

IN THE SUPREME COURT  
STATE OF GEORGIA

FRIENDS OF THE CHATTAHOOCHEE, INC.  
and SIERRA CLUB,

Petitioners,

v.

CASE NO. S09C1879

DR. CAROL COUCH, DIRECTOR,  
ENVIRONMENTAL PROTECTION  
DIVISION, GEORGIA DEPARTMENT OF  
NATURAL RESOURCES, and  
LONGLEAF ENERGY ASSOCIATES, LLC.

Respondents.

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BRIEF OF AMICI CURIAE GEORGIA CONSERVANCY,  
MOTHERS & OTHERS FOR CLEAN AIR,  
GEORGIA INTERFAITH POWER & LIGHT,  
CENTER FOR A SUSTAINABLE COAST,  
COBB ALLIANCE FOR SMART ENERGY, and  
FALL-LINE ALLIANCE FOR A CLEAN ENVIRONMENT  
IN SUPPORT OF PETITIONERS

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Jon L. Schwartz  
Attorney at Law, P.C.  
1230 Peachtree St., # 1900  
Atlanta, GA 30309  
(404) 874-8919  
Ga. Bar No. 631038

*Amici Curiae* Georgia Conservancy, Mothers & Others for Clean Air, Georgia Interfaith Power & Light, Center for a Sustainable Coast, Cobb Alliance for Smart Energy, and Fall-Line Alliance for a Clean Environment respectfully submit the following brief in support of Petitioners Friends of the Chattahoochee, Inc. and Sierra Club ("Petitioners").<sup>1</sup>

Respondent Georgia Environmental Protection Division ("EPD") issued an Air Quality Permit to Respondent Longleaf Energy Associates, Inc. ("Longleaf") that would allow the construction of a coal-fired power plant in Early County, Georgia (the "Longleaf plant"). As set forth in the Clean Air Act and in the Brief of Petitioners, the Permit was required to include emission limitations for certain pollutants, including Carbon Dioxide, ("CO<sub>2</sub>"), based on the limits that could be achieved by incorporating the "best available control technology" ("BACT") into the

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<sup>1</sup> "The function of an amicus curiae is to call the court's attention to law or facts or circumstances in a matter then before it that may otherwise escape its consideration." Village of North Atlanta v. Cook, 219 Ga. 316, 322 (1963).

design and construction of the power plant. However, the Permit for the Longleaf plant did not include any CO<sub>2</sub> limit.

In Massachusetts v. EPA, 549 U.S. 497, 127 S.Ct. 1438 (2007), the U.S. Supreme Court held that CO<sub>2</sub> is an air pollutant. In the case *sub judice*, the Administrative Law Judge held that CO<sub>2</sub> is not an air pollutant subject to regulation under the Clean Air Act. The Superior Court of Fulton County reversed the ALJ, therein noting that this position is "untenable" and that "there is no question that CO<sub>2</sub> is "subject to regulation under the Act." (Slip Op., p. 7). The Court of Appeals reversed the Superior Court, therein holding that CO<sub>2</sub> is not subject to regulation under the Clean Air Act for purposes of the permit at issue in this case. (Slip Op., p. 7).

If constructed as permitted by EPD, the CO<sub>2</sub> released into the atmosphere by the Longleaf plant will have severe environmental and health impacts. In failing to take CO<sub>2</sub> emission levels into account, EPD has disregarded regulatory requirements and scientific

consensus. This is a matter of great public concern. *Amici Curiae* therefore urge this Court to grant the Petition for Certiorari, and reverse the Court of Appeals on the issues raised in the Petition for Writ of Certiorari.

#### **STATEMENTS OF INTEREST**

##### **The Georgia Conservancy**

Founded in 1967, the Georgia Conservancy collaborates, advocates and educates to protect Georgia's natural environment. Through its focus on clean air and water, land conservation, coastal protection, growth management and education, the Conservancy works to develop solutions to protect Georgia's environment and promote the stewardship of the state's vital natural resources.

##### **Mothers & Others for Clean Air**

Mothers & Others for Clean Air is a partnership of six environmental and public health organizations dedicated to improving air quality for all Georgians by educating the public about the health effects of air pollution and engaging people in both individual

change and public policy advocacy that will improve air quality. The organizations that comprise Mothers & Others for Clean Air are: The American Lung Association, Children's Healthcare of Atlanta, Emory's Rollins School of Public Health, Morehouse School of Medicine, Physicians for Social Responsibility and the Georgia Conservancy.

