

DIRECTION

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INDUSTRY AT LARGE

WIND ENERGY POISED TO LEAD THE WAY IN CARBON REDUCTION

The first week in June was a busy one in the renewable energy world, and perhaps even more so among the media that covers energy and policy. That was when the U.S. Environmental Protection Agency (EPA) released its first-ever proposed rule limiting carbon pollution from existing power plants.

In short, the release of the proposed rule was good news for wind energy because the resource is well-positioned to be a leading solution to cutting carbon.

ALREADY MAKING AN IMPACT

Having dramatically cut the cost of its product (i.e., clean energy), the wind energy industry is already helping every state make progress in cutting their carbon emissions. Already, 11 states have achieved emission reductions of 10 percent or more because of wind and another three states are just below 10 percent.

Just prior to the release of the proposed EPA rule, AWEA released a white paper showing wind energy already helps nearly every state make progress toward carbon reductions and is an affordable and reliable compliance option for further reductions. The white paper found that the 167.7 million megawatt-hours of wind energy produced in the U.S. in 2013 reduced CO₂ emissions by 126.8 million tons, the equivalent of reducing power sector emissions by more than 5 percent, or taking 20 million cars off the road.

Achieving 20 percent wind energy, a benchmark outlined in the U.S. Department of Energy's

impending Wind Vision document and in a prior 2008 DOE report, would yield emission reductions of 25 percent.

Wind energy can help states make even more significant reductions, in accordance with the proposed rule — and it can do that while saving consumers money and driving local economic development in the process.

Over the last few years, wind energy has experienced record growth and a major reduction in costs. Wind energy has driven up to \$25 billion in private investment in a single year, while the reductions in carbon dioxide emissions and deployed megawatts are rapidly heading upwards.

The cost of wind energy has dropped 43 percent in four years, thanks partly to 560 factories making wind energy components across 44 states. Utilities and other power providers have increasingly been signing contracts for wind energy because they can get long-term, fixed-price deals that help hedge their portfolio against the price volatility of fuel-based sources.

ADOPT AND ADAPT

Thus, American wind power is well positioned to be at the center of efforts to achieve the benchmarks under the proposed EPA rule.

“We hope that this rule makes clear that we have a chance right now to make long-term decisions to lock in affordable power with clean, renewable energy for decades to come,” said Paul Gaynor, CEO of wind energy company First Wind. “Renewable power



By Carl Levesque
American Wind Energy Association

isn't only clean, it's competitively priced. Our customers are already saving millions of dollars by buying wind and solar electricity, and stand to save millions in the years to come. Renewable energy isn't subject to the price fluctuation that fossil-fuel power is, meaning that the cost savings will last for years to come.”

Notably, stakeholders from various segments of the energy industry are showing openness to the proposed rule. Duke Energy CEO Jim Rogers offered an almost shrugging can-do analysis of the EPA proposal. “I think we'll find a way to adopt and adapt to the EPA regulations,” he said, speaking at the Annual Conference for Energy Storage in Washington, D.C.

Rogers also expressed concern over rushing to natural gas as the sole solution to meeting the carbon targets set by the new EPA rule. “The gas industry has a history of volatility,” noted Rogers, urging utilities to diversify their resource mix with such options as renewables.

As many utilities across the country know, renewable energy sources like wind power act as a hedge against fossil-fuel price volatility, insulating customers from spikes on their power bill during supply squeezes. In three separate cases during the winter months, wind stepped in to stabilize prices and fill in supply gaps when the cold drove electric demand skyward.

“As one of the biggest, fastest, and cheapest ways to reduce carbon pollution, wind energy can play a central role in state plans to achieve the reduction targets appropriately set by the EPA,” said AWEA CEO Tom Kiernan, responding to the release of the proposed rule. “Reducing carbon pollution through the deployment of wind energy can be done in a manner that keeps electricity affordable and reliable, creates jobs, and supports local economic development.”

