



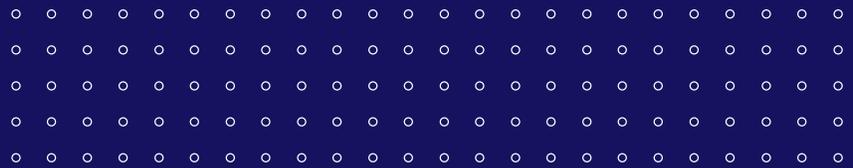
Leadership for Solutions

Energy
Economy
Climate
Environment



2008
Annual Report

Through innovations in energy and environmental policies,
programs and technologies, the Southern States Energy Board
enhances economic development and the quality of life in the South.



Contents

Leadership for Solutions



5

Southern States Energy Board

The Southern States Energy Board (SSEB) is a non-profit interstate compact organization created in 1960 and established under Public Laws 87-563 and 92-440.

7

2007-2008 Board Membership

The list of members serving on the Board as of July 1, 2008. For a current roster, please contact the SSEB staff or visit our website at www.sseb.org.

9

Value-Added Services to Member States

All of the activities of the Board, as described in this *Annual Report*, benefit the southern region in the development of a sound economy, proper utilization and diversity of energy sources and increased industrialization, while providing for protection of the environment to ensure public health, safety and welfare.

11

Report of the Chairman

The Honorable Joe Manchin, III
Governor of West Virginia
Chairman, Southern States Energy Board 2006-2008

15

Event Photographs, 2007-2008

Event photographs from the Southern States Energy Board's 47th Annual Meeting.

21

Current Programs & Activities

- 21 American Energy Security
- 26 Carbon Management
- 29 Coal & Advanced Power Systems
- 32 Biobased Products and Bioenergy Development
- 34 Water for Energy
- 35 Environmental Technology Development, Deployment and Training
- 36 Radioactive Materials: Emergency Response and Transportation Planning
- 39 Regional Recycling Market Development
- 40 Electric Utility Program
- 41 Energy and Environment Legislation
- 42 Industry Partnerships

43

Sources of Support

The Southern States Energy Board's core funding comes from annual appropriations from the 18 member states and territories.

44

Selected Reports & Publications

Annually, numerous requests for specific technical and policy information occur from SSEB members, state and federal government officials, legislators and other parties, including the general public.

46

SSEB Staff

Staff Directory



Southern States Energy Board

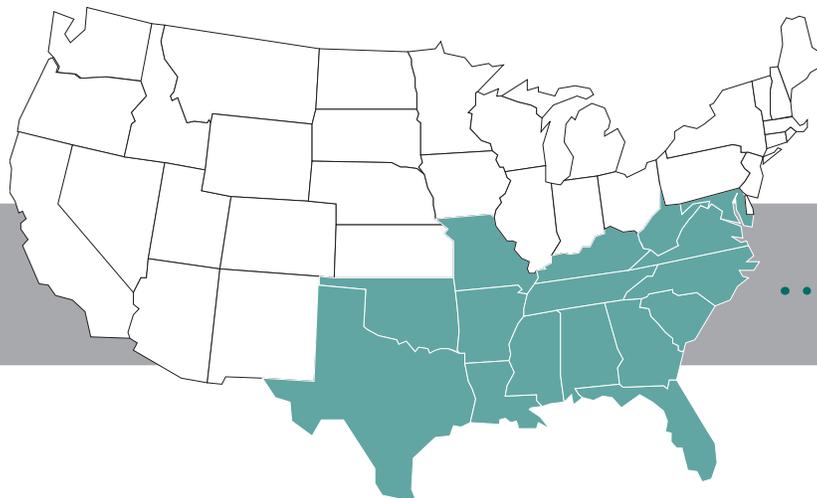


The Southern States Energy Board (SSEB) is a non-profit interstate compact organization created in 1960 and established under Public Laws 87-563 and 92-440. The Board's mission is to enhance economic development and the quality of life in the South through innovations in energy and environmental policies, programs and technologies. Sixteen southern states and two territories comprise the membership of SSEB: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, Missouri, North Carolina, Oklahoma, Puerto Rico, South Carolina, Tennessee, Texas, U.S. Virgin Islands, Virginia and West Virginia. Each jurisdiction is represented by the governor and a legislator from the House and Senate. A governor serves as the chair, and legislators serve as vice-chair and treasurer. Ex-officio non-voting Board members include a federal representative appointed by the President of the United States, the Southern Legislative Conference Energy and Environment Committee Chair and SSEB's executive director, who serves as secretary.

SSEB was created by state law and consented to by Congress with a broad mandate to contribute to the economic and community well-being of the southern region. The Board exercises this mandate through the creation of programs in the fields of energy and environmental policy research, development and implementation, science and technology exploration and related areas of concern. SSEB serves its members directly by providing timely assistance to develop effective energy and environmental policies and programs and represents its members before governmental agencies at all levels.

LONG-TERM GOALS:

- Perform essential services that provide direct scientific and technical assistance to state governments.
- Develop, promote and recommend policies and programs on energy, environment and economic development that encourage sustainable development.
- Provide technical assistance to executive and legislative policy-makers and the private sector in order to achieve synthesis of energy, environment and economic issues that ensure energy security and supply.
- Facilitate the implementation of energy and environmental policies between federal, state and local governments and the private sector.
- Sustain business development throughout the region by eliminating barriers to the use of efficient energy and environmental technologies.
- Support improved energy efficient technologies that pollute less and contribute to a clean global environment while protecting indigenous natural resources for future generations.





2007-2008 Board Membership

The list of members below reflects officials serving on the Board as of July 1, 2008.
For a current roster, please contact the SSEB staff or visit our Web site at www.sseb.org.

Executive Committee

Chairman, 2006-2008

*Governor Joe Manchin¹, III,
Governor of West Virginia*

Vice Chairman

*Representative Rocky Adkins¹,
Commonwealth of Kentucky*

Treasurer

Representative Myra Crownover¹, Texas

Members, Executive Committee

*Governor Haley Barbour¹,
Governor of Mississippi
Governor John P. deJongh¹,
U.S. Virgin Islands
Senator Jeff Rabon¹, Oklahoma
Representative Harry Geisinger¹, Georgia*

Federal Representative

The Honorable Brian C. Griffin²

Secretary to the Board

*Kenneth J. Nemeth², Executive Director,
Southern States Energy Board*

Southern Legislative Conference Energy and
Environment Committee Chair

Representative Ron Peters, Oklahoma³

Members of the Board

Alabama

*Governor Robert Riley
Senator Jimmy W. Holley
Representative Locy "Sonny" Baker
Representative Joseph Mitchell, Deputy
Member
Representative Pete B. Turnham, Emeritus,
House Alternate*

Arkansas

*Governor Mike Beebe
Senator Jack Critcher
Senator Denny Altes, Senate Alternate
Representative Allen Maxwell*

Florida

*Governor Charlie Crist
Senator Lee Constantine
Representative Dave Munzin
Mr. Jeremy Susac, Governor's Alternate*

Georgia

*Governor Sonny Perdue
Senator David Shafer
Senator Mitch Seabaugh, Senate Alternate
Representative Harry Geisinger¹
Representative Jeff Lewis, House Alternate
Mr. Jimmy Skipper, Governor's Alternate*

Kentucky

*Governor Steve Beshear
Senator Robert Stivers
Representative Rocky Adkins¹*

Louisiana

*Governor Bobby Jindal
Senator Robert Adley
Representative Gordon Dove, Sr.
Representative Noble Ellington, Governor's
Alternate*

Maryland

*Governor Martin O'Malley
Senator Thomas McLain (Mac) Middleton
Delegate Dereck E. Davis*

Mississippi

*Governor Haley Barbour¹
Senator Nolan Mittetal
Representative Jim Ellington
Mr. Patrick Sullivan, Governor's Alternate*

Missouri

*Governor Matt Blunt
Senator Kevin Engler
Representative Ed Emery*

2007-2008 Board Membership

continued

North Carolina

Governor Michael F. Easley
Senator David W. Hoyle
Speaker Joe Hackney
Mr. Larry Shirley, Governor's Alternate

Oklahoma

Governor Brad Henry
Senator Jeff W. Rabon¹
Representative Dennis Adkins
The Honorable David S. Fleischaker, Governor's Alternate

Puerto Rico

Governor Anibal Acevedo Vilá
Representative Severo Colberg Toro
Dr. Javier A. Quintana, Governor's Alternate

South Carolina

Governor Mark Sanford
Senator John C. Land, III
Representative Robert "Skipper" Perry, Jr.

Tennessee

Governor Phil Bredesen
Senator Rosalind Kurita
Representative Gary Odom
Mr. Ryan Gooch, Governor's Alternate

Texas

Governor Rick Perry
Senator Kip Averitt
Representative Myra Crownover¹
Commissioner Michael L. Williams, Governor's Alternate

U.S. Virgin Islands

Governor John P. deJongh¹
Mr. Bevan R. Smith, Jr., Governor's Alternate

Virginia

Governor Tim Kaine
Senator Thomas Norment, Jr.
Delegate Harry R. Purkey
Dr. Michael Karmis, Governor's Alternate

West Virginia

Governor Joe Manchin, III¹
Senator William R. Sharpe, Jr.
Delegate Harold K. Michael
Mr. John F. Herholdt, Governor's Alternate

Designations

- ¹ Executive Committee Member
- ² Ex-Officio, Non-voting Executive Committee Members
- ³ The Board's by-laws provide that the Southern Legislative Conference Energy and Environment Committee Chair serves as a non-voting Executive Committee Member.



Value-Added Services to Member States



Participation by all member jurisdictions in the Southern States Energy Board Compact is critical not only to the state but also to the region. All of the activities of the Board, as described in this Annual Report, benefit the southern region in the development of a sound economy, proper utilization and diversity of energy sources and increased industrialization, while providing for protection of the environment to ensure public health, safety and welfare. SSEB often undertakes state-specific projects with those same goals in mind.

Listed below are value-added services that SSEB member states and its citizens receive as members of the Compact.

- SSEB obtains funding for state and regional projects at the request of its membership, committees and working task forces. This funding provided to our states generally is far in excess of appropriations paid to SSEB by its members.
- SSEB negotiates collective funding for member states on programs that support energy and environmental research, education and training, technology development, regulatory reform and other key issue areas.
- SSEB funds the direct participation of state officials in projects and activities in order to enable states to remain current on new programs, trends and technologies while decreasing the impact of travel on member state budgets.
- SSEB works directly with businesses and industries on specific economic development projects that create and sustain jobs and expand the economy.
- SSEB provides regional forums, summits, conferences and workshops in member states that stimulate and promote economic development while facilitating peer and professional development.
- SSEB conducts training and professional development activities that address energy and environmental programs and technologies.
- SSEB conducts research and recommends solutions to specific issues on request of member state officials and businesses.
- SSEB supports improved energy efficient technologies that pollute less and contribute to a clean global environment while protecting indigenous natural resources for future generations.





Report of the Chairman

As the Southern States Energy Board celebrates nearly five decades of leadership for implementing solutions related to energy, the environment and the economy, it is my pleasure to serve as Chairman of this exemplary organization. Its mission, "to enhance economic development and the quality of life in the South, through innovations in energy and environmental programs, policies and technologies," has even a more poignant purpose than it did when the Board voted for this direction.

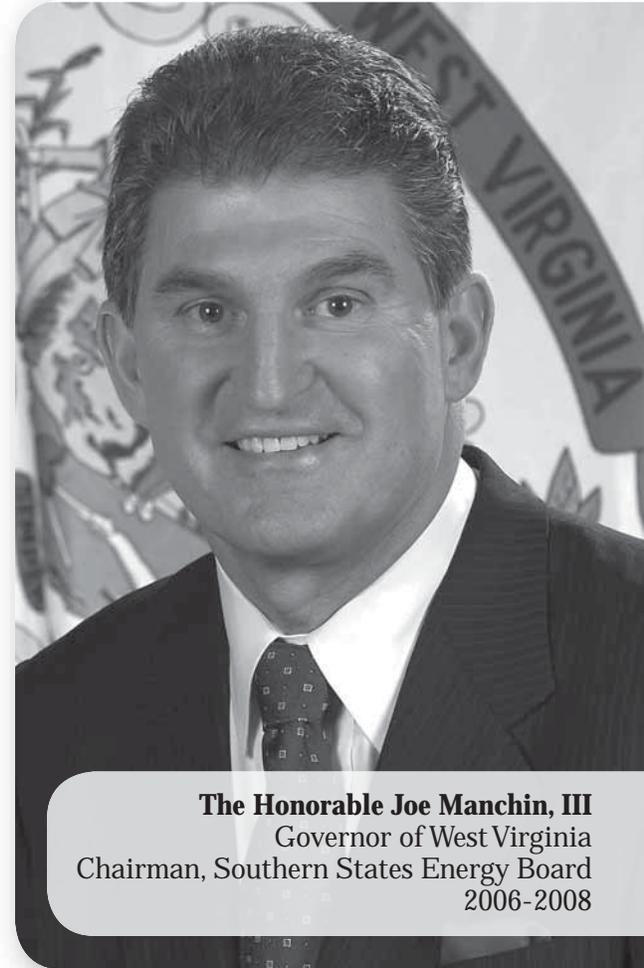
One of the Board's key roles is to form government/industry partnerships and collaborations that benefit its member states and the Nation to implement solutions that are effective, balanced and contribute to the Board's mission. During my tenure as SSEB's Chairman, I have focused on the nexus of key issues impacting our country – energy independence, climate change and national security. Such solutions are quite evident in the Board's initiatives over the years and most recently with the development and implementation of the *American Energy Security Initiative* and the accomplishments of the *Southeast Regional Carbon Sequestration Partnership*.

