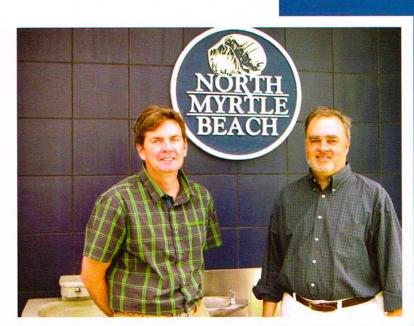


BY JO ANN MATHEWS

South Carolina's first wind turbine. Skystream, began operating on Nov. 30, 2010, in North Myrtle Beach through the efforts of North Strand Coastal Wind Team.

Monroe Baldwin III, chairman of the Wind Team, said the decision to pursue wind energy in 2009 came from the North Myrtle Beach Chamber of Commerce's economic development council, of which he is a member, and fellow member Gregory Duckworth, a North Myrtle Beach councilman.



Gregory Duckworth (left) and Monroe Baldwin III



"He brought the value of wind energy to the city," Baldwin said of Duckworth.

More than a dozen partners across the state embraced the concept and joined the team. Baldwin envisioned turbines capturing the wind atop hotels and other highrise buildings. Through a chamber grant, a wind-test station was placed on the roof of the Avista Resort. "The outcome is that wind turbines can produce electricity 68 percent of the time," Baldwin said.

Santee Cooper installed Skystream at 22nd Avenue North at the oceanfront through its Wind Education Project. The 2.4 kilowatt turbine generates electricity when winds reach eight miles per hour and reaches full capacity when the winds register 29 mph. The city plans to install up to seven more turbines at public beach accesses by the end of 2011, although final contracts have not been signed.

National Weather Service records show the average wind speed in North Myrtle Beach in 2010 was 7.0 mph. A two-minute wind gust reached 37 mph, and a five-second gust was 49 mph. However, due to the exponential power production curve of the turbine, Baldwin said, short periods of time of high wind speed produce as much electricity as long periods of time at average

The U.S. Energy Information Administration reports the U.S. generated 1.3 percent of its electricity from wind energy in 2008, and our country ranks first in the world in wind power capacity. Nevertheless, the world generated less than one percent of its electricity from wind power that year. In his 2011 State of the Union address, President Obama suggested the U.S. generate 80 percent of its electricity from clean energy sources by 2035.

"Our hope is to create an atmosphere for people to move here, test the wind turbines and have production here," Duckworth said...

"The small wind turbine onshore here introduces the concept of saving electricity," Baldwin said. "It will require an industry to be set up once it catches on. It's a possible way to diversify our economy." CBL