#### **Georgia Interfaith Power & Light**

Since 2003, Georgia Interfaith Power & Light has been working with communities of faith through worship and education to promote energy conservation and the clean generation of energy.

#### **Center for a Sustainable Coast**

The Center for a Sustainable Coast (the "Center") was founded in 1997 to promote the sustainable conservation and use of environmental, economic, and cultural resources along Georgia's coast. The Center educates coastal communities and elected officials about the conditions and trends of coastal Georgia's

environment. The Center also advises the public and policy makers about development choices that affect the value of businesses, jobs, and quality of life that depend on a healthy environment.

**Cobb Alliance for Smart Energy**

Cobb Alliance for Smart Energy seeks to ensure that clean and affordable energy options are available for Cobb County citizens. The organization educates Cobb County citizens and utility companies on energy issues, including the importance of investing in efficiency to meet the demand for electricity.

**Fall-Line Alliance for a Clean Environment**

Fall-Line Alliance for a Clean Environment brings together citizens and community to protect Georgia's hills and farmland from air and water pollution. Fall-Line Alliance for a Clean Environment is working to prevent unnecessary pollution from a proposed coal-fired power plant near Sandersville, Georgia.

## DISCUSSION

### **I. A Higher Proliferation Of CO<sub>2</sub> In The Atmosphere Increases Greenhouse Gas Levels, Which Is Proven To Have Adverse Impacts On The Environment And Human Health.**

#### **A. The Environmental Effects Of Increased CO<sub>2</sub>.**

There is scientific consensus that climate change caused by increased greenhouse gases will have broad and wide ranging environmental effects. The Intergovernmental Panel On Climate Change ("IPCC") was established by the World Meteorological Organization and the United Nations Environment Program "to provide an authoritative international statement of scientific understanding of climate change."<sup>2</sup> As set forth in the most recent IPCC Assessment, "[h]uman activities, primarily the burning of fossil fuels and the clearing of forests, have greatly intensified the natural greenhouse effect, causing global warming."<sup>3</sup>

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<sup>2</sup> IPCC, Climate Change 2007, The Physical Science Basis, Contribution of Working Group I to the Fourth Assessment.  
[www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-frontmatter.pdf](http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-frontmatter.pdf) (last visited on Aug. 10, 2009).

<sup>3</sup> IPCC, Fourth Assessment, Chapter 1, p. 115.

Global warming is expected to raise sea levels by expanding ocean water, melting glaciers and ice small caps, and causing portions of the ice sheets to melt.<sup>4</sup> "Rising sea levels inundate wetlands and other low-lying lands, erode beaches, intensify flooding, and increase the salinity of rivers, bays, and groundwater tables."<sup>5</sup> By 2080, rising sea levels could convert as much as 33% of the world's coastal wetlands to open water.<sup>6</sup> Rising sea levels will also damage development along the coast.<sup>7</sup>

Additionally, global warming will likely cause increased drought and heat waves.<sup>8</sup> The amount of

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[http://ipcc-wg1.ucar.edu/wg1/Report/AR4WG1\\_Print\\_Ch01.pdf](http://ipcc-wg1.ucar.edu/wg1/Report/AR4WG1_Print_Ch01.pdf)  
(last visited on Aug. 10, 2009).

<sup>4</sup> U.S. Environmental Protection Agency, Coastal Zones and Sea Level Rise (2008).  
[www.epa.gov/climatechange/effects/coastal/index.html](http://www.epa.gov/climatechange/effects/coastal/index.html)  
(last visited Aug. 10, 2009).

<sup>5</sup> Id.

<sup>6</sup> Id.

<sup>7</sup> Id.

<sup>8</sup> IPCC Fourth Assessment Report, Synthesis Report, p. 30.

global land area stricken by serious drought more than doubled from the 1970s to the early 2000s.<sup>9</sup> Almost half of that increase is due to rising temperatures.<sup>10</sup> By the end of this century, it is projected that 30% of the world's land surface will be in extreme drought, 40% will be in severe drought, and 50% will be in moderate drought.<sup>11</sup>

B. The Health Effects of Increased CO<sub>2</sub>.

There is general consensus in the medical community about the adverse effects of climate change on human health. The American Public Health

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[http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4\\_syr.pdf](http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf) (last visited Aug. 10, 2009).