Leadership for Solutions - In July of 2006, the Southern States Energy Board unveiled a plan for the United States, the *American Energy Security Study*, to establish energy security and independence through the production of alternative oil and liquid transportation fuels from its vast domestic resources that include coal, oil shale and

biomass. That plan was the result of a leadership study initiative begun by the Board in 2005 to target the Country's extreme dependence on imported oil and what could be done to eliminate the resulting economic, national security and environmental problems. The goal of the plan is to reduce the Nation's dependence on imported oil by 2030 through "national will" and a series of leadership actions.

The first American Energy Security Summit was sponsored by the Southern States Energy Board in Alexandria, Virginia, on April 16-18, 2007. The conclave brought together a powerhouse assembly of members of Congress, governors, state legislators, the U.S. military, the Department of Energy, the Environmental Protection Agency, business and industry CEO's, "Wall Street" financiers, academia, new technology developers, media interests and private citizens.

A Zogby International poll of the American people, conducted for Southern States Energy Board on April 9-11, 2007, was the signature release of the initial Summit session, with some startling revelations. Ninety-five percent of Americans responding to the poll believed that eliminating our dependence on imported oil should be one of the Nation's top five priorities. Rapidly expanding production of alternative fuels, such as coal, biomass and oil shale and enhanced oil recovery,



The Honorable Joe Manchin, III
Governor of West Virginia
Chairman, Southern States Energy Board
2006-2008

was supported by 95 percent. When asked if the federal and state governments should take aggressive action to reduce investment risks to ensure the deployment of alternative fuels, 84 percent strongly agreed.

The cost of gasoline and its effects on the 2008 presidential election also was posed. Seventy-six percent listed this issue as a key indicator of their voting preference for a candidate. When asked about the development of a "price support" mechanism to void predatory practices by imported oil suppliers and speed alternative liquid fuels into the marketplace, 67 percent approved of this strategic

security mechanism. Some of these questions have been construed as controversial, yet overwhelming support came from Americans polled across the Country. Recent polls are showing that energy and environment still remain in the public's top priorities for the 2008 Presidential race.

The Nation's homeland security is at risk as long as we continue to rely on imported sources for our transportation fuels and refuse to begin a national initiative to eliminate our dependence on other countries. The federal government and the states can provide incentives that will bring technology developers, financiers and investors together to create a "national will" to become energy independent. Many of those incentives can be found in the Southern States Energy Board's American Energy Security Study at www.americanenergysecurity.org.

Over the past year, the American people have become astutely aware of how our reliance on imported oil is impacting their quality of life. Basic needs are becoming more and more difficult to afford. The price of energy is affecting all aspects of daily living. While we must aggressively increase choices so the American public is served, we also must face realities and recognize that the United States is rich in resources and that we have to utilize these resources to protect the strength of our economy. At the same time, we need to optimize every

opportunity to become more energy efficient and conserve.

Our Nation must create a long-term plan to increase the expansion of alternative fuel production from domestic resources. We need to move toward a more aggressive approach to develop fuels such as methanol, crop-based and cellulosic ethanol, butanol, biodiesel, coal-to-liquids and hydrogen. Of course, we must understand the life-cycle greenhouse impacts when considering these fuel choices. The ability of our economic sectors such as agriculture and forestry to participate in these new markets must also be analyzed.

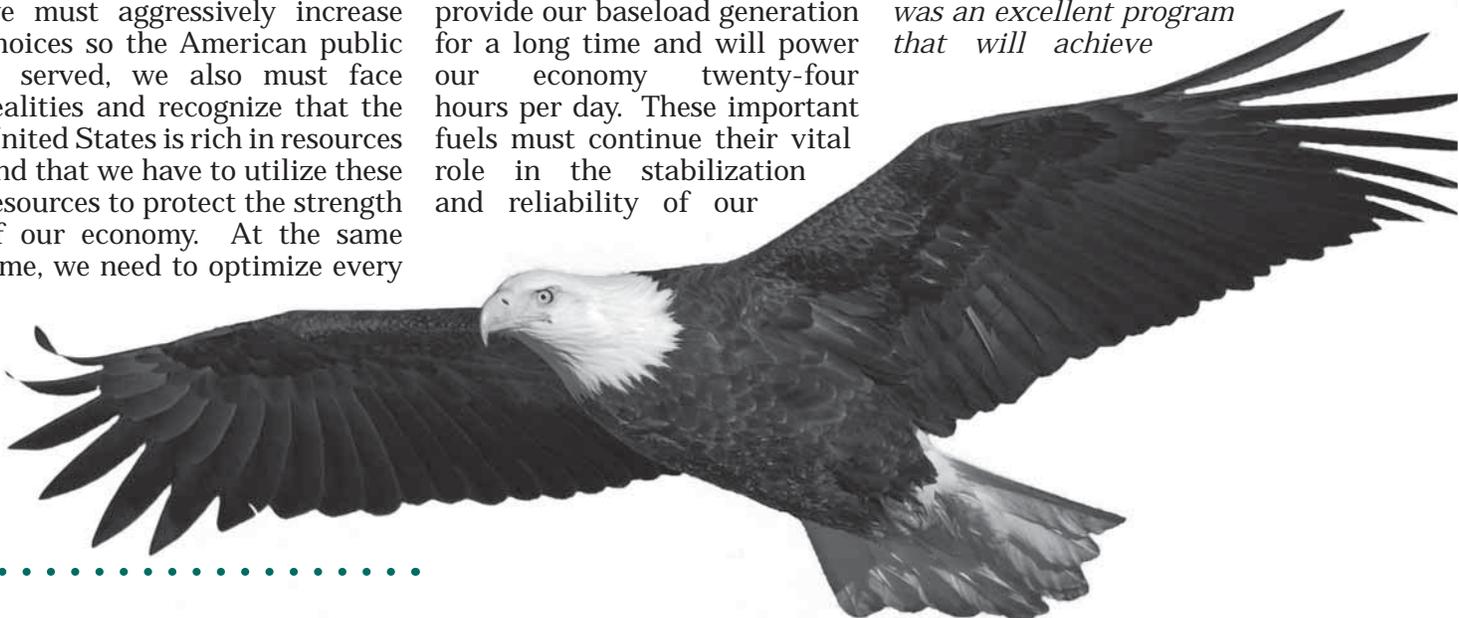
While our Nation moves aggressively toward a new energy future and what many are calling a transformation, we must develop the infrastructure and the technologies required to preserve our environment. Today, we are building consensus on strategies for government leadership to reduce greenhouse gases, and specifically carbon dioxide (CO₂) in order to affect climate change. Recognizing that we need to lower greenhouse gas emissions, we also must accept that coal and nuclear will provide our baseload generation for a long time and will power our economy twenty-four hours per day. These important fuels must continue their vital role in the stabilization and reliability of our

American lifestyle. Renewable energy must be expanded and utilized wherever possible.

Leadership for Solutions - Since coal is our most abundant energy resource domestically, we must find ways to reduce CO₂ emissions from generating plants. For this reason, carbon capture and sequestration are extremely important as a primary approach to counteract climate change.

In 2003, the U.S. Department of Energy (DOE) began funding a national framework of seven regional carbon sequestration partnerships with a common goal of commercially deploying carbon sequestration technologies in an effort to reduce greenhouse gas intensity by 18 percent by 2012. The Southern States Energy Board manages the Southeast Regional Carbon Sequestration Partnership, or SECARB. The three phase SECARB program, the largest of the seven, represents a partnership of thirteen states, more than 100 participating organizations and an overall budget of \$116 million.

In May 2008, the International Energy Agency Greenhouse Gas R&D Programme expert review panel proclaimed that the "*Phase III of the regional partnerships was an excellent program that will achieve*



significant results for carbon capture and sequestration both in the United States, Canada and internationally.” The panel unanimously agreed that the regional partnerships will significantly advance and accelerate this field. The IEA expert review panel also noted that *“the individual projects within Phase III will complement each other and together build a comprehensive and expansive research program, the size and scope of which is unique throughout the world.”* Further, the expert panel emphasized that no other country or region has embarked upon such an ambitious initiative.

SECARB completed Phase I of the program in 2006, during which its partners screened potential sources and sinks for carbon sequestration. The findings revealed that potential sources of carbon dioxide emissions are located throughout the region, with large coal-fired power plants being the most prominent emitters. Also, the findings demonstrate that the region has numerous and diverse terrestrial and geologic sinks that could serve as most promising basins for sequestering CO₂.

The four-year Phase II program began in 2006 and focuses on the most promising opportunities for geologic sequestration within the region that promote the development of a framework and infrastructure necessary for the validation and deployment of carbon sequestration technologies. Under Phase II, the SECARB team is validating, through field testing, sequestration technologies and corresponding infrastructure approaches

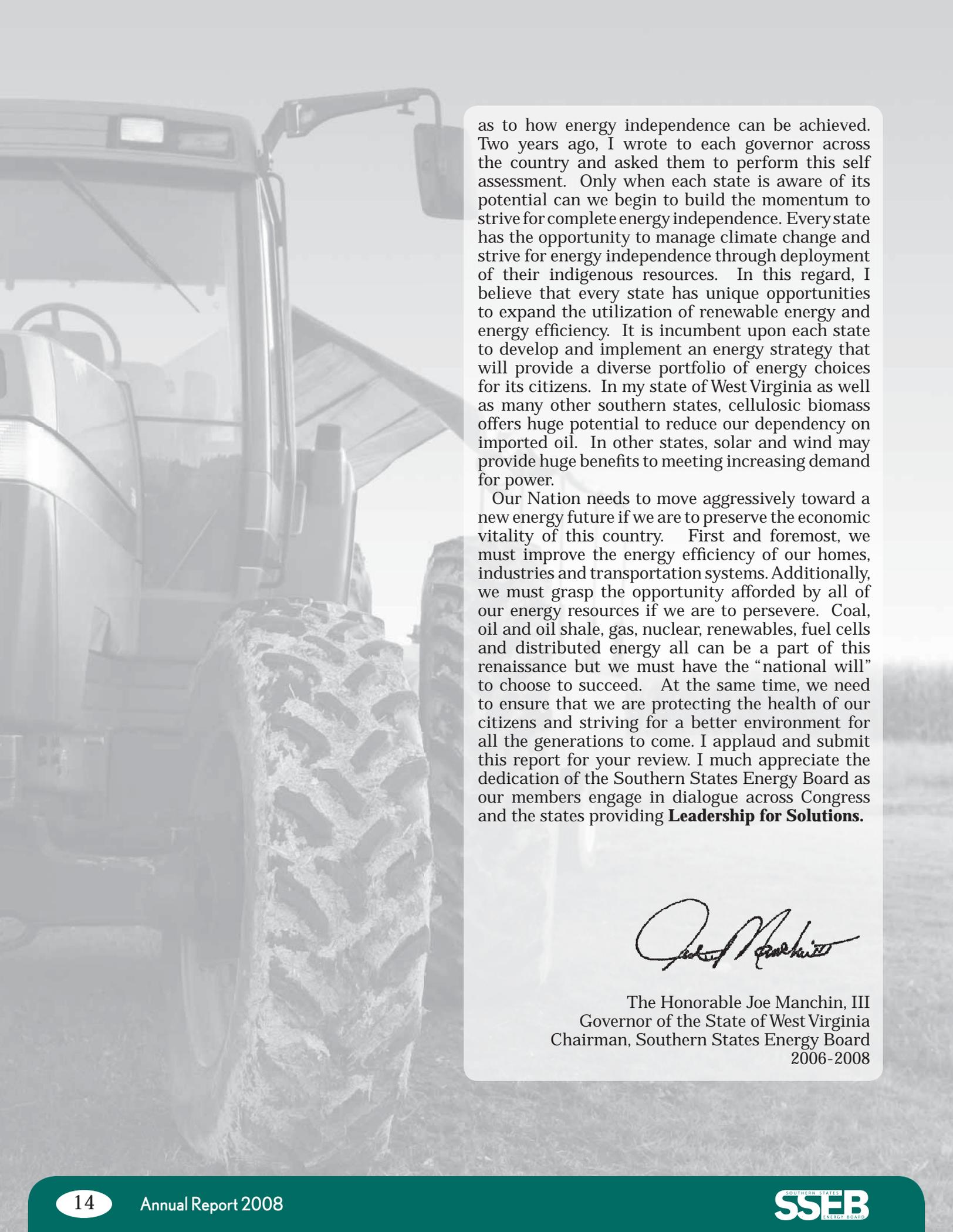
related to regulatory, permitting and outreach. Phase II consists of three multifarious field tests in four locations, including enhanced coalbed methane projects in Central Appalachia (Russell County, Virginia) and the Black Warrior Basin (Alabama); a saline reservoir field test near Escatawpa, Mississippi, at Mississippi Power Company’s Victor J. Daniel Power Plant; and a Gulf Coast stacked storage project at the Cranfield oilfield east of Natchez, Mississippi.

