Report Title/Type:	Ninth Quarterly Technical Progress Report for project entitled "Establishment of an Industry-Driven Consortium Focused on Improving the Production Performance of Domestic Stripper Wells"
Reporting Period:	October 1, 2002 – December 31, 2002
Principal Authors:	Joel L. Morrison
Report Issue Date:	April 8, 2003
Doe Award Number:	Grant No. DE-FC26-00NT41025
Submitting Organization:	The Pennsylvania State University The Energy Institute C-211 Coal Utilization Laboratory University Park, Pennsylvania 16802-2323

DISCLAIMER

ABSTRACT

The Pennsylvania State University, under contract to the U.S. Department of Energy, National Energy Technology Laboratory will establish, promote, and manage a national industry-driven Stripper Well Consortium (SWC) that will be focused on improving the production performance of domestic petroleum and/or natural gas stripper wells. The consortium creates a partnership with the U.S. petroleum and natural gas industries and trade associations, state funding agencies, academia, and the National Energy Technology Laboratory.

This report serves as the ninth quarterly technical progress report for the SWC. Key activities for this reporting period include: 1) organizing and hosting two fall technology transfer meetings , 2) SWC membership class expansion, and 3) planning the SWC 2003 Spring meeting.

In addition, a literature search that focuses on the use of lasers, microwaves, and acoustics for potential stripper well applications continued.

TABLE OF CONTENTS

1.0 INTRODUCTION

The Pennsylvania State University, under contract to the U.S. Department of Energy (DOE), National Energy Technology Laboratory (NETL), is in the process of establishing an industry-driven stripper well consortium that will be focused on improving the production performance of domestic petroleum and/or natural gas stripper wells. Industry-driven consortia provide a cost-efficient vehicle for developing, transferring, and deploying new technologies into the private sector. The Stripper Well Consortium (SWC) will create a partnership with the U.S. petroleum and natural gas industries and trade associations, state funding agencies, academia, the National Energy Technology Laboratory, and the National Petroleum Technology Office.

Consortium technology development research will be conducted in the areas of reservoir remediation, wellbore clean up, and surface system optimization. Consortium members elected an Executive Council that will be charged with reviewing projects for consortium co-funding. Proposals must address improving the production performance of stripper wells and must provide significant cost share. The process of having industry develop, review, and select projects for funding will ensure that the consortium conducts research that is relevant and timely to industry. Co-funding of projects using external sources of funding will be sought to ensure that consortium funds are highly leveraged.

2.0 EXPERIMENTAL

A description of experimental methods is required by the DOE for all quarterly technical progress reports. In this program, Penn State is responsible for establishing and managing an industry-driven stripper well consortium. Technology development research awards are made on a competitive basis. Therefore, this section is not applicable to the Penn State contracted activities. Technical reports from the individual researchers will be required to contain an experimental discussion section and will be submitted to consortium members and DOE for their review.

3.0 RESULTS AND DISCUSSION

During the last reporting period, the SWC focused the following: 1) issuing subcontracts for the 2002 SWC projects, 2) SWC membership class expansion, and 3) planning upcoming SWC technology transfer meetings.

3.1 SWC Workshops

The SWC organized and hosted two technology transfer meetings during this reporting period. The agendas for these meetings are provided in Appendix A. Building from the small regional informational workshops conducted in Oklahoma and Texas during the fall of 2001, the Consortium organized its 2002 technology transfer efforts around two regional meeting to facilitate a broader outreach effort to showcase SWC-funded technologies.

Oklahoma City Workshop. The SWC held a technology transfer workshop in Oklahoma City, OK at the Westin Hotel on October 17 and 18, 2002. The workshop was planned and marketed in close consultant with the Oklahoma Marginal Well Commission. The workshop drew approximately 50 attendees. The workshop attendees were a diverse mix of both members and non-members representing various regions and organizations. On the 17th, eleven presentations on 2002 funded projects were followed by an evening exhibit reception, where attendees enjoyed exhibits provided by the SWC, the Oklahoma Marginal Well Commission, the Interstate Oil and Gas Compact Commission, Brandywine Energy and Development Company, and the Oklahoma Independent Petroleum Association. On the 18th, the remaining eight presentations were provided to the attendees. The meeting concluded with a luncheon at 1:00 p.m.