<sup>9</sup> National Center For Atmospheric Research (2005, January 18). Drought's Growing Reach: NCAR Study Points To Global Warming As Key Factor. ScienceDaily, Jan. 18, 2005  
<http://www.sciencedaily.com/releases/2005/01/050111091640.htm> (last visited Aug. 10, 2009).

<sup>10</sup> Id.

<sup>11</sup> Burke, E. J., Brown, S. J., and Christidis, N.: Modeling the Recent Evolution of Global Drought and Projections for the 21st Century with the Hadley Centre Climate Model. Journal of Hydrometeorology, Volume 7, p. 1122.

Association stated: "[t]here is a direct connection between climate change and the health of our nation today."<sup>12</sup>

At Emory University, Dr. Howard Frumkin, MD, MPH, DrPH, founded and directed the Environmental and Occupational Medicine Consultation Clinic, the Occupational Medicine Residency training program, and the Southeast Pediatric Environmental Health Specialty Unit. Dr. Frumkin serves as director of the National Center for Environmental Health (Center for Disease Control, Agency for Toxic Substances and Disease Registry). In testimony before the House Select Committee on Energy Independence and Global Warming, Dr. Frumkin testified that:

higher surface temperatures, especially in urban areas, encourage the formation of ground-level ozone. Ozone can irritate the respiratory system, reduce lung function, aggravate asthma, and inflame and damage cells that line the lungs. In addition, it may cause permanent lung damage and aggravate

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<sup>12</sup> American Public Health Association, *Blueprint: Recommendations for the Public Health Community* (2008), available at <http://www.nphw.org/nphw08> (last visited Aug. 10, 2009).

chronic lung diseases.<sup>13</sup>

The World Health Organization ("WHO") estimated that the effects of climate change may have caused over 150,000 deaths worldwide in the year 2000.<sup>14</sup> It also concluded that deaths caused by climate change are likely to increase in the future.<sup>15</sup>

Children and the elderly are especially vulnerable to the health effects of climate change.<sup>16</sup> The American Academy of Pediatrics issued a policy statement regarding its concern for the impacts of

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<sup>13</sup> Hearing Before the House Select Committee on Energy Independence and Global Warming, 110th Cong. April 9, 2008; Statement of Howard Frumkin, M.D., M.P.H., Ph.D., Center for Disease Control, Director of National Center for Environmental Health, Agency for Toxic Substances and Disease Registry, p. 5. <http://globalwarming.house.gov/tools/assets/files/0486.pdf> (last visited Aug. 10, 2009).

<sup>14</sup> World Health Organization, Fact Sheet, July 2005, <http://www.who.int/globalchange/news/fsclimandhealth/en/> (last visited Aug. 10, 2009).

<sup>15</sup> Id.

<sup>16</sup> Hearing Before the House Select Committee on Energy Independence and Global Warming, *supra* note 13, p. 7.

climate change on children and the urgent need to reduce greenhouse gas emissions:

Conservative environmental estimates of the impact of climate changes that are already in process indicate that they will result in numerous health effects to children. The nature and extent of these changes will be greatly affected by actions taken or not taken now at the global level.<sup>17</sup>

While most health studies have concentrated on the overall effect of increased greenhouse gas emissions, of which CO<sub>2</sub> is a major component, a study by Stanford professor Mark Jacobson specifically isolated CO<sub>2</sub>'s effect on human health and quantitatively determined that CO<sub>2</sub> alone increases mortality.<sup>18</sup> "A climate-air pollution model showed by cause and effect that fossil-fuel CO<sub>2</sub> increases increase U.S. surface ozone, carcinogens, and

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<sup>17</sup> AAP Policy, Global Climate Change and Children's Health, Pediatrics, Vol. 120 No. 5 November 2007, pp. 1149-1152, Abstract.  
<http://aappolicy.aappublications.org/cgi/content/full/pediatrics;120/5/1149> (last visited Aug. 10, 2009).

