## Testimony of John Giannelli on behalf of Gamesa USA before the House Republican Policy Committee Hearing on Wind Energy in Pennsylvania at Southern Huntingdon High School in Three Springs, Huntingdon County on Friday, June 11, 2010

Chairman Saylor, Rep. Fleck and members of the committee: Thank you for inviting me to testify today. On behalf of Gamesa USA, I appreciate the opportunity to outline for you the way that wind energy creates a stronger and more sustainable economy, a healthier environment and a more stable and affordable market for Pennsylvania electricity consumers.

Gamesa is a world leader in wind energy development and deployment. The company is the market leader in Spain and among the top three leading wind players in the United States, with a 7 percent U.S. market share in 2009. Gamesa's worldwide market share was 6.7 percent in 2009.

Gamesa has an international workforce of 6,300 employees and operates in more than 30 countries, with production facilities in Europe, the United States, China and India. 800 of those employees are here in Pennsylvania with an additional 50 throughout the U.S. The company intends to reach U.S. 900 employees before the end of this year.

Across the globe, Gamesa has 18,000 megawatts of installed capacity and 12,000 megawatts under maintenance. The company has installed more than 2,000 wind turbine generators made in our Pennsylvania factories at 22 wind farms in the United States, including two wind farms in Pennsylvania, with others still in the planning or permitting phases. Gamesa also is a world leader in the development, construction and sale of wind farms, having installed more 3,600 megawatts.

In September 2004, Gamesa became the first overseas wind manufacturer to set up full production facilities in the United States when it officially selected Pennsylvania as the site for its U.S. headquarters, East Coast development office and two manufacturing facilities. Today, Gamesa operates a blades manufacturing plant in Ebensburg, Cambria County, and a nacelles manufacturing plant in Fairless Hills, Bucks County. Gamesa also has a development office in Philadelphia and executive and other offices in Bucks County.

Pennsylvania invested \$15 million in subsidies and tax incentives as part of an investment package designed to attract foreign investment.

Gamesa has met and exceeded its promises.

To date, Gamesa has invested more than \$220 million in commonwealth after an initial commitment of only \$69 million in 2004 --- a significant return on the state's investment. That

includes \$34 million to convert 20-plus acres at the former U.S. Steel industrial site in Fairless Hills from a brownfield into a modern manufacturing center. Again, Gamesa employs 850 workers nationwide, including 800 in Pennsylvania. More than 350 of the company's factory jobs are "green collar" positions, where employees are represented by the United Steelworkers (USW) union.

Gamesa's economic impact reaches far beyond its factory walls, too. For each wind turbine that's manufactured, about 8,000 parts are needed for assembly. Gamesa's domestic content on U.S.-made turbines is nearly 60 percent, one of the highest standards in the industry, and our local supply goal is to go more local. The company has suppliers now in more than 30 states with 41% of those coming from Pennsylvania.

From its two U.S. manufacturing facilities, Gamesa is capable of turning out approximately 900 megawatts of wind turbine components annually. Our commonwealth has more than 590 wind megawatts operating and another 200 megawatts under construction, enough to power 162,500 households. Pennsylvania soon could the first state east of the Mississippi to reach "giga-status," which is over 1,000 installed megawatts. Fourteen other U.S. states have already attained this status and compete directly with Pennsylvania for new jobs, new factories, and new domestic clean energy sources.

For members of the committee and other policy makers, it is important to note that there were many reasons that Gamesa chose Pennsylvania but chief among them was the bipartisan approach to renewable energy articulated by state leaders, particularly with the enactment of our state's portfolio standard requiring the Commonwealth to produce 18 percent of its energy from alternative sources by 2020.

The results of that law have been substantial. Since 2003, Pennsylvania has invested nearly \$1 billion leveraging another \$5 billion in private capital, creating more than 8,300 jobs across the state. Pennsylvania now has more than 4,000 workers assembling or building wind turbines and components, ranking the state fifth nationwide.