Pittsburgh Workshop. On November 12-13, 2002, the second technology transfer for the SWC was held at the Pittsburgh Sheraton North in Mars, PA. The Pittsburgh workshop was planned in with the Independent Petroleum and Natural Gas Association of Pennsylvania (IOGA-PA). The SWC workshop was held in collaboration with regional IOGA environmental and marketing working groups. IOGA-PA planned the coordinated the IOGA meeting for the states of New York, Ohio, West Virginia, Kentucky, and Ohio. In addition, the northeast section of the American Association of Petroleum Geologists also held a workshop in collaboration with the SWC and IOGA workshops. On November 12, ten presentations on 2002 funded projects were followed by an evening exhibit reception, where attendees enjoyed exhibits provided by the SWC, National Energy Technology Laboratory, Society of Petroleum Engineering – Pittsburgh Petroleum Geologists Section, Penn State's Petroleum and Natural Gas Program, Nuerolog, Pumping Solutions, and Brandywine Energy and Development Company. On November 13, the remaining six presentations were made to the attendees with the meeting concluding after the SWC luncheon.

3.2 SWC Membership Class Expansion

The SWC is committed to growing and diversifying its membership base to ensure that the Consortium is industry-driven and that the nation's stripper well operators are aware of the

technologies currently under development by the Consortium. Two separate activities started during the last reporting period continued throughout this reporting period.

First, an endorsing membership was drafted which will enable Federal agencies (e.g., Rocky Mountain Oil Field Testing Center-RMOTC) to participate formally in the Consortium. Presently, RMOTC cannot formally participate in the Consortium because their membership fee would utilize federal funds. The SWC Constitution and By-Laws were modified to create this membership tier. The SWC Executive Council was then polled to determine if the proposed change should be adopted. The SWC Executive Council approved the proposed modification to the Constitution and By-Laws . The new SWC Constitution and By-Laws are provided in Appendix B.

Secondly, the Consortium is working the use of a limited block membership structure to allow affiliate members to designate a block of producers at a discounted annual rate. The current structure would permit affiliate members to procure a block of memberships in an effort to assist stripper well operators that may be financially unable to participate in the consortium. This effort was ongoing during this reporting period.

3.3 Upcoming Meetings

The SWC is in the process of finalizing its 2003 meeting calendar. The Spring meeting is nearly planned with the tentative site being Pearl River, New York. This meeting will be planned with the cooperation of the New York State Energy Research Development Authority (NYSERDA). The fall technology transfer meetings are still in the planning stage.

4.0 CONCLUSIONS

During this reporting period, the efforts were focused primarily on the organizing and hosting the fall technology transfer meetings. Simultaneously, administrative issues such as modifying the SWC Constitution and By-Laws and creating a block membership tier to promote further industrial involvement were areas of concentration. The SWC is poised to enter its third year with a growing, diversifying membership.

5.0 REFERENCES

A listing of referenced materials is required by the DOE for each quarterly technical progress report. This technical progress report for the SWC did not utilize any reference material.

6.0 APPENDICES

6.0 APPENDIX A: MEETING AGENDAS

MEETING AGENDA

Westin Hotel
Oklahoma City, Oklahoma

October 17, 2002	
9:00-10:00	**Meeting Registration**
10:00-10:30	**Welcome I Status of SWC** *Presenter: Joel Morrison, Director, Stripper Well Consortium*
	Technical Session I Presentations ***Moderator: Liz Fajen, Oklahoma Marginal Well Commission***
10:30-11:00	**Development of Diagnostic Techniques to Identify By-Passed Gas Reserves and Badly Damaged Production Zones in Gas Stripper Wells in the Rocky Mountains** *Presenter: Ron Surdam, Innovative Discovery Technologies LLC*
11:00-11:30	**Identification of Effective Fluid Removal Technologies for Stripper Wells** *Presenter: Timothy Knobloch, James Engineering*
11:30-12:00	**Chamber-Lift — A Technology for Producing Stripper Oil Wells** *Presenter: Bob Watson, Penn State University*
12:00-1:00	**SWC Luncheon**
	Technical Session II Presentations ***Moderator: Dan Ferguson, National Petroleum Technology Office***
1:00-1:30	**Advanced Decline Curve Modeling for Stripper Well Production Analysis** *Presenter: Larry Pekot, Advanced Resources International*
1:30-2:00	**Environmental and Regulatory Issues with Recycled Oil Field Produced Water** *Presenter: Dave Burnett, Texas A&M University*
2:00-2:30	**Injectivity Improvement of Low Permeability Reservoirs Big Sinking Field, Lee County, Kentucky** *Presenter: Malcolm Pitts, Surtek, Inc.*
2:30-3:00	**Quantification of By-Passed Gas Reserves & Badly Damaged Production Zones in Gas Stripper Wells in the River Basin** *Presenter: Presenter: Ron Surdam, Innovative Discovery Technologies LLC*