In October 2007, SECARB was awarded Phase III funding to conduct large-scale carbon dioxide injections in two distinctly different validation tests over a ten-year program period. The first test, referred to as the “Early Test,” will be conducted in the Cranfield oilfield, near the site for the Phase II demonstration. The second test, referred to as the “Anthropogenic Test,” will be performed in the Gulf Coast region and integrate a carbon capture technology at an existing Southern Company power plant that will provide the source of carbon dioxide for nearby injection. The site for the Anthropogenic Test will be selected in October 2008.

The successful completion of the SECARB program will validate carbon capture and storage technologies for future commercialization in the Southeast and foster a new approach to U.S. clean coal power generation and energy security. For additional information regarding the science behind the SECARB field tests, please visit the Partnership’s website at www.secARB.org.

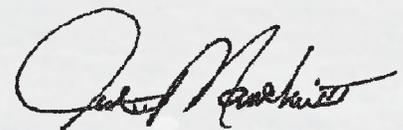
Each state needs to perform its own assessment





as to how energy independence can be achieved. Two years ago, I wrote to each governor across the country and asked them to perform this self assessment. Only when each state is aware of its potential can we begin to build the momentum to strive for complete energy independence. Every state has the opportunity to manage climate change and strive for energy independence through deployment of their indigenous resources. In this regard, I believe that every state has unique opportunities to expand the utilization of renewable energy and energy efficiency. It is incumbent upon each state to develop and implement an energy strategy that will provide a diverse portfolio of energy choices for its citizens. In my state of West Virginia as well as many other southern states, cellulosic biomass offers huge potential to reduce our dependency on imported oil. In other states, solar and wind may provide huge benefits to meeting increasing demand for power.

Our Nation needs to move aggressively toward a new energy future if we are to preserve the economic vitality of this country. First and foremost, we must improve the energy efficiency of our homes, industries and transportation systems. Additionally, we must grasp the opportunity afforded by all of our energy resources if we are to persevere. Coal, oil and oil shale, gas, nuclear, renewables, fuel cells and distributed energy all can be a part of this renaissance but we must have the “national will” to choose to succeed. At the same time, we need to ensure that we are protecting the health of our citizens and striving for a better environment for all the generations to come. I applaud and submit this report for your review. I much appreciate the dedication of the Southern States Energy Board as our members engage in dialogue across Congress and the states providing **Leadership for Solutions**.



The Honorable Joe Manchin, III
Governor of the State of West Virginia
Chairman, Southern States Energy Board
2006-2008

Event Photos

2007-2008

SOUTHERN STATES ENERGY BOARD 47TH ANNUAL MEETING “Breaking the Chains of Energy Dependence” August 27, 2007

Senator John Watkins, Commonwealth of Virginia, calls the Southern States Energy Board’s 47th Annual Meeting to order. Senator Watkins served as SSEB’s Vice Chairman.



The Honorable Tim Kaine (photographed to the right), Governor of Virginia, discusses key energy and environmental issues with members of the Board. Dr. Michael Karmis, Governor Kaine’s Alternate to the Board, is pictured left.

Representative Myra Crownover of Texas delivers the Board’s financial report. Representative Crownover has served as Treasurer since 2005.



Event Photos

2007-2008

SOUTHERN STATES ENERGY BOARD 47TH ANNUAL MEETING “Breaking the Chains of Energy Dependence” August 27, 2007



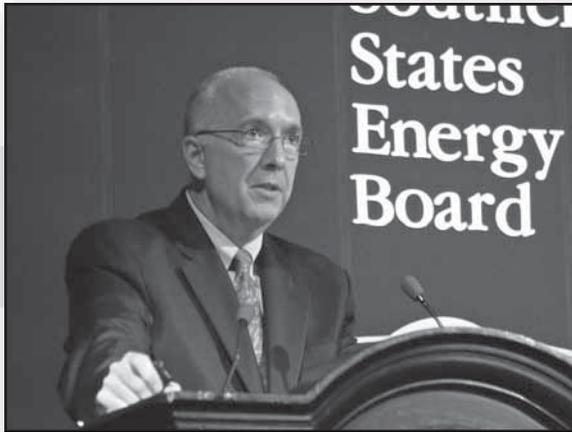
Mr. John Hofmeister, President of Shell Oil Company, addresses the Board on the topic of *Ensuring Our Energy Future*.

Mr. Eric K. Knox provides the U.S. Department of Energy’s perspective on the impact of nuclear waste on southern states. Mr. Knox is the Associate Director of System Operations and External Relations at the U.S. Department of Energy.



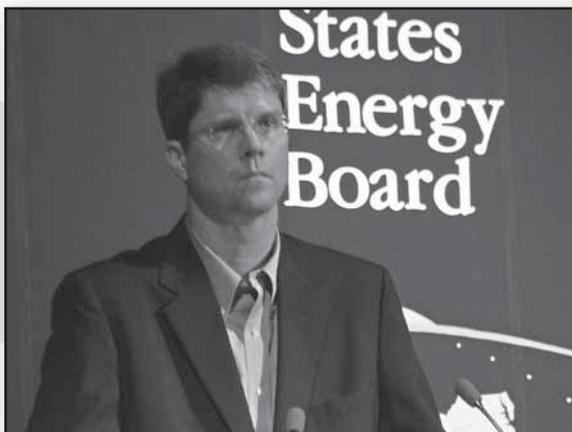
Representative Harry Geisinger, Georgia, participates in the Board’s 47th Annual Meeting.

SOUTHERN STATES ENERGY BOARD 47TH ANNUAL MEETING
Associate Members and Electric Utility Task Force Meeting
August 24, 2007



Mr. Leonard Haynes presents recent energy efficiency and conservation efforts by Southern Company.

Mr. Alexander Mack, Florida Energy Office, reports on Florida's Action on Climate Change.

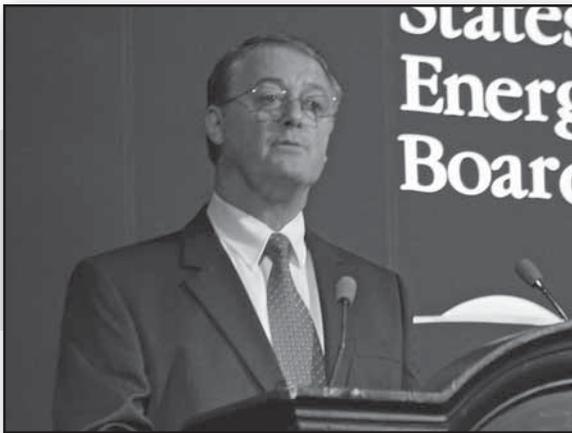


Mr. Jim Kibler, AGL Resources, recommends that the Southern States Energy Board host a web-based energy education initiative. Mr. Kibler will serve as Chair of the Associate Members during 2008-2009.

Event Photos

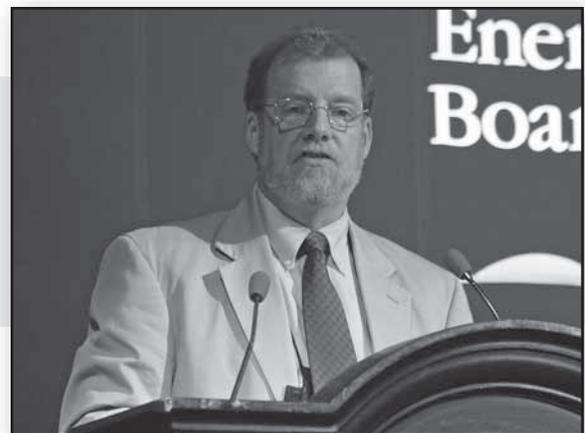
2007-2008

SOUTHERN STATES ENERGY BOARD 47TH ANNUAL MEETING Associate Members and Electric Utility Task Force Meeting August 24, 2007



Mr. Eric Jenkins of Fibrowatt LLC discusses an innovative technology to generate renewable power from poultry litter.

Mr. Larry Shirley, North Carolina State Energy Office Director, shares details of the North Carolina Utility Saving Initiative. Mr. Shirley serves as Governor Michael Easley's alternate to the Board.







American Energy Security



During its Annual Meeting in August 2005, the Southern States Energy Board unanimously approved an *American Energy Security Study*. The focus is on soaring energy prices, national energy security and shortages of liquid transportation fuels. The goal is to implement federal legislation that will address the fiscal, tax, legislative and regulatory reforms necessary to ensure stable, affordable, quality liquid transportation fuels for the American public.

The Board unanimously agreed that the country does not face an “energy crisis”; it is apparent that a shortage of viable liquid transportation fuels is being exacerbated by four oil related risks to our economy. First, we face an expanding dependence on oil supplies delivered to us by unstable and unfriendly foreign countries. America consumes 22 million barrels of oil per day, and 67 percent of that total powers the transportation sector of our economy. Second, oil is a finite resource, and many experts believe that supplies will “peak” soon and begin a steady decline. Third, we face inexorable competition for oil from huge, developing countries such as China and India. And fourth, the 2005 hurricanes demonstrated the vulnerability of our energy

infrastructure and how easily supplies can be disrupted. Even more daunting is the fact that oil is being used as an international weapon by terrorists, a threat that can be eliminated if we act as a Nation to do so.

The American Energy Security action plan and study promotes the rapid development of an alternative oil and liquid fuels production base in America utilizing our vast domestic resources including coal, oil shale and biomass. The plan also emphasizes the need for increased transportation fuel efficiency, sensible energy conservation and improved domestic enhanced oil and coalbed methane recovery programs using carbon dioxide.

One goal of the SSEB study is to show how America can replace approximately five percent of U.S. imported oil each year for 20 years, beginning in the next five years. A key component of this plan will be the construction of multiple alternative liquid fuel plants each year.

Several key factors in this approach to energy independence include, first, the United States has significant quantities of alternative oil resources rivaling total worldwide conventional oil reserves. Trillions of tons of American coal, oil shale and renewable biomass resources are available to be converted to premium quality liquid fuels using existing and rapidly emerging technologies. Second, by producing environmentally superior transportation fuels from near-zero emissions plants that can recycle, utilize and sequester CO₂, the United States can be an example for the world, in particular the rapidly expanding energy production capabilities of China and India. Liquid fuels produced from coal, oil shale and biomass have very low sulfur, low particulate and NO_x emissions and higher performance characteristics than their conventional distillate counterparts. Third, the SSEB study focuses primarily on the rapid development of coal, oil shale and biomass-to-liquid fuels production. Commercial enhanced oil recovery successes using CO₂ flooding suggest that American oil and gas production can be dramatically increased using these methods. Miscible CO₂ flooding can revitalize certain mature oil fields. In addition, the study supports CO₂ injection into coal and oil shale deposits with an emerging technology that can increase natural gas production from these sources.



American Energy Security

continued

On April 16-18, 2007, Governor Joe Manchin hosted The American Energy Security Summit in Alexandria, Virginia. Sponsored by the Southern States Energy Board, the Summit brought together members of Congress, governors, state legislators, the U.S. military, the U.S. Department of Energy, the U.S. Environmental Protection Agency, business and industry chief executive officers, financiers, academia, new technology developers, media interests and private citizens.

A Zogby International poll of the American people, conducted for Southern States Energy Board on April 9-11, 2007, was the signature release of the initial Summit session, with some startling revelations. Ninety-five percent of Americans responding to the poll believed that eliminating our dependence on imported oil should be one of the Nation's top five priorities. Rapidly expanding production of alternative fuels such as coal, biomass and oil shale and enhanced oil recovery was supported by 95 percent. When asked if the federal and state governments should take aggressive action to reduce investment risks to ensure the deployment of alternative fuels, 84 percent strongly agreed. The cost of gasoline and its effects on the 2008 Presidential election also was posed. Seventy-six percent listed this issue as a key indicator of their voting preference for a candidate. When asked about the development of a "price

support" mechanism to void predatory practices by foreign oil suppliers and speed alternative liquid fuels into the marketplace, 67 percent approved of this strategic security mechanism. Some of these questions have been construed as controversial, yet overwhelming support came from the Americans polled.

Energy security and the price of petroleum fuel supplies have been a dominant theme in the news over the past year. Rising prices of oil above \$70 per barrel have given priority to a number of legislative calls for alternative methods of reducing the Nation's dependence on foreign oil supplies and drastically increasing the use of our domestic resources by providing petroleum substitutes for transportation fuel. In 2007 the President, in his State of the Union address, called for the United States to drastically reduce its dependence on foreign oil, particularly from the Middle East. With imports of over 12 million barrels of foreign oil per day, the United States is economically vulnerable to the price and quantity of oil available.

Congressional legislation will be needed to implement the recommendations of the *American Energy Security Study* and discussions are underway with members of Congress to address these strategies. The following measures are target issues which continue to be debated.



Extend the \$0.50 Per Gallon Alternative Liquid Fuels Excise Tax Credit

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, SAFETEA-LU 2005 extension, provides a \$0.50 per gallon excise tax credit for certain alternative liquid fuels, including coal-to-liquids products. This incentive is set to expire in 2009, before any major new coal-to-liquids and oil shale plants, for example, can come online. Its extension through 2020 and the inclusion of oil shale products will provide “real” market incentive to future alternative liquid fuel plant developers.

Provide Accelerated Cost Recovery to Alternative Fuel Plant Owners

Authorization for 100 percent expensing in the year of outlay for any alternative liquid fuel plants begun by 2020 is recommended. This will provide a substantial tax incentive to build alternative fuels manufacturing capacity, with the government recapturing the deferred taxes in the early years of a plant’s operation.