<sup>18</sup> Jacobson, Mark Z., On the causal link between carbon dioxide and air pollution mortality, Geophysical Research Letters (June 22, 2007).  
[http://www.fypower.org/pdf/Stanford\\_CO2\\_Jacobson.pdf](http://www.fypower.org/pdf/Stanford_CO2_Jacobson.pdf)

particulate matter, thereby increasing death, asthma, hospitalization, and cancer rates."<sup>19</sup>

Temperature increases due to higher levels of greenhouse gases may also cause outbreaks of diseases. Hotter summers give disease-carrying insects more opportunity to breed,<sup>20</sup> and outbreaks of bacterial infections following consumption of seafood and shellfish have been associated with increases in temperatures.<sup>21</sup>

The Office of Science and Technology Policy leads interagency efforts to develop and implement sound science and technology policies.<sup>22</sup> The Director under President George W. Bush, Dr. John Marburger, stated:

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<sup>19</sup> Id., page 7.

<sup>20</sup> Alan Mauldin, Climate Change Impacts Health, Thomasville Times-Enterprise, April 2, 2008 citing Dr. Jacqueline Grant, director of the Southwest Public Health District. [http://www.timesenterprise.com/archivesearch/local\\_story\\_093225903.html](http://www.timesenterprise.com/archivesearch/local_story_093225903.html) (last visited Aug. 10, 2009).

<sup>21</sup> Hearing Before the House Select Committee on Energy Independence and Global Warming, *supra* note 13, p. 5.

<sup>22</sup> Office of Science and Technology Policy, Executive Office of the President. [www.ostp.gov/cs/about\\_ostp](http://www.ostp.gov/cs/about_ostp) (last visited Aug. 10, 2009).

"we are producing far more CO<sub>2</sub> from fossil fuels than we ought to be."<sup>23</sup> Dr. Marburger stated that the earth may become "unlivable" without cuts in CO<sub>2</sub> output.<sup>24</sup>

In an interview about fossil fuels and global warming, Steven Chu, U.S. Secretary of Energy, stated: "It's a world security issue on political stability. It's a world security issue on our environmental issues that will definitely affect us fifty and one hundred years from now, and it could be in a very adverse way."<sup>25</sup>

A 2007 report issued by a national security think tank, (CNA Corporation), and written by six retired admirals and five retired generals, concluded that global warming poses a "serious threat to America's

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<sup>23</sup> Roger Harrabin, Bush Aide Says Warming Man-Made, BBC News, Sept. 14, 2007  
<http://news.bbc.co.uk/2/hi/science/nature/6994760.stm>  
(last visited Aug. 10, 2009).

<sup>24</sup> Id.

<sup>25</sup> New York Times, Feb. 11, 2009, Audio Interview with Steven Chu, Secretary of Energy.  
[www.nytimes.com/2009/02/12/us/politics/12chu.html?\\_r=1](http://www.nytimes.com/2009/02/12/us/politics/12chu.html?_r=1)  
(last visited Aug. 24, 2009).

national security."<sup>26</sup> The report projects that within 30 to 40 years, there will be wars over water and other shortages, and warns that the U.S. will be drawn into these conflicts.<sup>27</sup> "The chaos that results can be an incubator of civil strife, genocide and the growth of terrorism."<sup>28</sup>

Gen. Anthony C. Zinni, the former head of the Central Command, and an author of the CNA Corporation report, stated: "We will pay for this one way or another. We will pay to reduce greenhouse gas emissions today, and we'll have to take an economic hit of some kind. Or we will pay the price later in military terms. And that will involve human lives."<sup>29</sup>

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<sup>26</sup> Military.com, "Climate Change Linked to Security Risks." April 16, 2007.  
<http://www.military.com/NewsContent/0,13319,132441,00.html>  
(last visited Aug. 24, 2009).

<sup>27</sup> Id.

<sup>28</sup> Id. quoting CNA Report.

<sup>29</sup> Id.

## **II. Georgia Emits High Amounts Of CO<sub>2</sub>.**

Utilities contribute more CO<sub>2</sub> than any other source in Georgia.<sup>30</sup> Georgia has two of the top three CO<sub>2</sub> emitting power plants in the United States, including Plant Scherer, which emits the most CO<sub>2</sub> of any power plant in the country.<sup>31</sup> Power plants in Georgia emit 118 million tons of CO<sub>2</sub> annually.<sup>32</sup> As permitted by EPD, the Longleaf plant would contribute an additional 8 to 9 million tons of CO<sub>2</sub>.