3:00-3:20	**Break**
	Technical Session III Presentations ***Moderator: Peter Bastian, Quicksilver Resources***
3:20-3:50	**Waterflooding in Gordon Sandstone Formation** *Presenter: Bob Watson, Penn State University*
3:50-4:20	**Reservoir Characterization of the Wileyville Oil Field** *Presenter: Doug Patchen, West Virginia Geological Society*
4:20-4:50	**Optimization of Plunger Lift Performance in Stripper Gas Wells** *Presenter: Erdal Ozkan, Colorado School of Mines*
4:50-5:20	**G.O.A.L. PetroPump Field Test Results** *Presenter: Gerald Swoyer, Brandywine Energy Development Co.*
5:30-7:00	**SWC Reception I Exhibits**

October 18, 2002	
	Technical Session IV Presentations ***Moderator: Sam Farris, Oklahoma Marginal Well Commission***
8:00-8:30	**Production & Research-based Approaches for Maximizing Recovery in the Barnett Shale** *Presenter: Jason Lacewell, Chief Oil and Gas, LLC.*
8:30-9:00	**Review and Selection of Velocity Tubing Strings for Efficient Liquid Lifting in Stripper Gas Wells** *Presenter: Larry Pekot, Advanced Resources International*
9:00-10:00	**A Low Cost Oil Water Separator for Stripper Well Applications / A Method of Using the Production Pump to Continuously Clean Stripper Wells** *Presenter: Leland Traylor, Pumping Solutions*
10:00-10:30	**Break**
	Technical Session V Presentations ***Moderator: Rodney Reynolds, PTTC/ Univ. of Kansas***
10:30-11:00	**Developing Methods to Identify Unstimulated and/or Ineffectively Stimulated Reservoirs Resulting from Multi-Stage Hydraulic Fracture Treatments** *Presenter: Gerry Merriam, Schlumberger Holditch Reservoir Technologies*
11:00-12:00	**Field Test of the Vortex Oil and Gas Unit in Stripper Well Flowlines / Development of the Vortex Flow Tools for Oil and Gas Applications / Field Test of the Vortex Oil and Gas Unit in Gas Gathering Systems** *Presenter: Brad Fehn, Vortex Flow LLC*
12:00-1:00	**Lunch**
	Technical Session IV Presentations ***Moderator: Larry Pekot, Advanced Resources International***
1:00-1:30	**Field Testing of New Technologies for Lifting Liquids from Gas Wells** *Presenter: Richard Christiansen, Colorado School of Mines*
1:30-2:00	**Advanced Technology for Infill and Recompletion Candidate Well Selection** *Presenter: Duane McVay, Texas A&M University*
2:00-2:30	**A Study to Evaluate the Effects of the Costs of Corrosion on Stripper Well Operations** *Presenter: Timothy Knobloch, James Engineering, Inc.*
2:30-2:45	**Closing Remarks** **Joel Morrison, SWC Director** **Liz Fajen, Oklahoma Marginal Well Commission**

MEETING AGENDA
Four Points by Sheraton Pittsburgh North
Mars, Pennsylvania

November 12, 2002	
9:00-10:00	**Meeting Registration (Mercer/Clarion Room)**
10:00-10:30	**Welcome / Status of SWC** *Presenter: Joel Morrison, Director, Stripper Well Consortium*
	Technical Session I Presentations (Mercer/Clarion Room) ***Moderator: Peter Bastian, Quicksilver Resources, Inc.***
10:30-11:00	**Identification of Effective Fluid Removal Technologies for Stripper Wells** *Presenter: Timothy Knobloch, James Engineering*
11:00-11:30	**Developing Methods to Identify Unstimulated and/or Ineffectively Stimulated Reservoirs Resulting from Multi-Stage Hydraulic Fracture Treatments** *Presenter: Gerry Merriam, Schlumberger Holditch-Reservoir Technologies*
11:30-12:00	**Environmental & Regulatory Issues with recycled Oil Field Produced Water** *Presenter: Dave Burnett, Texas A&M University*
12:00-1:00	**SWC Luncheon (Atrium)**
	Technical Session II Presentations (Mercer/Clarion Room) ***Moderator: Jim Ashbaugh, Pennsylvania General Energy Corp.***
1:00-1:30	**Advanced Technology for Infill and Recompletion Candidate Well Selection** *Presenter: Peter Bastian, Quicksilver Resources, Inc.*
1:30-2:00	**Advanced Decline Curve Modeling for Stripper Well Production Analysis** *Presenter: George Koperna, Advanced Resources International*
2:00-2:30	**Optimization of Plunger Lift Performance in Stripper Gas Wells** *Presenter: Erdal Ozkan, Colorado School of Mines*
2:30-3:00	**Field Testing of New Technologies for Lifting Liquids from Gas Wells** *Presenter: Richard Christiansen, Colorado School of Mines*