HEADLINES

GE submits revised bid for Alstom

GE announced it has revised its bid for the acquisition of French energy and transportation powerhouse Alstom. Under the revision, GE proposes “alliances” between the two companies, while maintaining a degree of autonomy.

Among the partnerships GE proposes is a 50/50 joint venture involving Alstom’s wind and hydroelectric renewable energy assets. In a similar joint venture, the two companies would combine their electrical grid assets.

Additional aspects of the proposal included a global nuclear and French steam alliance, strengthening Alstom’s transportation segment, and an emphasis on job creation in France.

The bid revision was announced three days after Siemens and Mitsubishi Heavy Industries submitted a similar joint counter-bid. GE’s original bid was rejected by French government officials concerned with French jobs.

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U.S. OFFSHORE WIND DEVELOPMENT AREA DOUBLES

Department of the Interior opens 742,000-acre zone off the coast of Massachusetts for commercial wind energy projects

As part of the Obama administration's Climate Action Plan, Secretary of the Interior Sally Jewell and Bureau of Ocean Energy Management (BOEM) Acting Director Walter Cruickshank today joined Massachusetts Governor Deval Patrick to announce more than 742,000 acres offshore Massachusetts will be available for commercial wind energy leasing. The proposed area is the largest in federal waters and will nearly double the federal offshore acreage available for commercial-scale wind energy projects.

The Massachusetts Wind Energy Area is located approximately 12 miles offshore Massachusetts – from its northern boundary, the area extends 33 nautical miles southward and has an east/west extent of approximately 47 nautical miles. BOEM proposes to auction the Wind Energy Area as four leases.

“Massachusetts is leading the way toward building a clean and sustainable energy future that creates jobs, cuts carbon pollution and develops domestic clean energy resources,” Jewell said. “Thanks to Governor Patrick’s vision and leadership, the competitive lease sale in Massachusetts will reflect the extensive and productive input from a number of important stakeholders. This includes interests such as commercial fishing, shipping, cultural, historical, environmental, and local communities to minimize conflicts and bring clarity and certainty to potential wind energy developers.”

“Today’s announcement is a momentous occasion and the culmination of years of cooperation and hard work between the Commonwealth and federal officials,” Patrick said. “Through our invest-

ments and proactive planning, Massachusetts is poised to lead the charge in offshore wind energy development, with the economic and environmental benefits that come with it.”

The announcement builds on Interior’s work to stand up a sustainable offshore wind program through its wind energy initiative for the Atlantic Coast. To date, BOEM has awarded five commercial wind energy leases off the Atlantic coast: two non-competitive leases (Cape Wind in Nantucket Sound off Massachusetts and an area off Delaware) and three competitive leases (two offshore Massachusetts-Rhode Island and another offshore Virginia). To date, competitive lease sales have generated about \$5.4 million in high bids for about 277,550 acres in federal waters. BOEM is expected to hold additional competitive auctions for Wind Energy Areas offshore Maryland and New Jersey later this year.

“The Commonwealth of Massachusetts has been working hand in hand with BOEM to foster responsible commercial wind development in federal waters off Massachusetts,” said BOEM Acting Director Cruickshank. “Members of the Massachusetts Renewable Energy Task Force have been great partners in our planning process for the Wind Energy Area and the Proposed Sale Notice.”

To help inform BOEM’s decision-making, the Commonwealth established two working groups, a Fisheries Working Group on Offshore Renewable Energy to discuss issues and compatibility between commercial fishing activities and offshore commercial wind energy development, and a Habitat Working Group on Offshore Renewable Energy to discuss available ecosys-

tem data and information within the area under consideration in order to identify any gaps.

The Commonwealth has additionally collected and presented spatial information and data for the Wind Energy Area regarding marine mammals, birds, ocean floor, geology, commercial ship traffic, and recreational boating to inform BOEM’s offshore wind planning process. In addition to BOEM’s stakeholder outreach, the Commonwealth has conducted dozens of public meetings and stakeholder sessions to discuss the Federal offshore wind leasing process.