Incentivize Refining of Alternative Liquid Fuels

We recommend the extension of the now temporary expensing allowance for equipment used in refining to 100 percent of any required additions to existing refineries needed to handle domestic alternative liquid fuels products (see EPAAct2005, § 1323). This incentive will redirect refinery owners to domestic and away from imported feedstock sources.

Provide Explicit DOE Authority and Appropriations for Loan Guarantees

The Energy Policy Act of 2005 establishes a loan guarantee program within DOE. However, the DOE view is that the Federal Credit Reform Act of 1990 contains a requirement preventing the DOE from issuing any loan guarantees until they have an authorization, including a loan volume limitation, in an appropriations bill. It is recommended that Congress provide explicit authorization in the form of a federal loan facility to support the first approximately

100,000 barrels per day of new commercial production capacity (ten 10,000 barrels per day plants +/-) for coal, biomass and oil shale-to-liquids facilities. Also, Congress should provide appropriations for technologies demonstration, as provided in the Energy Policy Act of 2005.

Fund the Military Alternative Fuels Testing and Development Program

The U.S. Department of Defense (DoD) has a development program underway to evaluate, demonstrate and certify turbine fuels from alternative energy resources for use in tactical vehicles, aircraft and ships. Fuel sources include Fischer-Tropsch (F-T) fuels made from domestic coal, refined fuels derived from oil shale kerogen and renewable/bio-based fuels. The ultimate goal is to develop a single Battlefield Use Fuel of the Future (BUFF). At the center of this development effort is a DoD fuel testing program. We encourage Congress to fully fund this critical program through FY2013. The military need is approximately \$500 million over a five to six year period, beginning in 2007.

Authorize and Fund Military Purchases of Alternative Fuels Under Long-term Contract

Total oil consumption by U.S. military forces is approximately 400 thousand barrels per day. Through the development of BUFF specifications, it is believed that a substantial portion of this requirement can be met with domestically produced alternative liquid fuels. The DoD desires to enter into long-term contracts for the purchase of alternative fuels made in the United States from domestic resources. This is part of DoD’s Total Energy Development (TED) Program, with a stated mission to “catalyze industry development and investment in [alternative] energy resources.” Congressional support is encouraged for DoD’s TED program, including extending its long-term contracting capabilities from five to as long as 25 years. Appropriate and necessary authorizations and funding should be given high priority. DoD fuels purchases under long-term contract can help establish a foundation on which to build a new alternative fuels

American Energy Security

continued

industry. And secure, high quality U.S. made alternative liquid fuels will help our military.

Eliminate The \$10 Million Cap for Tax Exempt Industrial Development Bonds

Certain pollution control and solid waste disposal facilities currently are not included in the \$10 million limit on tax exempt Industrial Development Bonds (IDB) which encourage investment. It is recommended that alternative liquid fuels production facilities be added to this list of activities having no tax exempt IDB size limits. This will lower the cost of capital to build new alternative liquid fuels processing projects and enable expansion of existing ethanol and biodiesel plants.

Provide Regulatory Streamlining for the Production of Alternative Liquid Fuels

In order to facilitate the rapid scale-up of alternative liquid fuels production capabilities in the United States, regulatory changes are necessary. Standardizing, simplifying and expediting the permitting process for manufacturing/processing facilities, mines, agricultural operations and necessary infrastructure is crucial. The “not in my back yard” mentality, often accompanied by costly, time consuming litigation and anti-commercial environmentalist obstructionism, needs to be countered with legislation and leadership. Below are a few recommendations in this very important area.

- Standardize, simplify and expedite permitting and siting with joint federal, state and local processes, policies and initiatives.
- Make appropriate federal, state and local government sites available for alternative liquid fuels manufacture, including base realignment and closure of military sites.
- Exempt initial alternative liquid fuels processing facilities from New Source Review and National Ambient Air Quality Standards offset requirements.
- Encourage local leadership to modify approaches to zoning and other land use and business regulations, to accommodate

the strategically important new activities of alternative energy harvest and manufacture.

- Prioritize, expand and promote the impressive reforestation work being done to dramatically accelerate the rate of tree growth by creating optimal soil conditions at reclaimed mine sites.

Establish a Self-sustaining Government Corporation to Provide Market Risk Insurance

Congress is encouraged to establish the Strategic Energy Security Corporation (SESC), a self-funding, self-sustaining government corporation. The SESC is proposed to administer a new, “fuel-neutral,” alternative liquid fuels market insurance program to protect against predatory pricing by OPEC and others. More details on the SESC initiative are provided in the *American Energy Security Study*.

Expand the Strategic Petroleum Reserve (SPR) Program to Include Alternative Liquid Fuels Products

Stockpiling crude oil in a centralized location has its limitations. Crude oil needs to be refined to be useful. The logistics of moving SPR crude to refineries having available capacity, and then transporting the refined products to locations in need, is cumbersome and takes time (time being of the essence in a crisis). There are only four centrally located SPR storage sites in the United States; two in Texas and two in Louisiana. All four sites are centrally situated on the hurricane-prone Gulf Coast, making them vulnerable to natural disaster and also to enemy attack. Congress should examine the feasibility of purchasing and storing “finished” alternative fuel products such as diesel fuel, jet fuel, heating oil and ethanol at a number of locations strategically dispersed throughout the United States, as an extension of the SPR program. Fischer-Tropsch wax produced from coal, biomass and perhaps even oil shale may be an ideal product for this purpose. The F-T process is capable of making a biodegradable wax as an alternative to producing diesel and jet fuels. This wax has a very long shelf life, and

can be upgraded to superior quality fuels much more quickly and inexpensively than crude oil. In general, a variety of alternative fuels could be purchased by the SPR under long-term contract to control costs and to help establish a vibrant, rapidly expanding alternative fuels industry. Congress should authorize the sale of portions of the crude oil currently in storage on the open market to fund available alternative fuels purchases.

Provide Incentives for Existing Ethanol Plants to Convert to Coal

Until very recently, the ethanol plant fuel source of choice for processing heat and electricity was natural gas. With the recent run-up in natural gas prices, new ethanol plants are opting for coal firing. Like crude oil, limited domestic natural gas supplies have necessitated increasing imports of this fuel as LNG to produce ethanol. To promote energy efficiency and lower energy imports, we recommend providing for 100 percent expensing in the year of outlay for the cost of converting ethanol plants currently using natural gas to domestic coal, if the new plant is in service by 2010.

Provide Incentives for Enhanced Oil Recovery and Enhanced Coalbed Methane Recovery Using CO₂ Captured From Alternative Fuel Plants

The capture and use of the CO₂ from alternative liquid fuel plants can greatly expand domestic oil production from existing oil fields and enhance methane recovery from coalbed methane operations. To lower the barriers to expanded use of CO₂ injection we recommend:

- Excluding oil production from the Alternative Minimum Tax;
- Increasing the investment tax credit to 50 percent;
- Providing federal royalty and severance relief until the investment in CO₂ injection is recovered; and
- Providing access to federal and state lands for construction of CO₂ pipelines.

Additional Recommendations

Issues and policy options related to the prioritization and catalyzing of a new domestic alternative liquid fuels industry are extremely complex and important. The policy recommendations provided in this Annual Report are believed to be keys to the success of a comprehensive national initiative for alternative fuels harvesting and manufacturing. The *American Energy Security Study* of the Southern States Energy Board has developed additional policy options for states.



Carbon Management

Southeast Regional Carbon Sequestration Partnership

The Southeast Regional Carbon Sequestration Partnership, or SECARB, is a program underway at the Southern States Energy Board to define the role for clean coal in a carbon constrained world and balance the environmental effects of existing and prospective power generating facilities. While many of our Nation's leaders are working hard to ensure that coal continues to contribute to this Nation's economic growth and homeland security, it is evident that carbon capture and sequestration technologies have a dominant role in that future. SECARB is a \$116 million multi-state program established in 2003 and managed by SSEB with the primary goal of characterizing the geology of a 13-state region, matching major sources of carbon emissions with geologic sequestration sites, determining the most promising options for commercial deployment of carbon sequestration technologies in the South and validating the technology options through carefully executed field testing through 2017.

SECARB is one of seven regional partnerships nationwide and co-funded by the U.S. Department of Energy and SECARB partners. The SECARB program is divided into three phases. The Partnership receives 70 percent of its funding from DOE's National Energy Technology Laboratory and the other 30 percent is provided by cost share partners, currently representing 39 organizations. Each year SECARB has an annual briefing in Atlanta, and the Third Annual SECARB Briefing in March of 2008 attracted over 100 industry, government, academic and non-profit participants.

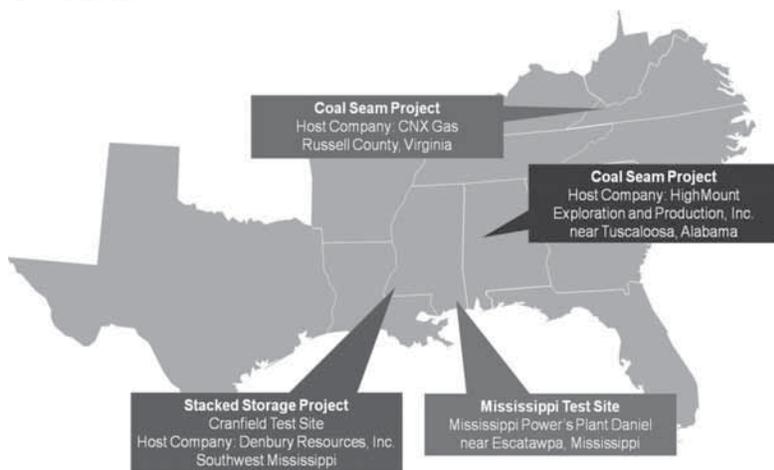
Phase I: Characterization

Phase I (2003-2005) focused on characterizing the geology and potential terrestrial sequestration options in the Southeast. Phase I culminated in the development of an action plan for small-scale geologic carbon sequestration field demonstrations.

Phase II: Validation

SECARB currently is in its third year of a four-year Phase II Validation program (2005-2009), whereby the team is implementing the

action plan from Phase I and validating various technologies with small-scale injections in the field. Phase II includes field tests in four locations.



SECARB Phase II Geographic Region and Field - Test Site Locations

Gulf Coast Stacked Storage Project

Enhanced oil recovery (EOR) stacked formations along the Gulf Coast are a prime target area for geologic storage of carbon dioxide. Sequestration in these formations can help the U. S. reach national emissions reduction targets in the future. SECARB's research estimated 31 billion metric tonnes (34 billion U.S. tons) of potential storage capacity in the region's depleted oil and natural gas fields.

SECARB's Gulf Coast Stacked Storage Project will demonstrate the concept of phased use of subsurface volumes, combining early use of CO₂ for enhanced oil recovery with later injection into underlying or adjacent brine formations. The benefits of this phased development are short-term, large-volume injection with immediate commercial benefit to support research and infrastructure development followed by use of underlying or adjacent brine-bearing formations for large-volume, long-term storage. The Cranfield Oilfield in Southwest Mississippi has been selected for this test, and Denbury Resources is providing the host site. The Gulf Coast Carbon Center at The University of Texas at Austin leads this field test for SECARB. Phase II CO₂ injection began in July 2008.



A work-over rig began re-entry operations on the Ella G. Lees #7 well on January 21, 2008. Ella G. Lees #7 will be utilized as an observation well during injection to monitor and verify the migration of the CO₂.

Saline Reservoir Field Test: The Mississippi Test Site

Saline formations are the primary CO₂ geologic storage options for the SECARB region because of the extensive saline formations that underlie many of the power plants in the region. SECARB's research estimated 1,440 billion metric tonnes (1,584 billion U.S. tons) of potential sequestration in saline formations in the region. Work performed during the Characterization Phase showed that saline formations with favorable sequestration potential underlie Alabama, Florida, Louisiana, Mississippi, East Texas, and Tennessee.

The purpose of the Mississippi Test Site project is to examine deep saline reservoirs located near large coal-fired power plants along the Mississippi Gulf Coast for geological storage of CO₂. In this area, the Massive Sand Unit of the Lower Tuscaloosa Formation has been identified as a high capacity CO₂ storage option. Mississippi Power Company's Victor J. Daniel Power Plant, located near Escatawpa, Mississippi, is the site for this field test. The project team is led by the Electric Power

Research Institute and Southern Company, and injection is scheduled to begin in fall 2008.

To assure a safe, secure and publicly accepted field test, the Mississippi Test Site project is in the process of building the essential foundation of technical knowledge for full-scale implementation. This includes: constructing geological and reservoir maps to further assess the site; conducting reservoir simulations to estimate CO₂ injection rates, storage capacity and the long-term fate of injected CO₂; addressing state/local regulatory regimes for permitting this site; fostering public education and outreach to build acceptance; injecting up to 3,000 tons of CO₂; and conducting baseline and long-term monitoring to establish the security of the CO₂ plume.



CO₂ Pilot-Injection Well Drilling – In February 2008 Basin Drilling LLC drilled a carbon dioxide pilot injection well and an observation well at Mississippi Power Company's Victor J. Daniel Power Plant. This small-scale pilot injection of CO₂, scheduled for late 2008, will help evaluate geologic storage sequestration at the site. Photo compliments of Richard Esposito, Southern Company Services Inc.

