PATRIOT RENEWABLES
Canton Mountain Wind, LLC

Section 28
Tangible Benefits

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28.0 TANGIBLE BENEFITS

The Canton Mountain Wind Project (Project) proposed by Canton Mountain Wind, LLC (CMW) will provide tangible benefits consistent with State Law to both the State of Maine and the host community of Canton, Maine. This clean, green, renewable energy generating resource will power Maine and the region's homes and businesses by employing our natural resources and without polluting the air and water. The Project will provide an important contribution to the state meeting its goals for renewable energy development as described in 2007 Public Law, Chapter 661 ("the Wind Power Act"). Under the terms of the Task Force legislation, the Project, as a renewable energy generation facility, is presumed to provide energy and emissions related benefits. It will also help the state meet its commitments under the Regional Greenhouse Gas Initiative and help competitive electricity providers meet their commitments under applicable Renewable Portfolio Standards. Further, it will provide competitively priced energy from an inflation-proof fuel source, while creating and retaining jobs, and supplying towns and the state with vital tax revenues for the next 20 years. This Project, like others operated by Patriot Renewables, will strive to be a corporate neighbor and remain committed to being a part of the community in which it resides.

28.1 Local Tangible Benefits

28.1.1 Tax Benefits

The Project is expected to be assessed at approximately $44 million. This significant investment in the local community will make CMW the largest taxpayer in Canton and will increase the assessment of the town by roughly 60 percent. Canton can elect to use the funds from the new tax revenue to lower taxes and/or fund public projects.

28.1.2 Employment

The Project will have a significant impact on employment in the State of Maine. During development of the Project, CMW hired many consultants, contractors, and field crews that are based in Maine. Specifically, CMW used Maine-based companies for wetland and vernal pool delineations, wildlife surveys, soil work, visual impact assessment, archaeological surveys, real estate surveying, electrical engineering, and legal counsel. CMW is committed to hiring local workers whenever possible and will endeavor to hire area contractors to construct the Project. During construction, there will be job opportunities for activities such as tree clearing, excavation, road construction, concrete work, and electrical work. On average, the Project would employ 40 to 50 construction workers for five to six months and up to 75 workers during peak construction times. Materials located close to the site will be used as much as possible, giving local stone quarries and construction material suppliers procurement opportunities. In addition, local businesses such as motels, restaurants, gas stations, and retail stores will see increases in activity during construction. After construction is complete, the Project will employ a maintenance staff of two to three full-time workers. There will also be a need for ongoing road maintenance, plowing, electrical, and landscaping services.

28.1.3 Community Benefit Fund

CMW will establish a Community Benefit Fund (CBF) that would provide the Town of Canton with an annual funding source that could be used by the community without restrictions. CMW would fund at least $4,000 per turbine per year for the first 15 years of the Project and at least $6,000 per turbine per year from year 16 to the end of the Project; the size of this fund may increase subject to availability of project resources. The CBF would be administered by the Town of Canton.

28.2 State and Regional Tangible Benefits

28.2.1 Electricity Pricing

CMW is exploring various options for entering into a long-term, fixed-price power purchase agreement with a New England load-serving utility. In contrast to the volatility of natural gas prices, renewable resources provide a stable cost of electric generation and provide a suitable structure for a long-term, fixed price contract[1]. This, in turn, increases price stability for utility customers, which makes it an attractive component of a utility's supply portfolio. In addition, by diversifying the electric generation mix with increased domestic renewable energy, we enhance national security by decreasing our dependence on foreign fuel sources[2].

In addition to the fixed price and energy independence benefits, wind projects will lower the average wholesale price of electricity in the regional market. Every day, all electricity generators in New England submit bids into the daily market to win the right to generate power. Because the market can produce more generation than is needed to meet consumer demand, the highest priced generators are not selected. All of the winning bidders receive the same price—the market clearing price—which is set by the highest winning bid. Coal and gas generators need to burn fuel to operate, so they must bid a price high enough to at least cover their fuel costs; otherwise, they will lose money every second they generate power. Wind turbines have free fuel (wind), so wind generators can bid zero, ensuring a winning bid and knocking out a higher-priced generator and lowering the market clearing price. Therefore, as more wind and other low-cost energy enters the market, more high-cost generators will be unable to compete, resulting in lower market clearing prices for electricity.

28.2.2 Environmental Benefits

A 22-MW project on Canton Mountain would provide enough emission-free renewable energy for more than 10,900 Maine households each year[3].

Wind energy generation facilities use a pollution-free fuel that does not create ancillary pollution from extraction or transport of fuel or disposal of waste by-products. Therefore, Maine law presumes that renewable energy projects provide emissions-related benefits to the state and the surrounding regions. As stated by the Governor's Task Force on Wind Development, "Two of the major, energy-related challenges that Maine is facing are the need to reduce greenhouse gas emissions and the need to increase the reliability of our electricity supply. Wind power holds great promise in helping meet each of these

[1] *White Paper*. U.S. Department of Energy. June 2004
[2] *20% Wind Energy by 2030*. U.S. Department of Energy. July 2008
[3] Based on a 35% capacity factor and an annual electricity usage of 6,188 kWh per year per Maine household.

challenges."[4] By incorporating renewable energy into Maine's energy grid, it is possible to minimize the production of fossil fuel by-products such as sulfur dioxide, nitrogen oxide, carbon dioxide (one of the major contributors to global warming), and mercury, which currently poses a serious threat to the Common Loon and region-wide fish populations.[5]

28.2.3 Health Benefits

According to the Maine Center for Disease Control (CDC), "Generating energy from wind turbines means less energy generated from foreign oil and coal, both being major contributors to global warming, pollution, and resulting diseases and deaths due to heart disease, cancer, asthma, and other lung diseases. Maine's highest-in-the-nation rates of asthma and cancer are thought to be at least partially due to pollution from our dependence on fossil fuels."[6]

28.3 Conclusion

CMW has worked closely with local and state agency representatives throughout the siting and development process to integrate regional and local needs into the proposed Project. The Project will provide increased employment during construction, local tax benefits, a community benefits fund, electricity price stability, downward pressure on wholesale spot market prices, and local and regional environmental benefits—all significant tangible benefits to the State of Maine and the Town of Canton.

[4] Report of the *Governor's Task Force on Wind Development*. February 2008. http://www.maine.gov/doc/mfs/windpower/pubs/report/wind_power_task_force_rpt_final_021408.pdf
[5] *If Not Wind, Then What?* Natural Resources Council of Maine. http://www.nrcm.org/if_not_wind.asp
[6] Mills, Dora Anne, MD, MPH Maine CDC/DHHS. Testimony of Dora Anne Mills, MD, MPH, FAAP, July 2011. http://www.maine.gov/dhhs/boh/wind-turbines.shtml