Without the state's portfolio standards, many of these investments and jobs would have gone elsewhere. Competition for those jobs remains fierce, which is why the state legislature currently is considering House Bill 2405 to increase our renewable energy requirements to 15 percent by 2025. This bill has the potential to create even more jobs, generate even more clean electricity and solidify Pennsylvania's place as a national leader in a global "green" market in the mid-Atlantic and Northeast regions.

I would like to turn now from manufacturing to development.

The dramatic growth in U.S. wind energy is the direct result of collaboration among developers, residents and regulators who are working together to improve siting procedures, protect the environment and gather much-needed information about wildlife issues to ensure wind projects maximize benefits and minimize impacts.

The wind industry takes potential wildlife impacts seriously, and invests heavily to ensure wind farms are done right. Pre-construction wildlife surveys are common practice throughout the industry, as developers work with state and federal fish and wildlife agencies and local wildlife groups. Post-construction monitoring has validated the industry's ability to assess risk and build safe projects.

Gamesa is among the many companies partnering with the Pennsylvania Game Commission to research the critical habitats of birds and other animals. Through this voluntary partnership, the wind industry is adding another layer of consultation and review by wildlife agencies to ensure the best designs to avoid conflicts with species and develop this critical resource responsibly.

Wind regulations already are rigorous. Development of a wind farm requires a National Pollution Discharge Elimination System permit to protect water quality. The work is reviewed, inspected and overseen by the local conservation district and the state Department of Environmental Protection to ensure the most stringent standards are met.

Four state and federal agencies are involved in protecting the state's natural resources. Wildlife surveys are coordinated with and reviewed by PGC, the Pennsylvania Fish and Boat Commission and the U.S. Fish and Wildlife Service. The state Department of Conservation and Natural Resources reviews plant surveys. That's not all: the Pennsylvania Historic and Museum Commission oversees cultural resource surveys; local land use regulations need to be followed; and the Federal Aviation Administration must issue a "determination of no hazard" to show that turbines will not interfere with flight paths.

It takes a tremendous investment of resources, time and energy to secure the information needed to satisfy regulators. But this strict enforcement of environmental standards ensures that wind farms are sited properly and developed responsibly.

Wind farms have a significant economic impact locally.

The General Assembly passed and the governor signed Act 167 of 2006 (Senate Bill 514), which authorizes Pennsylvania county assessors to assess property taxes on wind farms based on a capitalized value of the lease payments. The tax payment averages about \$1,500 per turbine per year based on the expected production and power prices. So, for example, for a 25-turbine project within a county, the tax would equal \$37,500 per year, or \$1.13 million over the 30-year life of the project.

Moreover, in nearly every jurisdiction of operation in Pennsylvania, Gamesa has entered into a development agreement that requires the company to make direct payments, usually on a perturbine basis, to the municipality. These agreements cover the life of the project, giving certainty to local governments as to the revenue stream over time, and they are in addition to tax payments.

Wind farms do indeed contribute to the fiscal health of local communities, providing long-term financial security. This is part of the reason why, in April 2008, residents in nearby Tyrone Borough voted 55 percent to 45 percent in favor of Gamesa's Sandy Ridge wind farm there.

Aside from the clear economic benefits, wind energy also benefits consumers. Because renewable energy operates without fuel costs, adding sources like wind to electricity markets suppresses energy prices. Particularly at times of high demand, low-cost renewables displace peak resources with substantially higher operating costs. This in turn lowers the price consumers pay for electricity. Eric will more fully elaborate on the market factors.

Reliability is a manageable issue. A modern 2-megawatt wind turbine generates enough zeroemission electricity to meet the demands of 500 to 600 homes over the course of a year. Recently announced Gamesa, Mega system, is technology that provides an up to the hour assessment of conditions at wind farms which helps to enhance turbines' performance and ensure that the energy they generate is better integrated into electricity markets.

Pennsylvania is a state blessed with many energy resources. Wind energy provides a cost effective way to diversify the electricity supply that is a win for consumers, a win for workers and a win for the environment. Gamesa USA is a Pennsylvania company fighting for Pennsylvania's energy independence and is committed to ensuring Pennsylvania's remains a national leader in energy production.

Chairman Saylor, Rep. Fleck and members of the committee: I would welcome any questions you may have. Thank you.