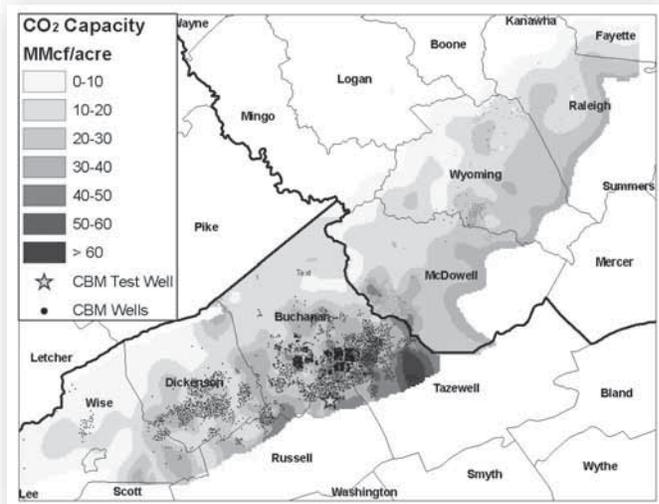
Carbon Management

continued

Coal Seam Project: Central Appalachian Basin

Coal seams are among the most attractive potential CO₂ sinks occurring in the Southeastern United States, where a prolific coalbed methane industry, which has produced more than 2.3 trillion standard cubic feet (Tscf) of natural gas, is approaching maturity. CO₂ sequestration in unmineable coal seams can produce enhanced coal bed methane to help offset sequestration costs. An estimated 82.1 billion metric tonnes (90.3 billion U.S. tons) of potential storage capacity exists in the region's unmineable coal seams. There are two SECARB Phase II field tests. The first is managed by Virginia Tech and will utilize an existing CNX Gas well located in Russell County, Virginia, for CO₂ injection this winter. The second is managed by the Geological Survey of Alabama, and HighMount Production and Exploration is donating a well to the SECARB team for this field test. The site is located near Tuscaloosa, Alabama, and CO₂ injection is scheduled to begin in 2009.

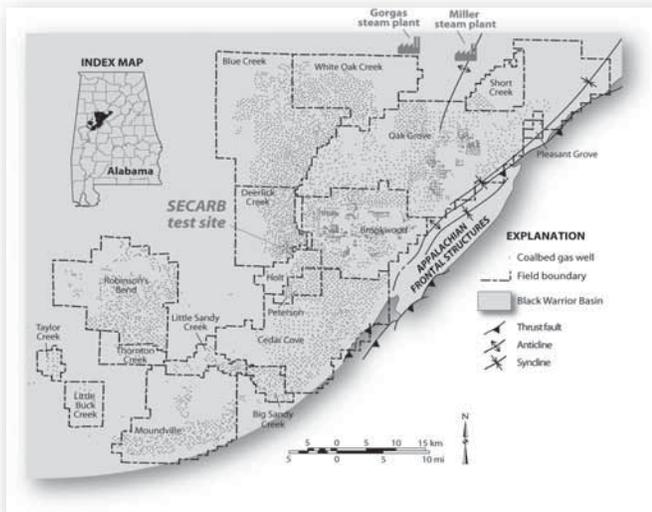
The objectives of the Coal Seam Project in the Central Appalachian Basin are to assess the sequestration potential of coalbed methane reservoirs as geologic sinks and to verify the sequestration capacity and performance of mature CBM reservoirs in the Central Appalachian Basin through injection-falloff and production testing, as well as the implementation of subsurface monitoring programs. These tests will demonstrate potential geologic sequestration into Appalachian coals as a safe and permanent method to mitigate greenhouse gas emissions. The objectives of the project are directly related to the following tasks: expanded geologic characterization; pilot site selection; reservoir modeling; corehole drilling and evaluation; pilot preparation and risk analysis; pilot testing and injection operations; data interpretation and assessment; and public outreach and technology transfer.



CNX Gas is providing the host site for the SECARB Coal Seam Project in the Central Appalachian Basin. The well is located in Russell County, Virginia.

Coal Seam Project: Black Warrior Basin

The principal objectives of the SECARB Black Warrior coal test are to determine if sequestration of carbon dioxide in mature coalbed methane reservoirs is a safe and effective method to mitigate greenhouse gas emissions; and to determine if sufficient injectivity exists to efficiently drive CO₂-enhanced coalbed methane recovery. Coalbed methane is produced from multiple thin coal seams (0.3 to 2.0 meters) distributed through more than 300 meters of section in the Black Warrior basin. Coal is an extremely stress-sensitive rock type, and permeability can decrease by as much as four orders of magnitude from the surface to depths as shallow as 700 meters. Coal, moreover, is an extremely heterogeneous reservoir, and permeability can vary by more than an order of magnitude at a given depth. Accordingly, procedures and technologies need to be developed to manage reservoirs with properties that vary greatly from seam to seam. This field test is intended to be the first step in this process.



SECARB's Black Warrior Basin Coal Seam Project will be conducted at an existing coalbed methane well site owned by HighMount Exploration and Production and located near Tuscaloosa, Alabama.

Phase III: Deployment

SECARB began a ten-year Phase III program in October 2007, to deploy a large volume injection test in two steps in the lower Tuscaloosa Formation, a formation representative of the Gulf Coast wedge. The first step, or "Early Test," will inject 1.4 million tonnes (1.5 million U.S. tons) of CO₂ per year for 18 months. The CO₂ will come from a naturally occurring source (Jackson Dome) near Jackson, Mississippi, and will be delivered by Denbury Resources' CO₂ pipeline. The second step, or "Anthropogenic Test," will inject 100,000 to 250,000 tonnes (110,000 to 275,000 U.S. tons) of CO₂ per year for three to seven years. The CO₂ will be supplied from a pilot unit capturing CO₂ from flue gas produced from a Southern Company power plant located near the injection site.

SECARB Keystone Middle School Teacher Training

On July 11-12, 2008, SECARB co-sponsored a *CSI: Climate Status Investigations* workshop at Agnes Scott College in Decatur, Georgia. The purpose of the workshop was to instill confidence needed by middle school teachers to introduce the topic of global climate change to their students. CSI incorporates effective and innovative ideas, activities and methods including, conflict resolution, role-playing, small group work and lab activities. All activities are hands-on and inquiry-based. The program, delivered at no cost to the teachers, was proven successful in helping them make connections between real science and current events. The CSI workshop, developed by The Keystone Center, is entirely funded by the U.S. Department of Energy, the National Energy Technology Laboratory and SECARB.



Twenty-four teachers attended the CSI Workshop on July 11-12, 2008, in Decatur, Georgia. SECARB is the first of the Regional Carbon Sequestration Partnerships to offer the training.

Coal & Advanced Power Systems

Increasing the use of coal and promoting innovative technologies to make coal cleaner and efficient are some of the intentions of the Southern States Energy Board's Committee on Clean Coal and Energy Technologies Collaboration. This committee is one of the Board's most active government and industry partnerships. The membership and activities of the committee stretch across the world. This allows the program to pursue countless domestic and international programs.

During the past year, the Committee's domestic agenda has focused on increasing coal production and educating policy makers on the many technologies available to make coal clean and efficient. This includes helping Pike County, Kentucky, prepare and implement a county-wide energy strategy incorporating clean coal and advanced technologies. Pike County, one of the largest coal producing areas in the world, has become the first county in the Nation to develop a comprehensive energy policy to be a leader in America's energy independence. The goal is to develop the public-private partnerships necessary to create a value-added energy industry. Pike County government has begun the process of establishing the Appalachian Energy Research Center (AERC). The AERC, a consortium of leading research universities and private investors, will focus on technologies related not only to coal and natural gas but also to biomass/biofuels, hydroelectric power and other forms of alternative energy. Its anchor will be a coal-to-liquid transportation fuel plant. Pike County stands at the forefront of the push for energy independence. More information on this partnership and its strategy is available at: www.americasenergycapital.com.

During 2006, the Commonwealth of Kentucky addressed the impending energy workforce crisis with the creation of the Kentucky Coal Academy. A model program worthy of adaptation by states across the country, the Coal Academy designs career pathways for miners with state-of-the-art equipment; develops short-term training; assesses employer needs; provides scholarships to deserving students; offers academic curricula leading to college and advanced degrees; and provides marketable and transferable skills to its students through the Kentucky Community and Technical College System. As one of its components, the Kentucky

Junior Coal Academy program is educating and interesting high school students in their potential roles in a new U.S. coal industry. Former SSEB Governor's Alternate, Dr. Bill Higginbotham, serves as the President of the Academy. A similar program has begun in West Virginia with the enactment of Senate Bill 150, which appropriates money for the creation of mine training and energy academies.

Of increasing interest to SSEB's Committee on Clean Coal and Energy Technologies Collaboration is the role of state regulators in the planning, siting, permitting and development of new coal power plants in the southern region. Regulatory decisions and actions are impacting the design of power plants from Florida to Texas with efforts focused on the elimination of greenhouse gases and carbon sequestration. In a cooperative effort with the Gasification Technologies Council, the Southern States Energy Board co-sponsors two workshops each year for state regulators, seeking to provide an education-based examination of clean coal technologies and their reduced greenhouse gas impacts and "carbon footprint."

The Southeastern Regional Carbon Sequestration Partnership, managed by the Southern States Energy Board, is an important element of Committee interest and its activities are discussed in a separate section of this Annual Report.

The international activities of the Committee are conducted in cooperation with the U.S. Department of Energy's Office of Clean Energy Collaboration. This cooperative partnership examines opportunities to export coal and clean coal technologies to developing countries in cooperation with U.S. companies interested in international business. In 2002, the Southern States Energy Board and the Industrial Estate Authority of Thailand signed a Memorandum of Agreement to explore measures to improve and enhance the economic and environmental performance of Thai industrial estates. The agreement has led to trade missions and reverse trade missions, technical assessments in several Thai industrial estates, cooperative ventures between U.S. and Thai partners, international conferences and workshops and eco-industrial development proposals to turn waste streams into productive resources and thereby providing solutions to environmental damage and

stimulating markets for new products. The goal is the continued involvement of southern U.S. manufacturing and service industries in finding solutions to industrial problems through international business.

In May 2006, the Southern States Energy Board hosted a tour by Thai officials to several clean energy demonstration projects in the western United States. Thai officials represented the Federation of Thai Industries and Chulalongkorn University. A framework was established for a major clean coal and advanced energy symposium to be conducted in Thailand during 2008. Representatives from the Thai Department of Energy Development and Efficiency have expressed their interest in a bilateral instrument with the Southern States Energy Board, to promote clean coal technologies in selected manufacturing sectors in Thailand.

During 2007, the Committee met with the Electricity Generating Authority of Thailand (EGAT) and several Thai industry associations to discuss collaborative arrangements with U.S. firms, government agencies and institutions of higher learning. The Committee currently is negotiating a Memorandum of Agreement with EGAT, the national power company in Thailand, to conduct R&D and other capacity activities on the deployment of clean coal technologies

in future coal power plants built in the country. ECO-Asia, an initiative of the U.S. Agency for International Development (USAID) is discussing opportunities to participate with SSEB in this collaboration. ECO-Asia also has invited a representative from SSEB to make a presentation at a Southeast Asia regional conference on clean coal technology in August 2008 in Ha Long, Vietnam.

Through the International Working Party on Fossil Fuels of the World Energy Council and the International Energy Agency, the Southern States Energy Board examined the intellectual property issues associated with the deployment of carbon sequestration technologies during the past year. This has provided direct benefit to the international Carbon Sequestration Leadership Forum as the 22 countries involved in the Forum seek to determine ways to share carbon capture, storage, utilization and disposal technologies to curb the release of greenhouse gases into the atmosphere. Barbara McKee of

the U.S. Department of Energy chairs the International Working Party on Fossil Fuels and is a member of SSEB's Committee on Clean Coal and Energy Technologies Collaboration.



Economic circumstances and development goals vary among southern states. Meanwhile, rural economies across the South suffer from slowed production and a decrease in the value of farm crops. At the same time, our country's demand for energy and continuing increase and dependency on foreign energy sources is jeopardizing our economic security. The South has 214 million acres of forest land, primarily owned by private landowners, and over one-third of America's farmland. Our region has potential for renewable, expandable and sustainable sources of energy as well as chemical feedstocks.

Over the past year, much debate ensued regarding the food versus fuel issue. In this regard, some people believe that the ethanol policy that the United States has implemented is a primary contributor to global food shortages. Most experts accredit multiple factors as the causes of increasing food prices. Some components include higher energy prices, soaring global demand for commodities, droughts and other climatic incidents, the weakening of the dollar and poor agricultural policies around the world.

The South is uniquely positioned to convert a variety of second generation cellulosic feedstocks for biofuels which is essential to move our country beyond the food vs. fuel debate. Among these is the large inventory of cellulosic feedstocks that are indigenous to this region such as wood waste and agricultural waste. Advanced research is on-going at the Oak Ridge National Laboratory (ORNL) and at many universities and colleges in the southern states. At the same time the region is moving aggressively to establish a biofuels and bioenergy industry and infrastructure. In this sense, the South will become a national leader in providing solutions to advance bioenergy options that are sustainable both economically and environmentally. The development of biorefineries is integral to making a transition from relying on imported oil to commercialization of domestic alternative fuels such as those derived from biomass. Utilizing biofuels and bioenergy in the South provides a solution toward strengthening our energy security while mitigating climate issues surrounding traditional energy resources.

