

Southern States Energy Board  
**Southeast Regional Carbon Sequestration Partnership**

Presentation to the  
 Third Annual Conference on  
 Carbon Capture & Sequestration  
 May 3-6, 2004

Presented by  
 Patrick R. Esposito, Ph.D., P.E.  
 Technical Advisor  
 Augusta Systems  
 pesposito@augustasystems.com





### Importance of CO<sub>2</sub> to the Region

- In the southeast region, coal and natural gas (the primary sources of CO<sub>2</sub>) are major fuels for electricity production
- 45% of total US CO<sub>2</sub> emissions originate from sources in 16 of SSEB's member states, over 25% from the partnership's 11 states
- Significant potential terrestrial and geologic sequestration sinks exist in the SSEB region
- Significant opportunities exist for value-added CO<sub>2</sub> usage, that also achieves sequestration [e.g. enhanced oil recovery (EOR) or enhanced coalbed methane production (ECBM)]




### Diverse Partnership Composition

State Executive & Legislative Leadership

Natural Resource Advocates

Electric Utilities & Associations

Energy Producers & Associations

Sequestration & GIS Research





### Regional Partnership Leadership

- Southern States Energy Board (SSEB)**
  - Ken Nemeth, Overall Project Manager
  - Kathy Baskin, Overall Administrative Manager
  - Gerald Hill, Overall Technical Manager
- Diagnostic Information & Analysis Laboratory (DIAL) at Mississippi State University**
  - John Plodinec, Senior Technical Advisor
- Electric Power Research Institute (EPRI)**
  - Richard Rhudy, Senior Technical Advisor
- Augusta Systems (AS)**
  - Pat Esposito, Technical Advisor & Geologic, Industry and Public Outreach
  - Patrick Esposito, Technical Advisor & Regulatory, Permitting, and Public Outreach
- United States Department of Energy / National Energy Technology Laboratory (USDOE/NETL)**
  - Karen Cohen, USDOE Project Manager

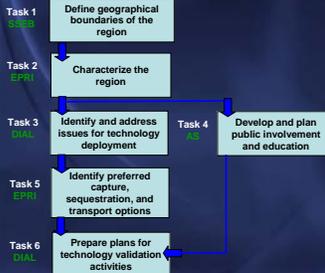



### Regional Partnership "Technology Coalition"

- Industry Members**
  - SSEB Associate Members and Utility Advisory Committee
  - Southern Company
  - Tennessee Valley Authority
  - Duke Power
  - Tampa Electric Company
  - Progress Energy
  - SCANA
  - South Carolina Electric and Gas Company
  - Interstate Oil and Gas Compact Commission
  - The North American Coal Corporation
  - Center for Energy and Economic Development
  - Oak Ridge National Laboratory
  - Clean Energy Systems, Incorporated




### Partnership Program



**Partnership Will Identify:**

- CO<sub>2</sub> Sources / Sinks
- CO<sub>2</sub> Capture Technologies
- CO<sub>2</sub> Sequestration Potential
  - Terrestrial and Geological
- Transportation Methodologies for CO<sub>2</sub>
- Existing Infrastructure
- Commercial Uses of CO<sub>2</sub>
- Technical Barriers
- Public Involvement, Education and Acceptance Methods
- Regulatory, Permitting and Accounting Frameworks
- Measurement, Monitoring and Verification Protocols




## Progress/Next Steps

- Continue our progress on Tasks 2.0 and 3.0 Activities
- Initiate work on Tasks 4.0 and 5.0
- Convene the SSEB Chairman's Forum on Carbon Management, May 19-21, 2004
- Maintain the [www.secarbon.org](http://www.secarbon.org) website



Southern States Energy Board

## Southeast Regional Carbon Sequestration Partnership

Presentation to the  
Third Annual Conference on  
Carbon Capture & Sequestration  
May 3-6, 2004

Patrick R. Esposito, Ph.D., P.E.  
Technical Advisor  
Augusta Systems  
[pesposito@augustasystems.com](mailto:pesposito@augustasystems.com)

