

Patrick, DeLeo, Petruccelli Hail Wind Turbines on Deer Island as 'Leading By Example'

Two turbines will be visible symbol of Commonwealth's commitment to clean energy, with state agencies taking lead

BOSTON - Tuesday, August 11, 2009 - Governor Deval Patrick, joined by House Speaker Robert DeLeo and Senator Anthony Petruccelli, today celebrated the installation, now underway, of two large wind turbines on the grounds of the Massachusetts Water Resources Authority's Deer Island wastewater treatment facility as a symbol of Massachusetts' commitment to clean energy.

"From today forward, passengers arriving at Logan Airport from all over the world will fly in and see the two turbines being installed today powering the cleanup of Boston Harbor," said Governor Patrick. "The message to all who see these turbines is clear: The Commonwealth is committed to taking a leadership role on clean energy, beginning with our own state government facilities."

On April 18, 2007, Governor Patrick issued Executive Order 484, "Leading By Example - Clean Energy and Efficient Buildings." That Executive Order sets ambitious standards for reduction of energy use and greenhouse gas emissions by state agencies, as well as increased use of renewable power - 15 percent of state government energy use by 2015, 30 percent by 2020. A year later, Governor Patrick came to Deer Island to cut the ribbon on a 100-kilowatt solar panel installation, and to announce the two wind turbines being erected today, along with other progress in the Leading By Example program.

Standing 190 feet tall and with capacity of 660 kilowatts each, for a total of 1.2 megawatts, the two Deer Island wind turbines will generate over 2 million kilowatt-hours of electricity per year. All of that electricity will be consumed on-site, displacing electricity that would be purchased from the grid and saving the authority an estimated \$250,000 per year. MWRA plans to install three more wind turbines at the facility, with the Federal Aviation Administration agreeing to allow the turbines to be installed one at a time, after 30 days of operation with no negative impact on aviation for each additional turbine.

"These turbines represent our Commonwealth's commitment to green energy as well our dedication to an innovative, creative economy. I am proud that these turbines will result in savings of \$250,000 per year for MWRA ratepayers, including those in Winthrop and Revere," said Speaker DeLeo.

"Wind is a powerful renewable energy resource for our Commonwealth, and I am proud to see it put to work at Deer Island," said Senator Anthony Petruccelli. "Clean energy is our future, for jobs and energy independence, and that future begins now."

Currently, Deer Island gets 23 percent of its energy from on-site renewable resources, including a steam turbine fueled by methane gas recaptured during the wastewater treatment process, hydroelectric power generated by treated water flowing through the outfall tunnel, and solar panels. The two wind turbines installed today will bring Deer Island to 26 percent self-generated renewable energy.

In addition to the wind turbines, MWRA is receiving federal stimulus funding for an additional 180 kW solar installation on Deer Island. This \$1.2 million design/build project is one of several projects for MWRA under American Recovery and Reinvestment Act (ARRA) funding for drinking water and wastewater treatment facilities, which requires for the first time investment in "green infrastructure" projects that make these facilities more energy efficient and driven by renewable power. Other projects include a wind turbine at a local pump station and several large solar installations at other MWRA facilities.

"Water treatment facilities are very energy intensive, and the Deer Island plant is one of the largest energy users in New England," said Energy and Environmental Affairs Secretary Ian Bowles, who serves as chairman of the MWRA Board. "Massachusetts was the first state to identify the opportunity to save money and make these facilities greener with the use of renewable energy, and federal stimulus funds will allow us to take advantage of that opportunity, here and across the state."

"Every kilowatt we generate on-site reduces the cost of purchased electricity, and that's good news for our ratepayers," said MWRA executive director Frederick A. Laskey.

Since Governor Patrick's appearance at Deer Island last year to update the Leading By Example Program, contracts for close to 750 kW of solar power for state facilities have been awarded, and construction is under way at nine sites. The Massachusetts Maritime Academy, which has an impressive wind turbine of its own, has installed solar power as part of a dormitory expansion project. The Department of Environmental Protection will have a 100 kW solar power system at its state-of-the-art environmental laboratory in Lawrence.

Additionally, applications were submitted last week for Clean Renewable Energy Bonds (CREB) low interest funding, authorized by ARRA, for 4.5 MW of solar at over 50 state sites, and projects at state facilities totaling 10+ MW have been identified for a large solar procurement taking place this fall under ARRA State Energy Program funding.

Other wind projects at state agencies are now approaching completion. The contract has been awarded for a wind turbine similar to this one at Cape Cod Community College, to be installed this fall, and another one is out to bid for the Blandford Rest Area on the Massachusetts Turnpike. Other large-scale wind turbines are planned for the state prison in Gardner and at Mt. Wachusett Community College. Feasibility studies are under way at several more state locations.

Governor Patrick has set ambitious goals for the deployment of renewable energy in Massachusetts - 250 MW of solar power by 2017, and 2,000 MW of wind energy by 2020 - creating vital new clean energy jobs along the way. The solar goal was set in conjunction with Evergreen Solar's decision to build its first full-scale U.S. manufacturing facility here in Massachusetts, creating more than 600 new jobs. The Commonwealth Solar program launched in January 2008 to help businesses and homeowners install solar power has been a huge success, awarding rebates for 860 projects totaling 11 MW of generating capacity. In addition, the number of firms involved in solar installation has quadrupled, from around 50 when Commonwealth Solar began to 193 today.

The wind turbines at Deer Island represent the 15th and 16th large (more than 100 kW) turbines installed in the state to date, and bring the total wind generating capacity to roughly 9 MW. Besides the aggressive development of wind power on state facilities, the Patrick-Murray Administration is exploring the potential for wind energy on state-owned lands, through a process that carefully balances public interests in conservation and in clean energy. A bill pending in the Legislature would establish statewide standards for wind siting on private lands that would protect natural resources and residential neighborhoods from negative impacts but also give wind developers the timeliness and predictability in siting they need to invest in clean energy projects.

The draft ocean plan released for public comment last month has identified two Wind Energy Areas in state waters that could support up to 600 MW of wind power - nearly one-third of the Governor's wind energy goal for 2020. And in May, US Energy Secretary Steven Chu came awarded Massachusetts \$25 million to build a Wind Technology Testing Center, where the next generation of wind turbine blades - up to 90 meters in length - will be put through rigorous testing. This facility, which begins construction this fall, will make Massachusetts a hub of research-and-development for the fastest-growing energy resource in the world.