MACKIE SHEA O'BRIEN PC

Insights & Updates

Fall 2013

Inside

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Wind and Solar Energy Goals Face Challenges

In conjunction with some landmark energy legislation five years ago, the Patrick Administration set aggressive goals for solar and wind energy development in Massachusetts. The goals were soon tempered by the realities of facility siting in the Commonwealth. To date a significant number of solar arrays have been installed and some land-based wind turbines have been constructed. Several projects continue to be plagued with concerns and complaints, however, and state agencies have begun to evaluate what needs to be changed.

One of the goals set by Governor Patrick is to have 2,000 megawatts of wind energy in Massachusetts by 2020. In 2001 Massachusetts only had one megawatt of installed wind energy; in June of 2013 there were more than 100 megawatts installed. The modest success toward the goal is due in large part to support from the Massachusetts Clean Energy Center (MassCEC), which has provided funding for feasibility studies and otherwise supported the development of wind energy facilities through its Commonwealth Wind program.

MassCEC funding is only available to projects that appear to be "appropriately sited," which is defined as projects that "provide the environmental, public health, energy security and economic benefits of clean energy with minimal impact." (Commonwealth Wind Program Manual for Community and Commercial Wind Projects). Residents in several communities with commercial wind turbines believe they should not have been constructed where they are. Now MassCEC is evaluating some operating wind energy facilities in an effort to improve the siting process.

As a result of concerns raised about the effects of wind turbine sound on people living and working in proximity to the turbines, MassCEC awarded a contract to a team of consultants to conduct a research study on wind turbine acoustics. The goal of the research project is to advance the Commonwealth's understanding of both the characteristics and foundations of wind turbine sound to help inform the public and improve wind turbine siting and approvals processes. The research study involves measurements and analyses of utility scale wind energy facilities. In addition to measuring sound, the data collected includes the size and technology of the turbines, topography of the surrounding land, weather conditions, and distances to receptors, among other things, to evaluate how those factors affect sound. Data from four wind energy facilities has been collected so far and is currently being analyzed.

MassCEC's work on wind turbine acoustics is part of an inter-agency initiative - the Community Wind Energy Initiative - announced in June by Energy and Environmental Affairs (EEA) Secretary Richard Sullivan to provide support and guidance for land-based wind projects. Another EEA agency, the Department of Public Utilities' Siting Division, is studying wind standards and guidelines from around the country and the globe in an effort to create a set of best practices for siting wind energy facilities.

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Firm Activities

Michelle O'Brien is now the managing shareholder of the firm, giving **Tom Mackie** a rest after 15 successful years in that role! Tom will continue to work on strategic planning for the firm.

Susan Lee, administrative assistant extraordinaire, served as a judge for the Boston Debate League and received the 2013 Fall Season Opener Outstanding Judge Award.

MSO sponsored the production of the LSP Association's 20th Anniversary Video "Suspended Disbelief" about the creation of the Massachusetts privatized hazardous waste site cleanup program and the licensed site professional.

Noreen Ruggiero again led the firm's participation in serving meals to poor and homeless women at Rosie's Place.

Susan Lee and Tom Mackie Serving at Rosie's Place.

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A third component of the Community Wind Energy Initiative was the creation of a Wind Turbine and Noise Technical Advisory Group (WNTAG). Convened by the Department of Environmental Protection (MassDEP) in June, the purpose of WNTAG is to provide technical advice to MassDEP on how best to craft effective regulations and policies for wind turbine installations and possible noise impacts. According to Secretary Sullivan's announcement of the WNTAG, MassDEP seeks a policy and regulations for wind turbine noise that encourage appropriate wind development; provides regulatory clarity for developers, towns, and communities; and are protective of public health and the environment.