## **III. Coal-Fired Power Plants Pollute For Long Periods of Time.**

Coal is the most polluting and carbon intensive form of energy production.<sup>33</sup> The average lifetime of a

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<sup>30</sup> Barczak, Sara and Carroll, C. Ronald; Climate Change Implications for Georgia's Water Resources and Energy Future, Proceedings of the 2007 Georgia Water Resources Conference, p. 1.  
<http://cms.ce.gatech.edu/gwri/uploads/proceedings/2007/1.3.1.pdf> (last visited Aug. 10, 2009).

<sup>31</sup> Carbon Monitoring For Action, <http://carma.org/dig> (last visited Aug. 10, 2009).

<sup>32</sup> Id.

<sup>33</sup> Pew Center on Global Climate Change, Coal and Climate Change Facts.  
[www.pewclimate.org/global-warming-basics/coalfacts.cfm](http://www.pewclimate.org/global-warming-basics/coalfacts.cfm)  
(last visited Aug. 10, 2009).

large coal-fired power plant is 50 years.<sup>34</sup> Thus, once a coal-fired power plant is constructed, it pollutes for a long period of time.

The Intergovernmental Panel on Climate Change's assessment notes that mitigation efforts over the next 20 to 30 years will have a significant impact on our ability to achieve lower stabilization rates for CO<sub>2</sub> levels.<sup>35</sup> Delayed emissions reductions will significantly constrain our ability to achieve lower stabilization rates, and will increase the risk of more severe climate change impact.<sup>36</sup>

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<sup>34</sup> Massachusetts Institute of Technology, *The Future of Coal* (2007), p. 60, n. 5.  
[http://web.mit.edu/coal/The\\_Future\\_of\\_Coal.pdf](http://web.mit.edu/coal/The_Future_of_Coal.pdf)  
(last visited Aug. 10, 2009).

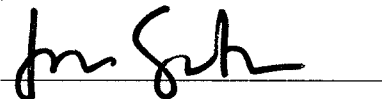
<sup>35</sup> IPCC, *Climate Change 2007: Synthesis Report, Summary for Policy Makers*, p. 19.  
[www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4\\_syr\\_spm.pdf](http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf)  
(last visited Aug. 10, 2009).

<sup>36</sup> Id.

### CONCLUSION

Carbon dioxide is proven to have significant adverse effects on the environment and human health. As held by the Superior Court of Fulton County in this case, EPD effectively ignored the Clean Air Act's regulatory structures by not requiring a BACT analysis for CO<sub>2</sub> on the proposed Longleaf plant. (Superior Court Slip Op., p. 7). *Amici Curiae* respectfully request that this Court grant the Petition for Certiorari and reverse the Court of Appeals on the issues raised in the Petition for Writ of Certiorari.

Respectfully submitted this 26<sup>th</sup> day of August, 2009.

A handwritten signature in black ink, appearing to read "Jon L. Schwartz", is written over a horizontal line.

Jon L. Schwartz  
Ga. Bar. No. 631038

1230 Peachtree Street  
Suite 1900  
Atlanta, GA 30309  
(404) 874-8919 - phone  
(404) 529-4587 - fax

Attorney for *Amici Curiae*  
Georgia Conservancy  
Mothers & Others for Clean Air  
Georgia Interfaith Power & Light  
Center for a Sustainable Coast  
Cobb Alliance for Smart Energy and  
Fall-Line Alliance for a Clean Environment

**CERTIFICATE OF SERVICE**

I hereby certify I have this 26<sup>th</sup> day of August, 2009 caused the foregoing Amicus Brief to be served upon the following counsel by way of U.S. mail, with adequate postage affixed thereto:

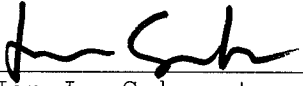
Diane L. Deshazo  
Margaret K. Eckrote  
State of Georgia  
Department of Law  
40 Capitol Square SW  
Atlanta, Georgia 30334

Patricia T. Barmeyer  
Leslie A. Oakes  
Ray Persons  
John Bottini  
King & Spalding  
1180 Peachtree Street, N.E.  
Atlanta, Georgia 30309

Justine Thompson  
Pamela Orenstein  
GreenLaw  
104 Marietta St. NW, Suite 430  
Atlanta, Georgia 30303

David Walbert  
Parks, Chesin & Walbert  
75 Fourteenth Street, 26th Floor  
Atlanta, Georgia 30309

George Hays  
GreenLaw  
236 West Portal Avenue, # 110  
San Francisco, California 94127

  
\_\_\_\_\_  
Jon L. Schwartz  
Counsel for Amici Curiae