Since taking office in 2007, Governor Patrick’s Administration has worked to position Massachusetts as a hub for the emerging U.S. offshore wind industry. These efforts also include the construction of the Marine Commerce Terminal in New Bedford, the first facility in the nation designed to support the construction, assembly, and deployment of offshore wind projects.

The Proposed Sale Notice announced today triggers a 60-day public comment period ending on August 18, 2014. Comments received or postmarked by that date will be made available to the public and considered before the publication of the Final Sale Notice, which will announce the time and date of the lease sale.

The end of the comment period also serves as the deadline for any participating companies to submit their qualification packages. To be eligible to participate in the lease sale, each bidder must have been notified by BOEM that it is legally, technically and financially qualified by the time the Final Sale Notice is published. For

more information on qualification requirements, please see The Proposed Sale Notice. Companies planning to submit a qualification package are strongly encouraged to submit as early as possible during the comment period to ensure adequate time for processing.

BOEM will host a public seminar during the comment period to describe the auction format, explain the auction rules, and demonstrate the auction process through meaningful examples. The time and place of the seminar will be announced by BOEM and related information will be published on BOEM's website.

In addition to the Proposed Sale Notice, BOEM is publishing in the Federal Register a Notice of the Availability (NOA) of a Revised Environmental Assessment and a Finding of No Significant Impact (FONSI). The FONSI states that BOEM has determined that no reasonably foreseeable significant impacts are expected to occur as a result of issuing wind energy leases and the approval of Site Assessment Plans in the Massachusetts Wind Energy Area. Before a decision regarding the construction of any proposed wind power facility, BOEM will conduct a comprehensive site-specific National Environmental Policy Act review, which will include additional opportunities for public comment. ✎

— Source: U.S. Department of the Interior.

HEADLINES

ScottishPower and Vattenfall receive planning consent for 1.2 GW UK offshore project

East Anglia One Offshore Wind, a joint venture between ScottishPower Renewables and Vattenfall, has received consent from the Department for Energy & Climate Change for a 1200 MW offshore wind farm off the coast of East Anglia, the largest renewable energy project ever to receive planning consent in England and Wales.

The East Anglia ONE project is also the first in England and Wales to be approved from the Crown Estate's Round Three Process.

The planned development is for up to 240 wind turbines to be installed across an area of 300km² in the southern North Sea. The project could power the annual electricity demands of around 820,000 homes.

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SAFETY IS OUR PRIORITY

ENERGY DEPARTMENT PARTNERS WITH ADVOCACY GROUPS TO CREATE SIX REGIONAL WIND ENERGY INFORMATION HUBS

In order to provide the highest quality information to support decision-making regarding wind energy, the Energy Department in June launched a collaborative partnership between its new WINDEXchange initiative and six supporting Regional Resource Centers.

The new WINDEXchange initiative and website will serve as a digital portal providing fact-based informational resources about the costs and benefits of wind power, technical assistance and guidance for simplifying the deployment process, and public access to educational resources. Upholding the Energy Department's commitment to making high-quality information available to advance clean energy technologies, WINDEXchange provides key resources and tools through its website such as: wind resource maps; e-newsletters published twice a month; webinars; podcasts; databases; economic development studies; fact sheets; the Wind for Schools Portal; and a Small Wind Guidebook.

Six new Regional Resource Centers (RRCs) will serve their regions as wind energy information centers, supporting WINDEXchange's efforts and working collaboratively with local organizations to engage diverse stakeholder groups. Their geographically-based focus will enable the RRCs to better understand and target

the specific priorities and challenges relevant to their regions. Leaders from the RRCs are meeting this week at the National Wind Technology Center in Colorado to kick off this year's engagement activities in each region and discuss the new WINDEXchange resources available to support their work.

The new RRCs include:

- Northwest Wind Resource and Action Center, operated by Renewable Northwest
- Four corners Wind Resource Center, operated by Utah Clean Energy in partnership with Interwest Energy Alliance and Northern Arizona University
- America's Islanded Grids Resource Center, operated by Renewable Energy Alaska Project and Island Institute
- Midwest Wind Resource Center, operated by Windustry
- Northeast Wind Resource Group, operated by Clean Energy Group and Sustainable Energy Advantage
- Southeast Wind Energy Resource Center, operated by Southeastern Coastal Wind Coalition.