Currently MassDEP has no official role in the siting of wind turbines. Sound that is objectionable can be considered "noise," however, which can be an air pollutant. Therefore, MassDEP and local communities have applied MassDEP's noise policy to wind turbine installations. This has resulted in some disagreement among the various stakeholders regarding implementation of the policy; for example, what the correct methodology is for measuring ambient and wind turbine sound levels. In addition to the noise standard (policy), the WNTAG is also discussing permitting (i.e., whether there should be a pre-construction permit required for wind turbines) and compliance monitoring. The work of the WNTAG is being facilitated by The Consensus Building Institute and details of the project can be found on its web site www.cbuilding.org/project/wntag. The work will likely result in recommended changes to MassDEP's noise regulations and policy as they apply to wind turbine sound.

A number of individuals living near wind turbines have also raised concerns about the shadow flicker from the turbines, which is the effect of the pulsing of sunlight through the turbine blades. A few communities with commercial-scale wind turbines are studying the shadow flicker effects.

There is no single standard for the amount of shadow flicker that is considered acceptable; however, the general guideline, adopted from Europe, is that 30 hours per year of shadow flicker impact is reasonable. Several Massachusetts communities have included a 30 hour per year standard in their local bylaws or ordinances. Wind project developers typically do modeling studies to determine how much shadow flicker is expected at particular receptors, such as residences. In Germany, if the projected shadow flicker will exceed 30 hours per year, the developer is required to re-site the turbine or mitigate. Although there are no similar requirements in Massachusetts, requiring curtailment (e.g., temporary shut-off) of the turbine at certain times is a simple way to manage wind turbine shadow flicker.

Addressing fears and concerns about the effects of wind turbine noise and shadow flicker is now a significant part of the discussion about the siting of wind energy facilities. In addition to the state agencies mentioned above, several municipal boards are dealing with post-construction issues associated with wind turbines. The towns of Falmouth, Fairhaven, and Scituate, owners of wind energy facilities at their wastewater treatment plants, are dealing with the economic impacts of turbine shutdowns, in addition to the concerns of residents about the turbine noise and shadow flicker effect.

One of our clients, a wind energy project analysis and design company, has developed a mitigation system for wind turbine

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noise and shadow flicker, which it hopes to bring to market next year. The system includes a sensor, which is installed at a receptor such as a home, and a receiver installed in a wind turbine. The sensor will automatically sense wind turbine noise or shadow flicker or both at the receptor and send a signal to the turbine. Using patent-pending software to interpret data from photo-sensors and microphones on the sensor, the device can be programmed to shut down or start up the turbine based on the signals. This system, which still needs to be tested in the field, could be a solution for wind energy installations that have struggled with operations as a result of noise and shadow flicker complaints.

Solar projects have fared much better than wind projects in Massachusetts. According to MassCEC, Massachusetts now has 347 megawatts of solar energy in place, far exceeding by time and number the Administration's goal of 250 megawatts of solar power installed by 2017.

There are a number of financial incentives for solar projects, such as eligibility for a separate category of renewable energy credits. The Commonwealth Solar II program, administered by MassCEC, provides rebates for homeowners and businesses in Massachusetts who install solar photovoltaics (PV).

Closed landfills and "brownfield" sites have been touted as ideal locations for solar PV installations. MassDEP and the U.S. Environmental Protection Agency each created guidelines for solar projects on potentially contaminated lands and landfills. As part of its RE-Powering America's Land initiative, US EPA created Best Practices for Siting Solar Photovoltaics on Municipal Solid Waste Landfills and has an on-line mapping and screening tool to locate potential project sites.

Solar and wind energy will likely continue to play a part in the Commonwealth's renewable energy portfolio, but it is unlikely the goal for wind energy will be reached. To achieve 2,000 megawatts of wind energy by 2020 the Commonwealth needs more than 1,800 additional megawatts installed in the next six years. The Cape Wind project, the offshore wind farm to be located in Nantucket Sound, is expected to generate 420 megawatts of power. Even with Cape Wind in place, the Commonwealth would need more than 150 1.5 megawatt wind turbines installed to achieve the Administration's goal. As long as the state has a renewable energy goal that includes wind, state and local officials will need to address the concerns of citizens concerning wind energy while providing a regulatory framework for developers that makes projects viable.

