I am Wayne Clough, President of Georgia Tech, and I am pleased to welcome you to the Georgia Tech campus and to this press conference to announce a joint initiative between Georgia Tech and the Southern Company to explore the potential for a wind power project offshore from Savannah. Georgia Tech’s participation in this initiative is part of our Strategic Energy Initiative, which is devoted to testing both the scientific and the economic feasibility of innovative alternative energy technologies.

Georgia Tech is very active in conducting research on a variety of alternative energy sources, from solar to hydrogen fuel cells to batteries. For example, we are home to one of two National Centers of Excellence in Photovoltaic Research and Education. The roof of our Campus Recreation Center contains a three-quarter-acre array of solar cells and serves as a testbed for researchers who are development lighter, longer-lasting, more efficient cells. The Georgia Tech Center for Innovative Fuel Cell and Battery Technologies conducts a wide range of research from developing micro-fuel cells that could be included on a microchip as a power source for an integrated circuit, to oxides that could serve as sources of hydrogen for fuel cells.

This press conference focuses on yet another source of alternative energy – wind. And it is an energy source that interests us very much here at Georgia Tech because it fits our emphasis on environmental sustainability. It is clean and does not deplete any natural resources.

People have been capturing wind energy and putting it to constructive use throughout history. The windmills of the Netherlands have ground corn, pumped water away from low-lying land, and milled lumber for centuries, and more than a thousand continue in operation today. Early Americans relied on a smaller, sleeker version of the windmill to pump water from wells.

The modern expression of wind power as a commercial source of electrical power dates to the energy crisis of the 1970s and early 80s. Those early wind power projects were unreliable, required more maintenance than expected, and did not produce much in the way of usable energy. However, over the past 20 years, the technology has progressed through several generations and become much more reliable and powerful.

Wind power still accounts for less than 1 percent of the electricity generated in the United States, but it has been growing at an annual of more than 20 percent a year. The American Wind Energy Association estimates that given consistent policy support, wind can provide 6 percent of U.S. energy by 2020 – about the same level being provided by hydro-electric power today.

Some 30 states already have commercial wind energy projects with a total capacity of more than 6,700 megawatts. But Tennessee and Arkansas are the only states in the South to undertake wind projects to date. A major obstacle is terrain. We simply do not have the flat open prairies or the barren hilltops of the Midwest or the West. The hills and forests that characterize the Georgia landscape reduce the performance of a wind turbine. It is only when you move offshore from the
Georgia coast that you get a flat, open space that allows consideration of a commercial wind project.

Georgia Tech has already conducted a preliminary study, funded by the National Science Foundation, to determine whether there is enough wind offshore from Savannah for power generation. Based on the results of that study, we are announcing a joint endeavor between the Georgia Tech Strategic Energy Initiative and the Southern Company to begin studying of the feasibility of an offshore power project.

The memorandum of understanding between Georgia Tech and the Southern Company, which we signed this morning, adds a new facet to the ongoing relationship between our two organizations. The Southern Company is a charter member of the National Electric Energy Testing Research and Applications Center, known as NEETRAC, which is based here at Georgia Tech. And five endowed chairs and professorships have been created as a result of the generosity of the Georgia Power Company — two in computer and electrical engineering, one in mechanical engineering, one in environmental engineering, and one in air quality. As you can see, the Southern Company has invested in the energy and environmental research underway at Georgia Tech, and we are pleased to add a new dimension to that relationship today.

As president of Georgia Tech, I work with many state and metro Atlanta organizations, and I have learned to appreciate the leadership that Southern Company Chairman, President and CEO David Ratcliffe provides. This year he is chairing the board of the Georgia Research Alliance, on which I also serve, as well as the Georgia Chamber of Commerce. He and I work together at the Metro Atlanta Chamber of Commerce, where I serve on the executive committee and he chairs the economic development committee.

At this time I’d like to introduce David Ratcliffe to speak on behalf of the Southern Company.

(RATCLIFFE SPEAKS)

Thank you, David. Also joining us this morning are Bill Bulpitt, who is a senior research engineer with Georgia Tech’s Strategic Energy Initiative, and Southern Company Senior Vice President of Environmental Affairs Chris Hobson. They are here to speak to the more technical aspects of this project.