— Source: U.S. Department of Energy

SILICON VALLEY POWER AND OKLAHOMA MUNICIPAL POWER AUTHORITY WIN 2014 PUBLIC POWER WIND AWARDS

The U.S. Department of Energy, together with the American Public Power Association (APPA), have recognized the Oklahoma Municipal Power Authority (OMPA) and Silicon Valley Power (SVP) of Santa Clara, California, as the winners of the 2014 Public Power Wind Awards.

The awards, presented at the APPA National Conference in Denver, Colorado, recognize publicly owned utilities that demonstrate outstanding leadership in advancing wind power in the U.S.

Silicon Valley Power received the award in the public power utility category for its 30-year, sustained commitment to acquiring, developing, and integrating wind energy in Santa Clara. The utility built a 20 MW wind farm that has provided

affordable power to Santa Clara customers for over 25 years. Silicon Valley Power provides its customers with renewable energy at the lowest average rate in the state of California, and maintains a 13.8 percent wind energy mix.

OMPA received the award for steadily building its renewable energy portfolio in an effort to support its members' green power initiatives. It was the first commercial power company to offer wind power to municipal customers in Oklahoma and, in 2011, OMPA purchased more than 49 MW of wind generating capacity, bringing their wind energy generation to 14 percent of their total annual power production.

— Source: U.S. Dept. of Energy



REPORT: GLOBAL INSTALLED WIND ENERGY CAPACITY TO MORE THAN DOUBLE BY 2020; CHINA TO BE A LEADER IN EXPANSION

Despite an overall slump in installations in 2013, the global cumulative wind power capacity will more than double from 319.6 GW at the end of 2013 to 678.5 GW by 2020, says research and consulting firm GlobalData.

The company's latest report states that China, the largest single wind power market responsible for 45 percent of total global annual capacity additions in 2013, is expected to have a cumulative wind capacity of 239.7 GW by 2020.

China overtook the U.S. as the leading market for installations in 2010, when it added a massive 18.9 GW of wind capacity.

"China doubled its cumulative wind capacity every year from 2006 to 2009 and has continued to grow significantly since then," said GlobalData alternative energy analyst Harshavardhan Reddy Nagatham. "Supportive government policies, such as an attractive concessional program and the availability of low-cost financing from banks, have been fundamental to China's success.

"While China will continue to be the largest global wind power market through to 2020, growth for the-

forecast period will be slow due to a large installation base."

The report also states that the U.S. will remain the second largest global wind power market in terms of cumulative installed capacity, increasing from 68.9 GW in 2014 to 104.1 GW in 2020. U.S. growth will largely be driven by renewable energy targets in several states, such as Alaska's aim to reach 50 percent renewable power generation and Texas' mandate to achieve 10 GW of renewable capacity, both by 2025.

Nagatham concludes: "The slump in 2013 was largely a product of a decrease in installations in the U.S. and Spain. While there are likely to be further slight falls in annual capacity additions in 2015 and 2016, overall industry growth will not be affected as global annual capacity additions are expected to exceed 60 GW by 2020."

The full report, "Wind Power, Update 2014 — Global Market Size, Average Price, Competitive Landscape, and Key Country Analysis to 2020" is available for purchase at store.globaldata.com.

— Source: GlobalData

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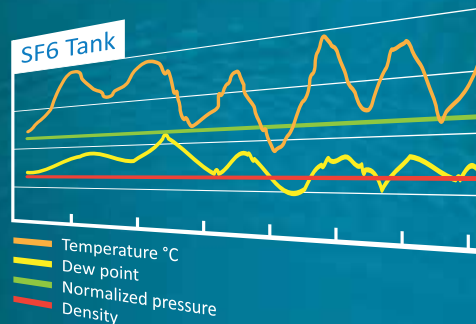
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