Environmental Law Update

Regulatory Takings

In *Koontz v. St. John's Water Management District*, the U.S. Supreme Court expanded the circumstances under which a land owner or developer may bring a regulatory takings claim. Historically, a takings claim did not lie where the governmental agency denied a permit or approval. The Court ruled that the "principles that undergird our decisions in *Nollan* and *Dolan* do not change depending on whether the government approves a permit on the condition that the applicant turn over property or denies a permit because the applicant refuses to do so."

Solar Renewable Energy Credits

In August 2013, reportedly due to an unanticipated over-supply of Massachusetts solar renewable energy credits ("SRECs") in the 2012 Solar Credit Clearinghouse Auction, the Department of Energy Resources purchased the excess credits and has proposed regulations substantially increasing the compliance obligation of Massachusetts Retail Electric Suppliers to deliver solar photovoltaic power in the so-called SREC 2 program.

Non-Hazardous Secondary Materials Used as Fuel

In February 2013, the EPA issued amendments to its March 2011 Non-Hazardous Secondary Material Rule under which it distinguishes between combustion of secondary materials as a solid waste (and therefore the burner is an "incinerator") or a legitimate fuel (and the burner is not an "incinerator"). The EPA has posted several "clarification" letters at http://www.epa.gov/epawaste/nonhaz/define/index.htm that demonstrate that the agency is not taking an overly strict interpretation of the rule.

Organics Disposal Ban

The MassDEP has proposed a ban, effective July 1, 2014, on disposal of food waste and other organic materials by large generators (currently those who generate more than one ton per week). This proposed ban is designed to support the development of source separated organics processing capacity such as composting and anaerobic digestion facilities, which were the subject of the MassDEP's November 2012 amendments to its solid waste regulations for such facilities.

Solid Waste Regulatory Reform

The MassDEP has proposed regulatory reform amendments to its solid waste management facility regulations at 310 CMR 19.000 designed to streamline aspects of the regulations and to reduce the agency's costs of oversight of solid waste facilities. Included in the proposed rule are streamlined permitting for certain small solid waste transfer stations and a new mandatory third-party inspection program for permitted solid waste facilities.

Brownfields Tax Credit Program

The Massachusetts Legislature extended the Brownfields Tax Credit for another five years. The program, initially passed in 1998, incentivizes commercial redevelopment in economically distressed areas by providing a rebate on environmental cleanups to Eligible Persons who did not cause the contamination. The extension means cleanups must begin by August 5, 2018 and be completed by January 1, 2019 to be eligible for the tax credit.

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Insights & Updates

Firm Successes

Mackie Shea O'Brien, PC received a first-tier ranking in the fourth edition of the U.S. News - Best Lawyers "Best Law Firms" publication. The firm was ranked Tier 1 for both Environmental Law and Environmental Litigation in the Boston metropolitan area for 2014. The firm also received national rankings of Tier 1 for Environmental Litigation and Tier 2 for Environmental Law. In addition, **Tom Mackie, John Shea,** and **Michelle O'Brien** each has been listed in Best Lawyers 2014 for expertise in environmental law and environmental litigation.

MSO succeeded in the following matters since Spring 2013:

- Obtained a $200,000 settlement payment for a homeowner who incurred remediation and restoration expenses and was sued by a tenant as a result of a fuel oil company's release of heating oil into the basement;
- Obtained an equitable allocation of $1 million in clean-up costs for a general contractor in a multi-party two-day mediation on claims concerning improper disposal of asbestos contaminated soil;
- Resolved alleged violations of the Massachusetts Contingency Plan for a fuel oil release on a commercial property acquired as an estate gift in a Consent Judgment with MassDEP and the Office of the Attorney General;
- Resolved claims against a service station owner for alleged violations of the vehicle emission inspection and hazardous waste management regulations in an Administrative Consent Order with MassDEP and the Registry of Motor Vehicles; and
- In a case of first impression obtained a final order transferring from the Springfield Housing Court to the Land Court in Boston zoning challenges against our client's $150 million biomass power plant.