

DIRECTION

THE FUTURE OF WIND



ALLETE Clean Energy enters new segment after Seattle agreement

ALLETE Clean Energy has entered a new customer segment after signing a five-year power purchase agreement (PPA) to sell wind power to Seattle City Light, the company's first municipal customer.

Seattle City Light, among the top-10 largest municipal utilities in the nation with more than 493,000 customers in Seattle, will purchase power from ALLETE Clean Energy's 50-MW Condon wind site in northern Oregon. The PPA also includes an agreement to jointly explore adding solar energy and/or energy storage capacity at the Condon site.

"We're excited to provide affordable, renewable wind energy to Seattle City Light from our Condon wind site and proud to help Seattle City Light meet their sustainability goals as we advance the clean-energy future," said ALLETE Clean Energy President Nicole Johnson. "This agreement also furthers our strategy of leveraging our existing wind sites with potential for complementary renewable additions and gaining new contracts."

ALLETE Clean Energy completed a refurbishment project at the Condon wind site in 2019 to extend its operating life and requalify the site for federal production tax credits. The project included equipment and system upgrades necessary to maintain its high operating availability and clean-energy production performance.

"Seattle City Light prioritizes creating our energy future on behalf of and in partnership with our customers and the communities we serve," said Emeka Anyanwu, Energy Innovation & Resources Officer. "To meet reliability, affordability, and environmental responsiveness goals, we strive to leverage resources like the Condon project to expand our supply mix with renewable energy resources supporting our efforts to enable decarbonization through electrification of transportation, buildings, and industry. In doing so, we will help communities to shift

further away from fossil fuels, meeting the climate crisis head-on."

ALLETE Clean Energy also serves five Fortune 500 companies from its Diamond Spring and Caddo wind sites in Oklahoma and a number of large electric utilities from its other wind sites.

ALLETE Clean Energy owns, operates, and has delivered build-transfer projects totaling more than 1,500 MW of nameplate wind capacity across eight states. The company is well-positioned to drive additional clean-energy sector growth.

MORE INFO alletecleanenergy.com

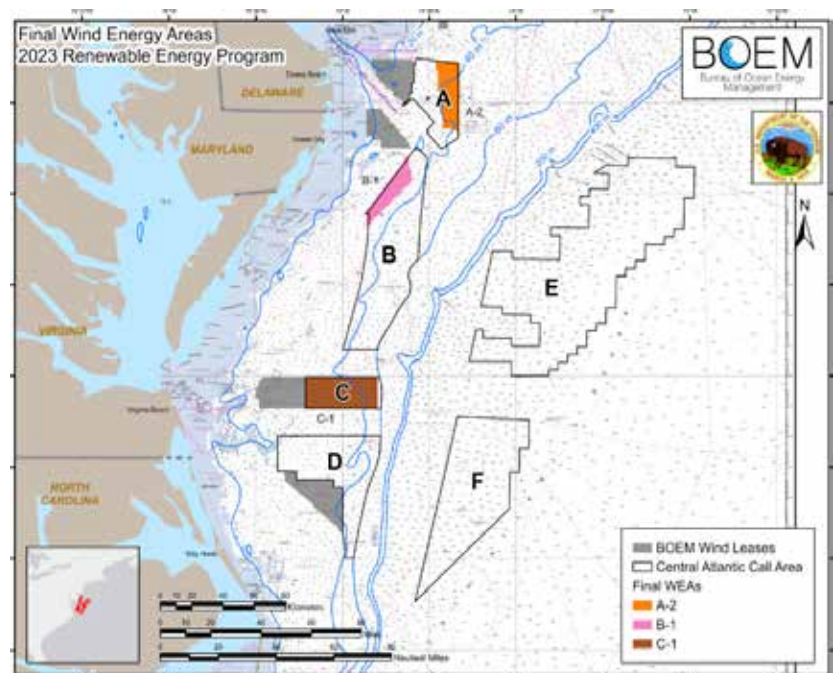
BOEM announces three final wind-energy areas

As part of the Biden-Harris administration's goal of deploying 30 GW of offshore wind energy capacity by 2030, the Bureau of Ocean Energy Manage-

ment (BOEM) recently announced three final wind energy areas (WEAs) offshore Delaware, Maryland, and Virginia, which were developed following extensive engagement and feedback from states, Tribes, local residents, ocean users, federal government partners, and other members of the public. If fully developed, the final WEAs could support between 4 and 8 GW of energy production.

The three WEAs total about 356,550 acres. The first WEA (A-2) is 101,767 acres and 26 nautical miles from Delaware Bay. The second WEA (B-1) is 78,285 acres and about 23.5 nautical miles offshore Ocean City, Maryland. The third WEA (C-1) is 176,506 acres and about 35 nautical miles from the mouth of the Chesapeake Bay, offshore Virginia. A map of the final WEAs can be found on BOEM's website.

"BOEM values a robust and transparent offshore wind planning process, which requires early and frequent engagement with Tribal governments, the Department of Defense, NASA,



The three WEAs total about 356,550 acres. (Courtesy: BOEM)



EverWind Fuels, a Canadian large-scale green hydrogen project, announced the purchase of three wind farm development projects. (Courtesy: EverWind Fuels)

other government agencies, and ocean users,” said BOEM Director Liz Klein. “We will continue to work closely with them, and all interested stakeholders, as we move forward with our environmental review.”

BOEM partnered with the National Oceanic and Atmospheric Administration’s National Centers for Coastal Ocean Science (NCCOS) to develop a comprehensive, ecosystem-based ocean planning model that assisted in the selection of the final WEAs.

This model leveraged best available data on natural resources, ocean industries such as fisheries and energy production, and areas of national security activities to identify areas with high wind-energy resource potential while reducing potential impacts to other ocean users and sensitive environmental resources.