3:00-3:30	**Break (Mercer/Clarion Room)**
	Technical Session III Presentations (Mercer/Clarion Room) ***Moderator: Paul Herzing, EOG Resources***
3:30-4:00	**Reservoir Characterization of the Wileyville Oil Field** *Presenter: Dave Matchen, West Virginia Geological Society*
4:00-4:30	**Waterflooding in Gordon Sandstone Formation** *Presenter: Bob Watson, Penn State University*
4:30-5:00	**Injectivity Improvement of Low Permeability Reservoirs Big Sinking Field, Lee County, Kentucky** *Presenter: Malcolm Pitts, Surtek, Inc.*
5:00-7:00	**SWC Reception / Exhibits (Venango/Crawford Room)** • **Strategic Center for Natural Gas (NETL)** • **Stripper Well Consortium** • The Pennsylvania State University – Petroleum & Natural Gas Engineering • **Pittsburgh Petroleum Geologist Section (SPE)** • **Nuerolog** **SWC Projects** • **Vortex Flow:** ***Development of the Vortex Flow Tools for Oil and Gas Applications*** • **Pumping Solutions, Inc.:** ***A Low Cost Oil Water Separator for Stripper Well Applications / A Method of Using the Production Pump to continuously Clean Stripper Wells*** • **Brandywine Energy Development Co. :** ***G.O.A.L. PetroPump Field Test Results***

November 13, 2002	
7:00-8:00	**Buffet Breakfast (Atrium 1)**
	Technical Session IV Presentations (Mercer/Clarion Room) ***Moderator: John Papso, Cabot Oil & Gas Corp.***
8:00-8:30	**A Low Cost Oil Water Separator for Stripper Well Applications / A Method of Using the Production Pump to Continuously Clean Stripper Wells** *Presenter: Leland Traylor, Pumping Solutions*
8:30-9:00	**Field Test of the Vortex Oil and Gas Unit in Stripper Well Flowlines / Development of the Vortex Flow Tools for Oil and Gas Applications / Field Test of the Vortex Oil and Gas Unit in Gas Gathering Systems** *Presenter: Brad Fehn, Vortex Flow LLC*
9:00-9:30	**Chamber-Lift — A Technology for Producing Stripper Oil Wells** *Presenter: Bob Watson, Penn State University*
9:30-10:00	**Review and Selection of Velocity Tubing Strings for Efficient Liquid Lifting in Stripper Gas Wells** *Presenter: George Koperna, Advanced Resources International*
10:00-10:30	**Break (Mercer/Clarion Room)**
	Technical Session V Presentations (Mercer/Clarion Room) ***Moderator: John Holko, Lenape Resources***
10:30-11:00	**A Study to Evaluate the Effects of the Costs of Corrosion on Stripper Well Operations** *Presenter: Timothy Knobloch, James Engineering, Inc.*
11:00-11:30	**G.O.A.L. PetroPump Field Test Results** *Presenter: Paul Yaniga, Brandywine Energy Development Co.*
11:30-12:00	**Closing Remarks** *Joel Morrison, SWC Director*
12:00-1:00	**Lunch (Atrium 1)**

6.0 APPENDIX B: CONSTITUTION & BYLAWS

CONSTITUTION FOR STRIPPER WELL CONSORTIUM

Article I

Name and Purpose:

Section 1. The name of this organization shall be the Stripper Well Consortium (SWC).