Southern States Biobased Alliance

Formed in July 2001, the Southern States Biobased Alliance works in an advisory capacity to the Southern States Energy Board, addressing the

development of biobased products and bioenergy within the southern region. The Alliance has developed a formal mission to provide leadership and develop strategies that will foster a biobased industry and boost rural economies in the southern states. The Alliance members are gubernatorial appointees who are state legislators representing SSEB member states and representatives of the public or private sector who are active in energy, environment, agriculture and forestry issues.

Upon its inception, the Alliance established goals to guide the group in building public/private partnerships that advance the economy of the region through unique state, local and industry networks. These goals provide regional leadership to the Southern States Energy Board and its member states through:

- Alliance meetings and activities that foster communication, coordination and collaboration among members to enhance development of a biobased industry in the region;
- recommendation of policies and programs that foster development of a biobased industry in the region;
- identification of strategies that stimulate markets for biobased products and technologies;
- providing electronic access to information, public forums and appropriate links to facilitate information transfer on biobased products and bioenergy; and
- advancing research, development and demonstration of biobased technologies and promoting the use of those technologies.

Key activities are focused on stimulating markets for biobased products and bioenergy. Learning about policies and incentives in other states, both in the South and in other regions, is integral to determining the proper approaches that will stimulate economic development and provide solutions for our growing energy demand while mitigating climate change.

Southeastern State/Regional Biomass Partnership

The regional biomass energy program was created by Congress in 1983 under the Energy

and Water Development Appropriations bills PL 97-88 and PL 98-50. The enabling legislation instructed the U.S. Department of Energy to design its national program to work with states on a regional basis, taking into account regional biomass resources and energy needs. The U.S. Department of Energy's regional biomass energy program was revamped in 2003 and identified as the National Biomass (State/Regional) Partnership (NBP). The NBP is a union of five long-standing regional biomass energy programs and the Southern States Energy Board is the host organization for the Southeast. The five regional programs, working with representatives in all 50 states, Puerto Rico, the U.S. Virgin Islands and the District of Columbia are recognized nationally for their combined experience related to biomass technologies and policies.

The goal of the Partnership is to work cooperatively with the DOE/OBP to facilitate the increased use of bioenergy and biobased products through coordinated federal, regional and state outreach, education and technical assistance programs. In support of this goal, the Southern States Energy Board as the host organization for the Southeast State/Regional Biomass Partnership, joined with the Coalition of Northeastern Governors (CONEG) Policy Research Center, Inc., the Council of Great Lakes Governors (CGLG), the Western Governors' Association (WGA) and the Pacific Regional Biomass Partnership hosted by Washington State University to conduct a national webinar on cellulosic ethanol under the auspices of the National Biomass Partnership. The forum was designed to address the need of state biomass officials to receive the most current and objective information on the status of cellulose-to-ethanol technologies. The webinar forum provided a basic understanding of the range and status of cellulose-to-ethanol technologies and equipped biomass officials with information and analytical tools to assess the claims made by technology developers. The webinar also addressed the future of ethanol, particularly how the ethanol, petroleum and automobile industries might respond to the federal renewable fuel standard.

In support of the goals of the National Biomass State/Regional Partnership, a technology matrix has been prepared for the National Partnership and states. Listings of the following areas are part of the matrix:

- major types of biomass feedstocks;
- potential energy end-use and applications;
- potential biofuel products; and
- biomass conversion technologies that are commercially available.

The technology matrix will allow users to conduct preliminary match of end-use applications and biomass feedstocks with specific characteristics to appropriate conversion technologies. Ultimately, this will increase bioenergy development intensity.

During the year, the Southeast State/Regional Biomass Partnership worked with Fort Valley State University (FVSU), the only 1890 land grant institution in Georgia, on a two-day bioenergy workshop held in October 2008. FVSU's College of Agriculture conducted the workshop to provide partners in the community and others with a better perspective of the future of fuel sources. Over 100 agricultural officials and bioenergy industry experts and spokespersons participated. State and federal government officials, producers and FVSU researchers and scientists explored and identified opportunities at the University to utilize bioenergy and to implement a stronger research program on the campus which has hundreds of acres of land available. Dr. Mark Latimore, Jr., interim dean of the College of Agriculture, Home Economics and Allied Programs (CAHEAP) is committed to discovering the promise of bioenergy and is developing partnerships locally and in near-by communities to ensure long-term commitment to this initiative.

In addition to the webinar and technology matrix, the Southern States Energy Board is co-hosting a regional biomass conference in conjunction with the National Association of State Energy Officials (NASEO), the North Carolina State Energy Office, North Carolina State University, other regional organizations and numerous stakeholders. The conference, to be held September 22-23, 2008 in Raleigh, North Carolina, will provide a forum for collaboration among industry, investors, researchers, agencies, policy makers, non-governmental organizations, feedstock producers and others. The conference will provide a snapshot of current opportunities, technologies, state-of-deployment, research, policy initiatives and incentives for biopower,

Water for Energy

“...Oh Blackwater, keep on rolling, Mississippi moon won't you keep on shining on me...” The Doobie Brothers sing in the background as the scenario plays out through two days in April 2007. While the music sings on, the Blackwater Energy for water supply workshop held in 2007 continues to resonate within the region in 2008. There are documented drought scenarios playing out and the crucial role of electricity in ensuring water availability is even more important today than in years gone by.

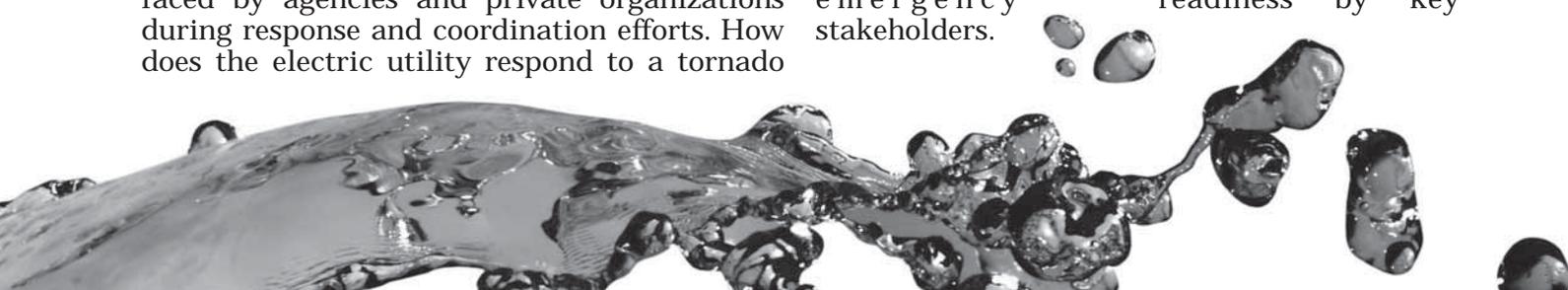
A number of stakeholders can learn from the workshop including the water, energy and emergency management professionals who met to explore responses each sector should make in times of crisis as energy facilities are impacted by weather events, leading to interruption of energy supply to water and wastewater treatment facilities and other infrastructure impacts. SSEB continues to offer information on this workshop to various stakeholders in 2008.

Some 90 representatives of electric and gas utilities; water and watershed management; state energy, environmental and emergency response officials; the U.S. Army Corps of Engineers; Federal Emergency Management Agency; and national water management associations met to review best practices and explore solutions to a scenario that included a series of tornadoes that moved through the city of Decatur, Georgia, up through the Atlanta region over a 24-hour period. Representatives from 12 SSEB states participated in the event. The highly interactive tabletop exercise, sponsored by the Southern States Energy Board in conjunction with the U.S. Department of Energy's National Energy Technology Laboratory and U.S. Environmental Protection Agency, included presentations on the basics of the electricity supply system, water and waste water systems and emergency local and state energy assurance guidelines. Participants were briefed on the issues and challenges faced by agencies and private organizations during response and coordination efforts. How does the electric utility respond to a tornado

watch at 3:00 a.m.? When do backup generators go online at the water utility? What priority do hospitals have as electricity and water supplies are restored following a significant storm event? How do the electric, gas and water utilities maintain coordination in the midst of chaotic events of the weather disaster? The Blackwater Exercise helped its participants explore these issues in great detail, resulting in a better coordinated, better prepared response team ready to react when the next weather event occurs.

Participants were briefed on the issues and challenges faced by local, state and federal agencies and private organizations during response and coordination efforts. Geographical information was presented in map form which included water and wastewater treatment plants in the Southeast; key pipelines from the Gulf of Mexico through the mid-Atlantic; and the electric infrastructure, including major generating facilities and voltage lines. This information was key to the interactive process of the tabletop exercise in helping participants visualize the impacts of the weather events.

Actions to improve energy water relationships and responses to critical situations can be categorized into numerous key issues including: the need for backup fuel supply to operate backup generators; the need for improved telecommunication infrastructure; issues of language barriers within the public; the need for simple, easily-understood communications for the public; the need for improve planning processes and agency coordination efficiency and effectiveness; the need for crossover credentials and other inter-jurisdictional coordination; the need for a common language regarding the basics of infrastructure; the need for policy to deal with some critical issues; the need for the public to assume some responsibility for preparation; the need for ongoing training and preparation within the stakeholder agencies; and various organizational activities that promote emergency readiness by key stakeholders.



Environmental Technology Development, Deployment and Training



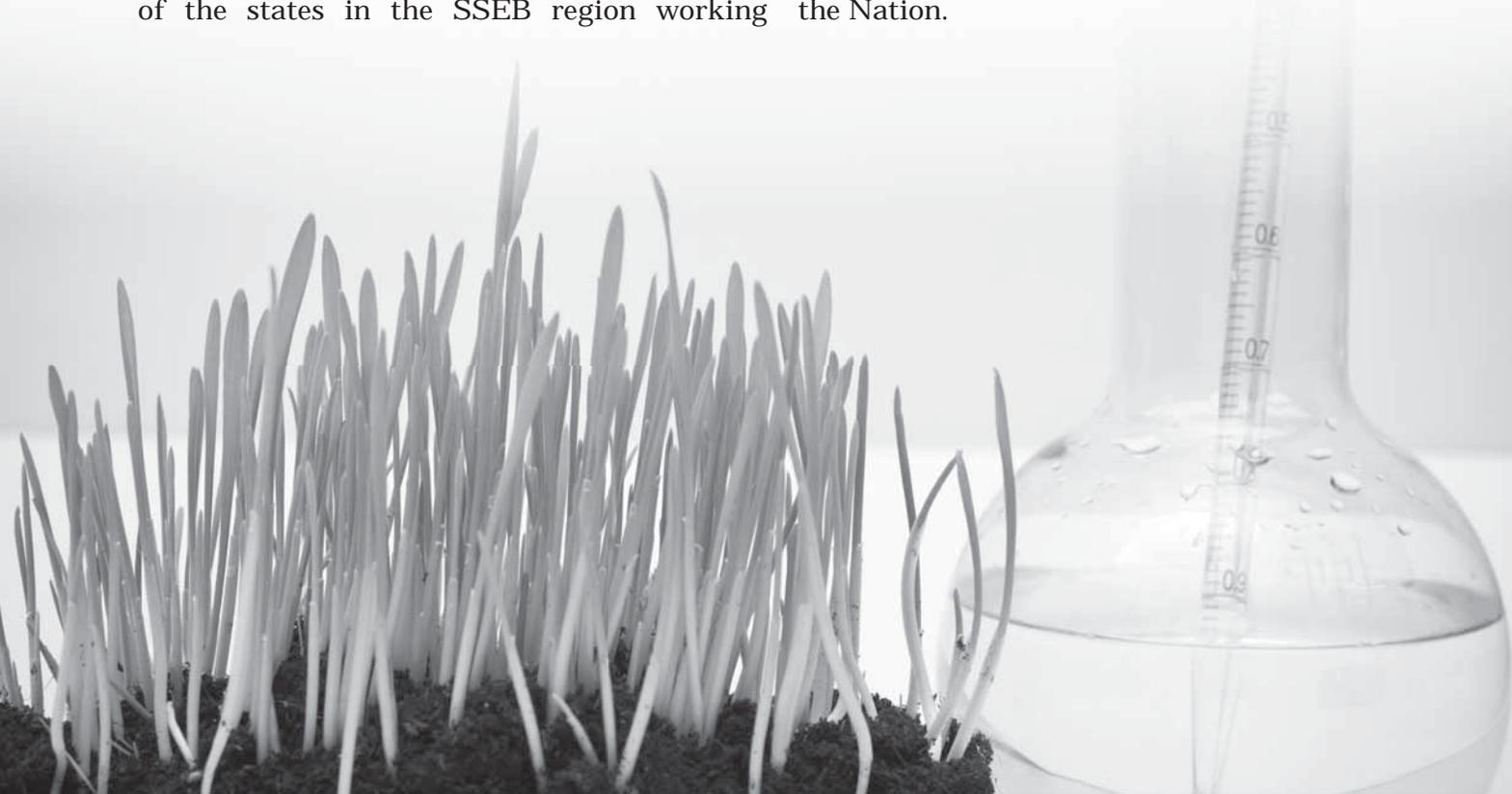
The Southern States Energy Board, as a founding member of the Interstate Technology and Regulatory Council (ITRC) in 1995, continues to promote the various components of the ITRC program and ensure that SSEB member groups, such as state regulators, are taking advantage of the low-cost, first-rate training and documents offered by ITRC. The ITRC now has 82 documents available for use at no charge to regulators, technology experts and vendors, academicians and others. The most recent releases include three guidance documents entitled Enhanced Attenuation: Chlorinated Organics (April 2008), Remediation Technologies for Perchlorate Contamination in Water and Soil (March 2008), and Decontamination and Decommissioning of Radiologically Contaminated Facilities (January 2008).

