per year); it is less than one-third the budget of the national dairy promotion and research budget (\$110 million) through the U.S. Department of Agriculture; it is approximately equivalent to the ethanol subsidy in the state of Minnesota (\$33.7 million); and equal to the U.S. Treasury's budget (\$32 million) to promote the newly redesigned \$20 bill.

Item 6:
Hands-on Teacher Education Program.

Implementation of this project has been slowed by a lack of state personnel to assist in project guidance.

Item 7:
Training for State Regulators.

Since July of 2005, the National Inspector Certification Program has worked with the IOGCC member states to evaluate their oil and gas field inspectors. By participating in the National Inspector Certification Program, states provide guidelines and structure to an important part of the oil and gas regulatory process. Inspections of oil and gas operations are one of the most important elements of oil and gas regulation. Prior to the IOGCC's institution of this program in 2000, no official national program had been established to standardize this procedure.

The committee charged with updating the exam gathered information on horizontal drilling and contacted the U.S. Bureau of Land Management (BLM) for information on its certification exam. This revision committee met in Denver, Colorado on April 26, 2005 to draft a revised exam. Working with the committee, Keith Thomas, Federal Projects Manager at the IOGCC, compiled the suggested changes into a draft and submitted said draft to the committee members on May 5, 2005. The committee met in Anchorage, Alaska during the 2005 IOGCC Midyear Meeting on May 15-17 to discuss the revised exam. The revised exam was approved on July 19, 2005 and new portion for offshore drilling was compiled for addition to the exam by William LeMay.

In efforts to enhance the program's effectiveness, IOGCC communications staff along with Federal Projects Manager Amy Wright began working to revitalize the program's communication plan. A tri-fold brochure was created to outline the program's benefits both to state oil and gas directors and their inspectors. The brochure was reviewed by the members of the IOGCC's Council of State Regulatory Officials at the Annual Meeting in Jackson Hole Wyoming, September 18, 2005. At the meeting a brief summation of the program and the objectives were reviewed by William LeMay and Wes Norton.

In July 2006 Oklahoma tested 8 Field Inspectors and in September 2006 California tested 30 Inspectors. The IOGCC is currently promoting the exam to may more states including but not limited to Texas, Mississippi, New Mexico and Michigan.

On Wednesday, June 7, 2006, in Austin, Texas, the IOGCC sponsored a Naturally Occurring Radioactive Materials (NORM) training event for the Railroad Commission (RRC) of Texas. Amy M. Wright, Federal Projects Manager for the IOGCC, worked with Leslie Savage, Director of Planning and Administration RRC, Oil and Gas Division, to present the training. The training was led by Scott Winters of Chase Environmental Group and consisted of a full-day training session for 28 employees of the RRC. The employees' in attendance job descriptions ranged from environmental services, site remediation and field operations. The session began with Scott Winters introducing himself and giving the group a brief synopsis of his education and back ground. The Course Topics were: Basic Health Physics, Radiation Terms, Risk Assessment, Field Operations, Regulatory Overview, Instrumentation and Field Training Exercises. The training was held in a class room setting which allowed interaction with Mr. Winters for questions and answers. The group broke at 11:30 AM for lunch and resumed at 12:30 PM. The group finished with a hands-on training session involving instruments used to measure NORM and how to obtain data from the instrument. The training session ended with a short NORM workshop quiz and the participants completing a course evaluation form. The course was a success and IOGCC has been approached by the RRC of Texas to provide the same training to other district offices in the state should funds be available.

Item 8:

Up-dating Access to IOGCC Information to the Public Through Innovation and Its Website.

The IOGCC is currently stepping-up communications and education efforts, by revamping communication plans to make the organization more visible and active, to make a more significant impact on educating key constituents about the importance of our nation's oil and natural gas resources. The IOGCC has revamped its Web site for easier navigation and readability, so that information can be clarified and easily accessed.

This effort was accomplished in early January, 2006.

A brochure, "A Dependent Nation: Recommendations for Energy Security," was widely distributed to educate key constituents about the problem of energy dependence, and the much-needed energy policy.

The IOGCC Public Outreach Committee is currently working on several projects to better educate the public about importance of oil and natural gas resources. A communications resource guide is underway, and will include communication materials submitted by associations, government and industry to provide a reference for communicators to provide a cohesive message to key constituents.

Area of Interest No. 4 – Resource Assessment and Development

This area of interest relates directly to helping maximize production of domestic oil and natural gas resources, including areas that are under explored or have not been adequately defined.

Item 1:

Conduct Coal Seam Natural Gas Assessment in Appalachian Basin or Coastal States.

The IOGCC has identified a state to work with to evaluate its coal seam gas resources. However, the state has not committed adequate matching resources to move this project forward. Additional opportunities will be identified and pursued. Identify states with coal seam natural gas resources that have yet to be assessed (July 2004). No further work on this project has occurred.

Item 2:

Research Alternative Forms of Electrical Power, Especially for Marginal Wells. First Project: Wind Power.

This project has been suspended indefinitely due to logistical and funding issues.

Item 3:

Emerging Issues.

Work plan will be developed as appropriate.

Conclusions:

Over the past year the Multi-State projects of the IOGCC continued to focus on issues important to state oil and gas regulatory programs including training and education, Technology, regulatory streamlining and improvement, and resource assessment and development.

Under the technology projects work included continued work of a steering committee of Information Technology (IT) professionals to identify and coordinate activities relating to IT projects such as Web based permitting and national data management collection/reporting.

Training and education projects included coordinated and conducted workshops, seminars and training programs to educate and inform state and federal regulators, as well as industry and the public on oil and gas related exploration and production issues. Also included is education on infrastructure security efforts and performance measurement assistance to the states of Oklahoma and Utah for program evaluation and improvement. Additionally, Naturally Occurring Radioactive Materials (NORM) training was provided to Texas and State Oil and Gas Regulatory Field Inspector Certification Exams were administered to states inspectors in Oklahoma, North Dakota and California.

Regulatory Streamlining efforts included discussions on current and future EPA regulatory agendas and rulemakings related to oil and gas exploration and production activities through two IOGCC-EPA MOU Task Force face-to-face meetings; EPA Regional Meetings with state oil and gas directors; meetings of the Appalachian-Illinois Basin Directors Workgroup, the North American Coastal Alliance Workgroup and the Council of State Regulatory Officials.

The Appalachian-Illinois Basin project provided partnering opportunities for oil and gas directors working within the Appalachian-Illinois Basin to improve regulatory efficiency in each director's state program through meetings and training programs. The group also developed a resource assessment report titled, *"Mature Region, Youthful Potential"* for the Appalachian and Illinois Basin regions that was published on September 18, 2005. This report has been a much requested document since it was initially published.

The North American Coastal Alliance involved bringing together states and Canadian provinces that have offshore petroleum exploration and production. This alliance enabled regulators with unique regulatory needs to come together to share and identify areas of concern that may be studied and incorporated into standard practices for offshore environmental and regulatory compliance. This workgroup produced an assessment of off-shore resources in North America titled *"Untapped Potential"* and published it in February 2006.

The projects funded under this DOE-NETL Cooperative Agreement have been critical in assisting IOGCC member states in conservation of their oil and natural gas energy resources while continuing to allow increased protection for human health and the environment.