Section 2. The mission of the SWC is to assist in the development, demonstration, and commercialization of technologies to improve the production performance of the nation's natural gas and petroleum stripper wells. Its functions shall pertain to petroleum and natural gas science and engineering, and the dissemination of new information to the scientific community, industry and the general public. The organization shall serve its Members by guiding, stimulating, and aiding their efforts to:

i) formulate research, development, and technology assessment goals;
ii) create a supporting infrastructure for conducting research and development that will increase knowledge of and expand the technological base for natural gas and petroleum; and
ii) promote and enhance the dissemination of research results and technology transfer to industry for the benefit of the nation.

Section 3. The SWC and Members who are not participants in a project are not liable in any way for any activities under a given project.

Article II

Membership:

Section 1. Membership in the SWC shall be at one of three Membership levels:

1) Full Members are defined as those Members from any individual firm, partnership, university or corporation engaged in the production and service of the natural gas and petroleum industry, or individuals engaged in research and development technologies associated with petroleum or natural gas industry or is a user of petroleum or natural gas products and who have provided an annual membership fee to be determined by the Executive Council. Full Members are entitled to designate one (1) voting representative to the Technical Advisory Committee, receive periodic communications, to compete for a seat on the Executive Council, to sponsor or propose a project for Consortium funding, and to receive quarterly and final technical reports. Full Members are

eligible to have up to two (2) people in attendance at meetings. Only Full Members are eligible to receive research funding from the Consortium.

2) Affiliate Members are defined as those Members from associations and professional societies. Affiliate Members are entitled to designate one (1) voting representative to the Technical Advisory Committee, and to receive periodic communications. Affiliate Members are eligible to have up to two (2) people in attendance at meetings. Affiliate Members are not eligible to receive research funding from the Consortium, may not be elected to the Executive Council, nor are they eligible to receive technical reports. If however, an Affiliate member provides co-funding in support of a specific project, the Affiliate member is eligible to receive the technical reports associated with the specific project. The annual Membership fee for Affiliate Membership will be determined by the Executive Council.
3) Endorsing Members are defined as those Members from federal entities. Endorsing members may send up to two (2) representatives to meetings upon payment of a meeting registration fee. Endorsing Membership will be considered for those federal entities which provide a letter of endorsement to the Consortium that outlines the in-kind services the entity will provide to the Consortium. Endorsing memberships are subject to Executive Council approval.

Section 1a. Full, Affiliate, and Endorsing Members may withdraw from the Consortium upon thirty (30) days written notice to the Consortium Director. Membership fees are nonrefundable.

Article III

Organization and Officers:

The SWC shall be governed and managed by an Executive Council and the Consortium Director.

Section 1. The Executive Council shall be the policy-making body of the Consortium. The Executive Council shall establish an overall research and development plan for the SWC; approve and issue requests for proposals from Full Members to fulfill research and development priorities; establish review procedures for research proposals; select proposals to be funded from Consortium funds based upon the relevance to the established goals and objectives of the Consortium; and perform the duties necessary to achieve the SWC mission. The Director and various committees derived from the Executive Council Membership shall be utilized as deemed necessary by the Executive Council to achieve these and other Executive Council goals.

Section 1a. The Executive Council shall be composed of:

1) seven (7) Full Members elected by the Technical Advisory Committee;
2) the SWC Director, who shall be a non-voting member presiding over the Council;

3) a representative from NETL's Strategic Center for Natural Gas (SCNG), who shall be a non-voting member of the Council;
4) a representative from NETL's National Petroleum Technology Office (NPTO), who shall be a non-voting member of the Council;
5) a representative from the New York State Energy Development Authority (NYSERDA), who shall be a non-voting member of the Council;
6) a minimum of one natural gas producer;
7) a minimum of one petroleum producer;
8) a maximum of two universities;
9) council representation shall be such that a broad range of industrial interests is represented.

Section 1b. With the advice and consent of the Executive Council representatives, the SWC Director shall set the time, place and agenda of the Executive Council meetings and shall preside over these meetings. Whenever possible, telephone conferencing will be scheduled to conduct meetings. Executive Council Members shall be responsible for their own travel and other expenses associated with the performance of their responsibilities.

Section 1c. Representatives of the Executive Council who will be unable to attend the Executive Council meeting shall notify the Director as far in advance as possible. An Executive Council Member can vote in absentia provided it is done in a written form.

Section 2. The Technical Advisory Committee shall provide research ideas, and aid the Executive Council in developing and implementing technology transfer plans for the SWC. The Technical Advisory Committee shall advise both the Executive Council and the Director regarding the relevance and the scientific merit of the Consortium research and development programs.