Currently, 19 teams of experts are working on specific environmental remediation issues to help to ease the transition from technological solution to practical implementation throughout the states. Some of the most recent topics taken on by ITRC teams include perchlorate in groundwater and enhanced attenuation using chlorinated organics, methyl and vapor intrusion.

ITRC consists of representatives from all of the states in the SSEB region working

to eliminate barriers and reduce compliance costs, making it easier to use new technologies and helping states maximize resources. The ITRC fosters better decision-making within state environmental agencies and enhances the understanding of these technologies both within public communities and the environmental industry through free or low-cost informational and training resources. Environmental topics of interest nationwide are addressed by teams of experts formed and supported through the ITRC support system. These teams develop state-of-the-art regulatory guidance documents, training sessions and other technical publications aimed at various segments of the public, private and regulatory sectors. Currently, training is conducted in over 35 topics either as internet-based training or in classroom settings.

ITRC continues to build the environmental community's ability to expedite quality decision-making while protecting human health and the environment. Globally, over 40,000 participants worldwide have been trained using ITRC developed training. As the ITRC network continues to grow, SSEB continues to promote its founding principles, where knowledge is enhanced thereby easing implementation of environmental remediation activity throughout the Nation.



Radioactive Materials: Emergency Response & Transportation Planning

High-level Radioactive Waste Transportation

With the increasing focus on the Nation's nuclear renaissance, SSEB is in a pivotal position to help effect change and chart the course of the nuclear industry. The Nuclear Regulatory Commission (NRC) has accepted new nuclear power plant applications for sites in SSEB member states, such as Alabama, Georgia, Maryland, Mississippi, North Carolina, South Carolina, Texas and Virginia. Applications are also expected for Louisiana, Missouri and Texas. With so many of our member states involved, SSEB has a unique opportunity, as a stakeholder, to contribute to the dialogue of this re-emerging industry.

To this aim, SSEB provides a voice for its members through the SSEB Radioactive Materials Transportation Committee, which continues to provide the U.S. Department of Energy with a southern states' perspective on policy related to nuclear power and transportation regarding the Nation's spent fuel and high-level radioactive waste. Furthermore, the Committee, whose membership includes regional, gubernatorially-appointed state emergency response planners, radiological health professionals and other state agency officials, is engaged with the U.S. Department of Energy's Office of Civilian Radioactive Waste Management (OCRWM) to address specific issues relevant to the development of the first federally designated repository for spent fuel and high-level radioactive waste, known as Yucca Mountain, located approximately 100 miles north of Las Vegas, Nevada.

The Committee has provided additional opportunities for state involvement through its ongoing participation in the DOE Technical External Coordination Working Group meetings, which are designed to facilitate dialogue between DOE and interested parties regarding radioactive waste transportation. Through this endeavor, SSEB staff, as well as representatives from the states of Alabama, Arkansas, Florida, Louisiana, North Carolina, South Carolina, Tennessee and Texas, interact with federal officials and participate in topic groups related to security issues, shipment routing and state funding.



A Yucca Mountain Project scientist tests for water movement in rock inside Yucca Mountain. Photo courtesy of the U.S. Department of Energy.

Radioactive Materials: Emergency Response & Transportation Planning

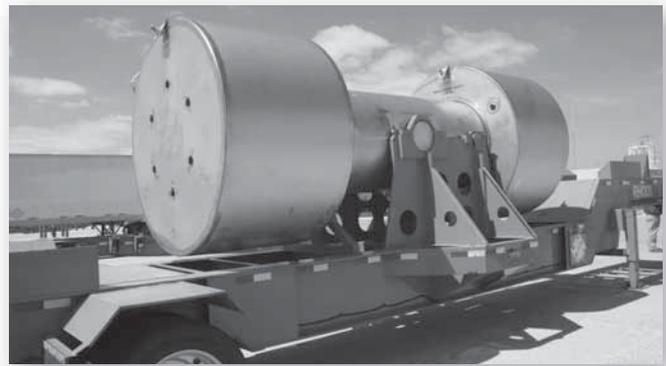
Transuranic Waste Transportation

For nearly two decades, SSEB's Transuranic (TRU) Waste Transportation Working Group has assisted the U.S. Department of Energy with environmental management clean-up activities. The TRU Working Group's major objective is to outline policies and procedures necessary to safely transport shipments of TRU waste thru the southern region enroute to the Waste Isolation Pilot Plant (WIPP) near Carlsbad, New Mexico. TRU waste, which is generated from the production of nuclear weapons mainly consist of solid items such as protective clothing and gloves, rags, lab instruments and equipment, as well as other items that have become contaminated by transuranic isotopes. The gubernatorial appointees of the TRU Working Group represent a variety of disciplines including radiological health, emergency response and transportation planning. SSEB acts as liaison for the states to identify, prioritize and resolve regional issues related to the transportation of TRU waste. These activities are undertaken through a cooperative agreement with DOE's Carlsbad Field Office (CFO).

The Savannah River Site (SRS) in South Carolina and Oak Ridge National Laboratory (ORNL) in Tennessee contain the majority of the South's TRU inventory, but waste also is stored at several small quantity sites (SQS) in the northeastern part of the country. The location of these TRU waste sites makes our region a major transportation corridor for WIPP disposal, thus SSEB annually issues subgrants of over \$1 million to the states impacted by the routes of these shipments. The funding supports emergency response preparedness activities, equipment purchases, public outreach programs, shipment tracking and other planning activities in each state.

Since opening in 1999, the WIPP facility has processed over 6,500 shipments. SRS has made over 900 of those shipments and is approaching 1.5 million miles of highway transport. The ORNL should begin making shipments in November 2008. The timeframe for the commencement of the SQS shipments has yet to be determined. In order to prepare for the opening of the ORNL corridor, SSEB will be coordinate with CFO and the states of Tennessee, Georgia and Alabama to host a WIPP

Road Show during the summer featuring an empty RH-72B shipping cask. Trucks carrying the shipping container will traverse a route from Oak Ridge to Birmingham allowing state inspectors and emergency response personnel the opportunity to familiarize themselves with the package and its tie-down configuration.



An RH-72B shipping container is a lead-lined cask that is certified by the NRC for shipping remote-handled TRU waste to WIPP.

Foreign Research Reactor Spent Nuclear Fuel

In the 1950's, as part of the "Atoms for Peace" program, the United States provided assistance to foreign countries regarding the peaceful application of nuclear technologies pending their agreement not to develop nuclear weapons. To further reduce the chance of nuclear proliferation, the United States agreed to take back and manage the spent fuel from the reactors overseas, in addition to assisting the foreign entities in minimizing and eventually eliminating the use of highly enriched uranium in their programs worldwide. The Southern States Energy Board became involved in this process in 1994 when the U.S. Department of Energy requested assistance in the planning efforts to transport two urgent-relief shipments of spent fuel from foreign countries to the Savannah River Site. After completion of these shipments, DOE issued a 1996 Record of Decision stating the fuel would be sent to either SRS or the Idaho National Laboratory (INL) based on its composition.

SSEB became fully vested in the campaign with the formation of two committees: the

Radioactive Materials: Emergency Response & Transportation Planning

Foreign Research Reactor Spent Nuclear Fuel Transportation Working Group and the Cross-Country Transportation Working Group (CCTWG). The purpose of these committees is to provide state participation in the DOE planning effort to successfully carry out a 23-year shipping campaign (1996-2019) under which the United States would accept up to 19.2 metric tons of spent nuclear fuel from research reactors in Africa, Australia, Europe, Asia, North America and South America. The Foreign Fuels Working Group coordinates specifically on shipments that originate in a foreign country and conclude at SRS. The Working Group is composed of personnel from various state agencies in South Carolina. The CCTWG has the added task of providing DOE with a forum to develop a transportation plan for the safe and efficient domestic movement of certain materials from SRS to INL. SSEB membership in the CCTWG is comprised of the states of South Carolina, Georgia, Tennessee and Kentucky. These shipments entering the southern region, via the Charleston Naval Weapons Station, are projected to occur not more than twice a year for the remainder of the program.

DOE is in the twelfth year of the 23-year return program and has successfully completed a total of 41 shipments, 36 of which have entered the United States through the Charleston Naval Weapons Station. To date, DOE has conducted seven cross-country shipments. The next proposed shipment will involve spent fuel being transferred from Romania to INL via SRS. This cross-country shipment is planned for late summer or early fall of 2008.

Southern Emergency Response Council

Formed in 1972, the Southern Emergency Response Council (SERC) exists as a formalized emergency response agreement among the southern region to respond in case of a radiological incident. SERC representation is comprised of the 14 signatory states of the Southern Agreement for Mutual State Radiological Assistance, including Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas and Virginia.

The Southern Agreement for Mutual State Radiological Assistance is implemented through the Southern Mutual Radiation Assistance Plan (SMRAP). Created as a blueprint for coordinating radiological emergency assistance capabilities among participating states in the southern region, SERC representatives review, revise and administer SMRAP on an annual basis to reflect changes in state emergency response capabilities and equipment. This document outlines the mutual aid agreement, the implementation process, emergency response contacts and available state resources.

An annual SERC meeting is held by SSEB to provide members with a forum to discuss matters related to SMRAP. Furthermore, SSEB operates as the regional coordinator for the testing of SMRAP activation procedures during joint power plant exercises between the states. The group convened in Oklahoma City, Oklahoma, for the 2007 meeting and to approve the yearly addition of SMRAP.

The states will meet again August 18-21, 2008, in Columbus, Ohio, to ratify SMRAP for 2008.



Regional Recycling Market Development



The Southern States Waste Management Coalition was created by resolution of the Southern States Energy Board in 1992. Areas of interest include waste minimization, source reduction, recycling, composting, waste to energy, land filling, re-fill/re-use, etc.

During this year, SSEB participated in activities within the public-private partnership that includes representatives of state energy and environmental offices, recycling coalitions, industry groups, the U.S. Environmental Protection Agency's Region IV office and others.

In 2001, the Coalition launched the Recycle Guys campaign in cooperation with EPA's Region IV office. Created in 1997 by the South Carolina Department of Health and Environmental Control, the Recycle Guys are animated characters featured in a series of public service announcements (PSAs) to promote recycling and energy conservation. Their message is conveyed in a variety of video clips and radio spots.

During Phase I of this program, the states of Alabama, Florida, Georgia, Kentucky, Mississippi and Tennessee were awarded funding through the Southern States Energy Board to adopt the existing South Carolina Recycle Guys model by purchasing three public service announcements.

Phase II of the Recycle Guys campaign began in 2003. Participants include the eight EPA Region IV states of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina and Tennessee. The current funding for Phase II of the regional campaign is used to strengthen the state campaigns by purchasing cable television air time for the Recycle Guys PSAs adopted during Phase I, purchasing additional Recycle Guys PSAs or financing other Recycle Guys promotional activities identified by the state Recycle Guys campaign coordinators. The Recycle Guys campaign continues its recognition as a key component to the region's public and political awareness activities. Outside the SSEB region, several states, communities and universities have adopted the campaign. Further, the South Carolina Department of Health and Environmental Control reports that they have sent educational materials for distribution to recycling coordinators in England and Ireland.

In light of budget and travel restrictions within state and local governments, a portion of the Phase II funding is allocated to travel reimbursement awards. These awards are necessary to obtain state and local officials' involvement in important national and regional recycling meetings.



The Recycle Guys appear in a series of public service announcements promoting recycling and energy conservation.

Courtesy of the South Carolina Department of Health and Environmental Control

Electric Utility Program

Electric utility customers are experiencing some of the largest price increases in decades. This is due in part to the rising cost of fuels and the expiration of rate caps in states that have chosen to operate in a competitive market. For a number of years, the electric utility industry has been experiencing dramatic changes in the way they conduct business. Today, the utility industry is a blend of competition and regulation.

Two of the SSEB member states, along with a number of other states nationally, are operating in a competitive retail market. The Virginia General Assembly enacted re-regulation legislation this year to return to a regulated rate environment.

The Energy Policy Act of 2005 enacted changes in the electric utilities industry. Mandatory and enforceable reliability rules now reside with the federal government as opposed to states. While states have the authority for siting transmission infrastructure, the federal government can authorize the siting if it is not expedited in a timely manner. With all the broadened responsibilities at the Federal Energy Regulatory Commission, there appears to be increasing movement toward regionalization.

The Electric Utility Task Force, composed of Southern States Energy Board members, was established in 1997. The Task Force provides a regional forum for the southern states to exchange knowledge and to address an ever changing electric utility industry. Over the past year, the Task Force has explored specific topics such as transmission projects affecting the South and grid modernization.

SSEB participated in the public discussions and made a presentation to the American Energy Futures subcommittee on electrical transmission and distribution for The National Academies in Washington, D.C. on February 21, 2008. SSEB's unique perspective provided valuable insight into issues of continued, ongoing high reliability, adequate transmission and generation supply in the southeast.

In October, 2007, SSEB participated in the Commonwealth of Virginia Energy and Sustainability Conference. SSEB presented two presentations including *Nuclear Energy - Overview of Environmental Impacts* at the Conference at the Virginia Military Institute in Lexington, Virginia; and *American Security- The Potential for Coal Liquids* in the Coal and Fossil Fuel Strategies, Challenges and Opportunities section of the conference.