This comprehensive approach not only provided valuable insights about

the seascape and uses of the ocean region, but also facilitated greater transparency and positive coordination with government partners and ocean stakeholders through direct engagement and incorporation of their feedback into the NCCOS model.

The final WEAs are in comparatively shallow water. BOEM may identify additional WEAs in deepwater areas offshore the U.S. Central Atlantic coast for future leasing once further study of those areas has been done.

MORE INFO www.boem.gov/renewable-energy/state-activities/central-atlantic

Wind capacity grows in Texas, Wyoming, and Iowa

Nationwide wind power capacity is projected to grow exponentially in the

coming years, with Texas, Wyoming, and Iowa leading the charge.

As renewable energy continues to command center-stage attention and massive financial investment, wind power has proven to be an indispensable tool in the clean energy toolbox.

With this in mind, Texas Real Estate Source, a Texas real estate, travel, and lifestyle website, analyzed installed and projected wind power capacity data in all 50 states and ranked them by total projected capacity, capacity per capita, and capacity per square mile. The study found that Texas, Wyoming, and Iowa lead the country in wind-power capacity.

Texas is the top wind-powered state in the country with 44,974 MW of projected wind-power capacity. This is more than triple the capacity of second place, Oklahoma, however, due to the large and ever-growing population.

Wyoming leads the nation in wind-power capacity per capita with 6,679 MW projected to serve a population of 581,381. Wyoming’s 6,679 MW ranks sixth in total projected capacity, but as the least-populated state in the nation, it vaults to No. 1 in projected wind-power capacity per capita at 0.011 MW.

Iowa has the most wind-power capacity per square mile. Iowa has a projected 13,444 MW of wind power across only 56,273 square miles of land, or 0.24 MW per square mile. To compare, Texas is third in the country, with 44,974 MW across a vast 268,596 square miles of land.

“It’s no surprise to see Texas significantly outpacing the nation in installed and projected wind power capacity,” a spokesperson from Texas Real Estate Source said. “The combination of boundless land, favorable wind patterns, and highly-respected research institutions has made it the perfect place for wind-power adoption. It’s revealing, however, to see the per capita and per square mile rankings. They give us a more complete picture of which states are at the forefront of wind power development.”

MORE INFO www.texasrealestatesource.com

EverWind Fuels buys three wind projects

EverWind Fuels, a Canadian large-scale green hydrogen project, recently announced the purchase of three wind-farm development projects: Windy Ridge, and in partnership with Membertou, Bear Lake, and Kmtnuk, together representing about 530 MW. The wind farms will represent a private investment in new, clean, renewable energy generation in Nova Scotia to power Phase 1 of EverWind's green hydrogen and ammonia project.

Highlights of the development include \$1 billion in private investment to deliver additional renewable energy to Nova Scotia; about 650 construction jobs and 30 full-time jobs; support for Nova Scotia's 80 percent renewables by 2030 standard; new generating capacity, and development of EverWind's green hydrogen and ammonia production facility.

"The global fight against climate change requires us to work together to get long-term investments in clean, renewable energy over the finish line," said Trent Vichie, CEO of EverWind. "This investment helps Nova Scotia move more quickly and cost-effectively toward its clean-energy transition. The power generated at these three new developments will also ensure EverWind's green hydrogen and ammonia will meet the strictest international standards for green fuels, including European RFNBO criteria. It is a win for our project, a win for the province and, ultimately, a win for the planet."

"Membertou is proud to partner with EverWind Fuels in the Bear Lake and Kmtnuk wind-farm developments," said Chief Terry Paul, Chief & CEO of Membertou. "As majority owner, Membertou will inform the development process, and along with our partners, we will work to progress the transition to green energy in Nova Scotia and the world. This development will provide a necessary source of energy, and will create economic benefits for the people of Membertou."

The wind farms will be developed and built in partnership with Renewable Energy Systems Ltd., which has been working with municipalities, corporations, First Nations, and government authorities in Canada since 2003, including extensive work in Nova Scotia.

"RES is excited to partner with EverWind to deliver these farm developments," said Peter Clibbon, Senior VP of Development for RES in Canada. "RES brings significant experience in wind-farm development, particularly in Nova Scotia. We are pleased with the advanced state of development for the wind farms and are excited to take these developments through to commercial operations."

Both wind projects are well advanced through the Nova Scotia Power interconnection process and are currently undergoing environmental assessment field investigations to allow for the commencement of a full EA process in fall of 2023."

The three new wind projects will increase the total amount of wind-generated electricity on Nova Scotia Power's grid and bring Nova Scotia Power closer to meeting the provincial mandate of 80 percent renewable energy sales by 2030.

Any green power in excess of EverWind's requirements can be made available to Nova Scotia Power for consumption by customers and provide benefits in terms of cost provided by the recently passed Canadian Government Investment Tax Credit for renewable generation. All power for EverWind's Phase 1 of production will be supplied from newly built renewable energy sources.

"Every wind project we consider building is conditional on ensuring that we do not remove a single watt slated for domestic residential, commercial, or industrial usage from Nova Scotia's grid," Vichie said. ↵

MORE INFO everwindfuels.com



DON'T BE LET DOWN BY AN ELEVATOR

Installation and preventative maintenance by IUEC elevator mechanics will keep your elevators moving SAFELY and more efficiently.

27,000 trained craftspersons using more than 119 training centers.

Contact Carisa Barrett at cbarrett@eiwfpf.org or 410-701-2206 or Vance Ayres at vayres@iuec.org or 540-490-0476

We represent more than 450 elevator companies ready to serve your Elevator Lift needs