Section 2a. The Technical Advisory Committee shall be composed of one (1) voting representative from each Full or Affiliate SWC Member.

Section 2b. The Technical Advisory Committee shall elect seven (7) industrial representatives to serve on the Executive Council. In the initial year, the Technical Advisory Committee shall elect four (4) representatives who shall serve a two-year term and three (3) who shall serve a one-year term. Thereafter, the Technical Advisory Committee shall elect three (3) representatives each year to replace outgoing representatives. No representative can serve two consecutive terms except for the one-year term representatives elected in 2001. The Technical Advisory Committee may also at any time elect a new representative to complete the term of a representative who is unable to finish his/her term.

Section 2c. With the consent of the Technical Advisory Committee, the Executive Council may be expanded to a nine (9) Members pending a 50% simple majority vote.

Section 2d. With the consent of the Technical Advisory Committee pending a 50% simple majority vote and unanimous approval of the SCNG and NPTO representatives, the Executive Council may be expanded to include those Affiliate member(s), which provide co-funding to the Consortium.

The Affiliate member(s) shall be a non-voting member of the Executive Council. Terms of Affiliate member(s) serving on Executive Council will be determined on a case-by-case basis by the SWC Director and Council Representatives from SCNG and NPTO.

Section 3. The SWC Director shall be the chief representative of the Consortium and shall be responsible for the administration of its affairs. The Director shall represent the Consortium in situations where a single representative of the Consortium is appropriate. The Director shall interact with public and private funding sources to secure and maintain funding necessary to meet the long-term goals of the Consortium.

Section 3a. As the SWC Administrator, the Director shall implement the decisions of the Executive Council, and oversee the daily operations of the Consortium. The Director will establish and enforce computerized and other necessary communication systems among all Consortium Members. Under the direction of the Executive Council, the Director in accordance with Article V, will operationally manage Consortium funding. The Director will have authority to establish and maintain research reporting procedures, using sponsor guidelines where applicable. The Director shall publicize the SWC and its research results utilizing publications, research reviews, and any other means approved by the Executive Council. The Director will make frequent formal recommendations to the Executive Council to aid it in setting policy for the SWC.

Section 3b. The Director is appointed by The Energy Institute with the approval of The Pennsylvania State University, and serves at the pleasure of The Pennsylvania State University.

Section 4. Administrative costs of the Director and Director's office will be borne by the Consortium in accordance with the budget.

Article IV

Amending the Constitution:

Section 1. The Constitution can be amended only by the Executive Council. All changes to the Constitution must be approved by a two-thirds majority vote of the Council.

Section 1a . Any Executive Council member may propose a change to the Constitution or Bylaws by petition to the Director. The Director shall submit the proposed amendment or change to each representative of the Executive Council at least thirty (30) days prior to the next meeting.

Section 2. Unless indicated otherwise in the Constitution or Bylaws, all decisions for and on behalf of the Consortium shall be by consensus vote of those present in an Executive Council meeting. All votes shall be open ballot unless a majority of the Executive Council or Advisory committee prefers a closed ballot.

Article V

Program Funding:

Section 1. The SWC Director will solicit proposals from the Full Members of the Consortium on an annual basis. Membership dues must be current prior to accepting a proposal for review.

Section 2. The Consortium shall have no obligation or responsibility to consider any proposal requesting funding for third parties who remain outside of the Consortium. The Consortium does encourage collaboration among the SWC Members. Funding requests for third parties who remain outside the Consortium will be evaluated by the Executive Council on a case by case basis.

Section 3. Full Members are expected to provide a minimum of 30% in co-funding for each proposal submitted to the Consortium for review. All co-funding included must be supported by appropriate documentation and will be subject to review as part of the complete proposal package.

Section 4. The Director shall receive proposals from the Full Members and distribute the proposals to the Executive Council fourteen (14) days before the Consortium meeting.

Section 5. The Executive Council is the final decision making body for approval of all projects funded by the SWC.

Section 6. The SWC Director will notify all applicants of their funding status in writing within fourteen (14) days of the Executive Council decision.

BYLAWS FOR THE STRIPPER WELL CONSORTIUM

I. Purpose

These Bylaws are intended to promulgate the governing policies of the Consortium and shall be subject to and interpreted consistent with the Consortium Constitution.