Energy & Environment Legislation



The Southern States Energy Board annually publishes the Energy and Environmental Legislative Digest. The Digest, for more than four decades, has remained the compendium of legislation passed by the Board's 18 member states and territories during the current legislative session. The Digest is used as a research tool and reference for state legislators, their staff, and industry to develop and refine laws in their respective states.

During the 2008 legislative session, SSEB member governors signed around 600 pieces of legislation aimed at advancing energy development and protecting the environment. Energy related legislation focused primarily on alternative energy developments and utilities.

Environmental measures addressed pollution control, solid waste management and recycling, and land and water conservation.

The necessity of American energy independence became a major motivation for legislators throughout the South this year. Actions taken by these legislatures resulted in a record number of measures passed relating to energy and the environment. These acts will improve the economy, foster energy security and independence and protect the environment. They further continue to demonstrate the South's deep commitment to effective energy and environmental policy, while answering the concerns of the citizens.



Industry Partnerships

Increased energy demand, domestic energy production, aging infrastructure and the national dialogue on climate change and carbon management have been key issues that the Southern States Energy Board Associate Members have undertaken over the past few years. Mr. Greg Pauley, American Electric Power, chaired the Associate Members during the past year with carbon management as a top priority.

The Associate Members also addressed issues related to the re-emergence of the nuclear industry and grid modernization; state responses to energy emergencies; energy security; low income home energy assistance and weatherization; air quality; aging workforce; natural gas supply and infrastructure; water and energy interdependency; energy efficiency and renewables; and state energy and environmental legislation.

The Southern States Energy Board works closely in partnership with its Associate Members to foster economic development in the southern region. Founded in 1984, the Associate Members represent the region's leading energy and technology providers. They contribute invaluable expertise to the social and economic aspects of state and federal legislation as well as ongoing programs and activities of the Southern States Energy Board.

Associate Members

- AGL Resources
- Alpha Natural Resources
- American Coalition for Clean Coal Electricity
- American Electric Power
- Arch Coal, Incorporated
- Association of American Railroads
- BP America, Incorporated
- Big Rivers Electric Corporation
- CEMEX
- ChevronTexaco Corporation
- Coal Utilization Research Council
- Colonial Pipeline Company
- Dominion
- Edison Electric Institute
- Entergy Services
- Fibrowatt, LLC
- Florida Power & Light Company
- Integrated Utility Services, USA, Incorporated
- Kentucky Coal Academy
- National Coal Council
- National Mining Association
- Nuclear Energy Institute
- Peabody Energy
- Praxair, Incorporated
- Progress Energy
- Rentech, Incorporated
- Ron Silver & Associates, Incorporated
- SCANA Corporation
- S&ME, Incorporated
- Shell Oil Company
- Santee Cooper
- Southern Company
- TECO Services, Incorporated
- TXU Energy
- Tennessee Valley Authority

Sources of Support

The Southern States Energy Board's core funding comes from annual appropriations from the 18 member states and territories. Each member's share is computed by a formula written into the original Compact. This formula is comprised of an equal share, per capita income and population. The Board has not requested an increase in annual appropriations in more than 20 years.

The Board also is authorized to accept funds from any state, federal agency, interstate agency, institution, person, firm or corporation provided those funds are used for the Board's purposes and functions. This year, additional support was received for special projects from research grants, cooperative agreements and contracts from the U.S. Department of Energy and U.S. Department of Agriculture. The American Coalition for Clean Coal Electricity, formerly the Center for Energy and Economic Development, provided funding to SSEB during this year for outreach and education in an effort to address governors, state legislatures, regulators, interest groups and the public regarding clean coal technologies, mining, pipelines, carbon capture and sequestration, power plant siting, utility reserve margins and water for energy. Additionally, the Southeast Regional Carbon Sequestration Partnership's Industry Associates provide an annual monetary contribution of \$10,000 per member to support the SECARB Program. Allocation of these contributions is at the discretion of the Southern States Energy Board in support of SECARB tasks and activities. Industry

Associates are provided with regular updates of activities and participate in an annual stakeholder meeting held in Atlanta, Georgia.

In addition, SSEB maintains an Associate Members program comprised of industry partners who provide an annual contribution to the Board. Membership includes organizations from the non-governmental sector, corporations, trade associations and public advocacy groups. The Associate Members program provides an opportunity for public officials and industry representatives to exchange ideas, define objectives and advance energy and environmental planning to improve and enhance the South's economic and environmental well-being.

State	Appropriation
Alabama	\$32,572
Arkansas	\$31,027
Florida	\$47,212
Georgia	\$35,782
Kentucky	\$32,197
Louisiana	\$33,817
Maryland	\$37,192
Mississippi	\$29,077
Missouri	\$36,247
North Carolina	\$37,042
Oklahoma	\$32,512
Puerto Rico	\$25,597
South Carolina	\$31,372
Tennessee	\$34,267
Texas	\$55,402
U.S. Virgin Islands	\$25,297
Virginia	\$38,362
West Virginia	\$28,732

Selected Reports & Publications

ENERGY AND ENVIRONMENT INFORMATION

Annually, numerous requests for specific technical and policy information occur from SSEB members, state and federal government officials, legislators and other parties, including the general public. SSEB provides direct technical and analytical support to its constituents on a variety of energy and environmental issues facing the region.

SSEB also maintains a website, accessible at www.sseb.org, that serves as a primary link to energy and environmental resources on the internet. Visitors can quickly link to a variety of data and download the latest SSEB publications. Following is a list of SSEB's frequently requested publications.

American Energy Security Study. July 2006.

This study provides an approach for America to establish energy security and independence through the production of alternative oil and liquid fuels from our vast domestic resources that include coal, biomass and oil shale. The study also emphasizes the need for improved domestic enhanced oil recovery programs using carbon dioxide, increased voluntary transportation fuel efficiency and sensible energy conservation.

Annual Report 2008. August 2008.

This report contains a statement by SSEB Chairman Joe Manchin, III, Governor of West Virginia, updates on SSEB programs and activities, Board members and staff listing.

An Assessment of Biomass-related State Programs and Policies. July 2005.

The analysis considers a broad range of policies and incentives throughout the United States and examines their impact on the bioenergy and biobased product industry. This study was funded by the National Energy Technology Laboratory.

Assessment of Opportunities to Co-locate Ethanol from- Cellulose Plants at Coal-Fueled Power Plants in the Southeastern U.S. July 2002.

Co-locating ethanol-from-cellulose plants near coal-fired power plant projects can result in advantages for both facilities. This assessment provides a list of plants and highlights important siting criteria.

Blackwater: Energy and Water Interdependency Issues: Best Practices and Lessons Learned. August 2007.

Almost one hundred water, energy and emergency management professionals participated in a two day workshop in April 2007 to explore responses each sector should make in times of crisis as energy facilities are impacted by weather events, leading to interruption of energy supply to water and wastewater treatment facilities and other infrastructure impacts. In order to both prepare for such events beforehand, and to most effectively deal with this type occurrence efficiently and effectively, stakeholders involved with the connected infrastructures must plan, communicate, partner, and carry out previously developed plans. Pre-planning and plan implementation are critical to minimize the impacts of such events on the wellbeing and economy of the citizens of the region affected.

Coal Regulatory Legislation in the Southern States: 2003-2007. March 2008.

SSEB member states' regulations on the utilization of our coal resources are detailed in this summary document. Included are brief descriptions of laws enacted with regard to coal and minerals in the southern states during the 2003-2007 legislative sessions. This list is requested frequently from agencies that develop legislation affecting the industrial use of coal and the regulation of environmental quality within their states.

Compendium of Energy Task Forces in the Southern States. January 2002.

This is an ongoing compilation of information on the energy task forces in the southern region. It includes reports prepared by these task forces, as well as executive orders, press releases and meeting summaries.

Energy and Environment Legislative Digest 2008. July 2008.

The legislative digest is an annual synopsis compilation of representative energy and environmental quality legislation enacted by Southern States Energy Board member jurisdictions. This edition summarizes the laws from the 2008 legislative sessions and includes an introduction by Rocky Adkins, Representative of Kentucky and SSEB Vice-Chairman.

Energy Offices in the South. December 2001.

The organizational structure, function and scope of state energy offices in the southern region are provided in this 2001 report. The information proves useful to southern lawmakers, their staffs and all parties interested in energy matters in the South.

Energy Policy in the South - Integrating Energy, Environment, and Economic Development: A Balanced and Comprehensive Approach. September 2001.

Prepared for the Southern Governors' Task Force on Energy Policy, this document was approved by the southern governors on August 7, 2001. It contains five key principles and policy options for a southern regional energy policy.

Freshwater Availability and Constraints on Thermoelectric Power Generation in the Southeast U.S., June 2008.

Thermoelectric generating industry is the largest user of the nation's water resources. With increasing quantities of consumption for multiple uses, there are growing constraints on water availability. As population grows and economic and technology demands increase for thermoelectric power, needs for freshwater will increase.

Industry Survey Final Report - Developing State Policies Supportive of Bioenergy Development. July 2004.

Biobased industry officials were surveyed to determine the impact of existing and/or lack of polices on efforts to develop, deploy or use biobased technologies or products. Although this survey was focused on industry, in some cases questionnaires were sent throughout North America to trade associations, and a few questionnaires were sent to selected government officials and academia throughout North America. The survey asked for comments on the effectiveness of the existing policies and programs and asked to suggest changes in the existing policies and programs or suggest new policies and programs that are needed. The survey also asked those suggesting changes or new policies and programs to explain the rationale for their suggestions.

Integration of Systems and Technologies for Clean Coal Power and Industrial Symbiosis in Thailand. January 2004.

This report is a product of a three-year cooperative effort, led by the Southern States Energy Board, to promote U.S. systems and technologies for clean fossil power and industrial symbiosis in Thailand's industrial estates.

Nuclear Energy: Cornerstone of Southern Living, Today and Tomorrow. July 2006.

New nuclear power plants will be essential to continued prosperity in the South as electricity demands rise rapidly in the fast-growing SSEB states. As stated in this report, nuclear power provides a reliable, economical, carbon-free source of electricity to help fuel strong economic growth in the states of the Southern States Energy Board.

Southern Mutual Radiation Assistance Plan (SMRAP). December 2007 (2008 edition available in December).

This annual publication contains the general provisions of the Southern Mutual Radiation Assistance Plan, which provides a mechanism for coordinating radiological emergency assistance capabilities among participating states. It is updated annually by the Southern Emergency Response Council, for which SSEB serves as secretariat.

Tires and Solid Waste to Electricity: A Review for Missouri Department of Natural Resources. November 2005.

The use of tire-derived fuel (TDF) to produce energy is a viable source of electrical power generation. At the direct request of the state of Missouri, SSEB prepared this report on the technical aspects of converting tires and solid waste to electricity; the status of TDF and municipal solid waste to energy legislation for state programs; electric utility issues; and specific opportunities for the state of Missouri.

SSEB Staff

Kenneth J. Nemeth

Executive Director and Secretary to the Board
nemeth@sseb.org

Kathryn A. Baskin

Managing Director
baskin@sseb.org

Cloyce B. Brackett

Policy Analyst, Nuclear Programs
brackett@sseb.org

Joan T. Brown

Senior Accounting Specialist
brown@sseb.org

Carolyn C. Drake, Ph.D.

Director, SSEB Washington Office
Retired in December 2007

Monica A. Fluellen

Computer Support Specialist
fluellen@sseb.org

Gary P. Garrett

Senior Technical Analyst
garrett@sseb.org

Leigh T. Parson

Grants and Accounting Specialist
parson@sseb.org

Kathy A. Sammons

Assistant Director, Business Operations
sammons@sseb.org

Kimberly A. Sams

Manager, Program Operations
sams@sseb.org

Brian M. Sernulka

Legislative Analyst
sernulka@sseb.org

Canissa N. Summerhill

Special Assistant, Program Operations
summerhill@sseb.org

Christopher U. Wells

Assistant Director, Nuclear Programs
wells@sseb.org

Project Staff

Phillip C. Badger

Technical Advisor on Bioenergy
pbadger@bioenergyupdate.com

Gerald R. Hill, Ph. D.

Senior Technical Advisor
hill@sseb.org

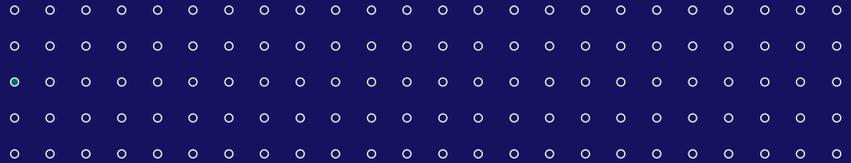
Mark A. Shilling

Special Counsel
mark.shilling@govt-affairs.com

Chester B. Smith

Technical Advisor on Fossil Energy
chestervision@hotmail.com

ALABAMA
ARKANSAS
FLORIDA
GEORGIA
KENTUCKY
LOUISIANA
MARYLAND
MISSISSIPPI
MISSOURI
NORTH CAROLINA
OKLAHOMA
PUERTO RICO
SOUTH CAROLINA
TENNESSEE
TEXAS
U.S. VIRGIN ISLANDS
VIRGINIA
WEST VIRGINIA



SOUTHERN STATES ENERGY BOARD

6325 AMHERST COURT
NORCROSS, GEORGIA 30092
770/242.7712 PHONE
770/242.9956 FAX
WWW.SSEB.ORG