II. Full and Affiliate Membership

1. Applications for Full and Affiliate Membership shall be submitted to the Director, whose responsibility it shall be to ensure their completeness and compliance with these Bylaws.
2. Upon receipt of Membership fee, the member(s) shall immediately exercise all rights, privileges and responsibilities of Membership.
3. Calendar year shall mean January 1 to December 31.

Any individual, firm, partnership, association, institution/university or corporation engaged in the exploration and production of natural gas and/or petroleum, or engaged in research and development of technologies associated with natural gas and/or petroleum, or is a user of natural gas and/or petroleum is eligible for Membership.

Membership in the Stripper Well Consortium entitles each Full Member to one (1) voting representative to the Technical Advisory Committee, periodic communications, eligibility of industrial Members to be elected to the Executive Council, eligibility to sponsor or propose a project, and eligibility to be awarded a research project from the Consortium. Affiliate Membership entitlements are as indicated in the constitution.

III. Endorsing Membership

1. Applications for Endorsing Membership shall be submitted to the Director, whose responsibility it shall be to ensure their completeness and compliance with these Bylaws.
2. Calendar year shall mean January 1 to December 31.

Endorsing members are not eligible to compete for Consortium funding. Endorsing Membership entitlements are as indicated in the consortium.

IV. Director

The office of the Director shall be located on the campus of The Pennsylvania State University, whose responsibility it shall be to provide an office, staff and facilities for the conduct of his or her duties and responsibilities as provided in the Constitution and these Bylaws. The administrative costs of the Director's office shall be borne by the budget of the Consortium.

The Executive Council shall meet at least twice a year at places and times set by the Director with the approval of the Executive Council representatives.

The Director shall prepare the agenda for Executive Council meetings from items submitted by the representatives of the Executive Council and the Technical Advisory Committee. He or she shall preside over Executive Council meetings and arrange for minutes of the meetings to be recorded and distributed to all Members.

The attendance of a majority of the representatives to the Executive Council shall constitute a quorum for the conduct of business at properly called meetings.

In the event that specific items of Consortium business require a vote of the Executive Council and it is impractical to convene a full Executive Council meeting, the Director will poll the Executive Council Membership by phone, computer, or other means.

V. Publications and Conferences

The preparation, presentation and publication of overview articles for SWC projects shall remain the responsibility of The Pennsylvania State University. Full Members shall be provided with the opportunity to review any overview papers or presentations containing any of the results of the SWC funded projects. Full Members may present technical papers on their SWC funded projects provided that the Consortium is acknowledged for its funding.

The Director shall be responsible for the preparation of all guidelines for technical reports and publications that have been approved by the Executive Council.

The Director shall arrange for all technical meetings and conferences at times and places approved by the Executive Council.

VI. Finances

The Pennsylvania State University will serve as fiscal agent for the Consortium. As such, The Pennsylvania State University will represent the Consortium in fiscal matters and have the ultimate accounting and financial reporting duties and the sole legal authority to enter into contracts and to administer and expend funds on behalf of the Consortium. The Members, acting solely upon their own behalf, may only subcontract with other Members, each likewise acting solely on its own individual behalf, for work conducted outside the member's institutions. The subcontracts will be carried out in accordance with the rules and regulations of research sponsors and standard internal subcontracting policies and procedures of the Members' institution as they may separately negotiate.

INTELLECTUAL PROPERTY RIGHTS POLICY FOR STRIPPER WELL CONSORTIUM

(Note: DOE Cooperative Agreement DE-FC26-00NT41025 was accepted by Penn State contingent upon the following language being incorporated in a subsequent modification.)

Pursuant to Chapter 18 of Title 35 of the United States Code, commonly known as the Bayh-Dole Act, as enacted by the Department of Energy (DOE) in DEAR 952.227-11, any domestic small business firm or nonprofit organization conducting research under Consortium funding (Research Party) may elect to retain title to any invention conceived of or first actually reduced to practice by its employees in the course of or under the research conducted with Consortium funding. Title to these inventions will be subject to DOE patent policy, including retention by the Government of a license for Government use and march-in rights, and U.S. competitiveness and manufacture requirements. The Consortium will petition the DOE for a class waiver of ownership rights to any inventions conceived or first actually reduced to practice by employees of entities other than domestic small business firms and nonprofit organizations. Information that results from the research and development conducted with Consortium funding and that would be trade secret or commercial or financial information that is privileged or confidential if the information had been obtained without Federal support, may be protected from public disclosure for up to five years after development of the information, but shall be available to Consortium Members during the period of projection.