



The Offshore Wind Round-Up

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PLEASE NOTE

Publication of the Offshore Wind Round Up pauses in March and resumes in April

BIDDING BEGINS SOON FOR NEW JERSEY'S FOURTH OFFSHORE WIND FARM

■ **Originally scheduled to begin during the third quarter of this year**, solicitation for New Jersey's fourth offshore wind farm has been moved up to sometime in the first quarter of 2024. The project is expected to be awarded in early 2025.

A report was published December 8, 2023 by offshoreWIND.biz under the headline "New Jersey Accelerates Schedule for Fourth Offshore Wind Solicitation." The link to that report is on the next page.

■ ***Refresh my memory, please, about the other three solicitations.***

From the same December 8th reporting:

"So far, New Jersey held three auctions for offshore wind projects.

In 2019, the Garden State awarded the largest single offshore wind project in the country to Ørsted's 1.1 GW Ocean Wind project which the developer canceled due to additional supplier delays impacting the project schedule.

In 2021, the second solicitation resulted in the largest combined award of 2.6 GW of offshore wind capacity to EDF/Shell's Atlantic Shores Offshore Wind¹ and Ørsted's Ocean Wind II projects.

The third offshore wind solicitation was launched in March this year [2023] and it attracted proposals from companies such as RWE and National Grid, Shell New Energies and EDF Renewables North America and Invenergy and energyRE. The winners are planned to be announced by the end of the year."

As of the publication of this Round-Up, the announcement has not been made.

Access the full December 8th report by clicking on this link

<https://www.offshorewind.biz/2023/12/08/new-jersey-accelerates-schedule-for-fourth-offshore-wind-solicitation/>

■ ***First, Atlantic Shores was awarded a leased area off LBI for an offshore wind project. Then in early 2022, it was awarded an additional lease for a wind project area farther out in the ocean. Has Atlantic Shores been awarded yet another area beyond those two?***

Answer: No, not at this time.

The confusion about how many areas Atlantic Shores is actually developing may stem from the fact that after the first leased area off LBI was secured, that development area was **divided into two parts** and each part was assigned a different federal identification number. It is still the original 183,353 acres, but it is now officially considered two projects.

Accordingly, **three areas are in play** at this time. Information published in an article August 7, 2023 by offshoreWIND.biz clarifies:

"The lease block OCS-A 0499 off New Jersey, which was first secured by US Wind in 2015/2016 and acquired by EDF Renewables Development in 2018, was split into two areas in 2021.

The southern part of the block contains the 1,510 MW [megawatts] Atlantic Shores Offshore Wind Project 1 and the 1,327 MW Atlantic Shores Offshore Wind Project 2, while the northern part of the block was given a new lease number, OCS-A 0549.

Aside from the two lease areas, the joint venture also holds lease rights for OCS-A 0541, which it won in [2022's] New York Bight auction."

¹ Atlantic Shores Offshore Wind is a 50/50 joint venture between Shell New Energies US and EDF-RE Offshore Development.

Click [HERE](#) to **access a map** that shows the location of OCS-A0541 in the NY Bight (after you click, scroll down to the map and find the area in green). On the map, the gray area to the west of the green area is Atlantic Shores Offshore Wind.

■ **Speaking of OCS-A0549 . . .** During the third offshore wind solicitation in March 2023, Atlantic Shores submitted a proposal to the New Jersey Bureau of Public Utilities (“NJBPU”) for an award of megawatt hours that the BPU would be willing to buy from Atlantic Shores Offshore Wind Project 2.

The NJBPU decides how much power it is willing to purchase from the wind farm and makes the award to the offshore wind project developer accordingly. Technically, the NJBPU awards offshore wind renewable energy certificates (“ORECs”) but the end result is the same, i.e., the NJBPU buys power from the wind farm for New Jersey residents’ use.

As a point of reference, there is a contract for the purchase of ORECs already in place for the 1,510-megawatt Atlantic Shores Offshore Wind Project 1, the southern portion of the 183,353 acres of lease area off LBI.

The reporting below, published by offshoreWIND.biz on August 7, 2023 with the headline “Shell-EDF Joint Venture Submits Bid in New Jersey’s Third Offshore Wind Solicitation,” provides information about the submitted bid.

Access the full report by clicking on this link

<https://www.offshorewind.biz/2023/08/07/shell-edf-joint-venture-submits-bid-in-new-jerseys-third-offshore-wind-solicitation/>



OFFSHORE WIND FARM EMPIRE WIND 2 HAS BEEN CANCELLED

■ **Where is it?** 15-30 miles southeast of Long Island with a capacity to generate 1,260 megawatts of power. The project’s two phases, Empire Wind 1 and 2, have a combined potential capacity of more than 2 gigawatts of power.

■ **What happened?** Equinor and BP announced that they have terminated their agreement to sell power to New York from their proposed Empire Wind 2 offshore wind farm, a 50/50 joint venture between the two companies.

■ **Why?** “Commercial conditions driven by inflation, interest rates and supply chains disruptions,” according to the press release from Empire Winds.

Access the full press release on the Empire Winds website by clicking on this link

<https://www.empirewind.com/2024/01/03/empire-wind-2-offshore-wind-project-announces-reset-seeks-new-offtake-opportunities/>

■ **What is going on with Empire Wind 1?** From a January 3 article published by Reuters: “The power sale agreement for the 816-MW Empire Wind 1 remains in place,” according to an Equinor spokesperson.

Access the full January 3 Reuters article by clicking on this link

<https://www.reuters.com/business/energy/equinor-bp-cancel-contract-sell-offshore-wind-power-new-york-2024-01-03/>



GOVERNMENT SUBSIDIES FOR ELECTRIC POWER PRODUCTION

Much has been written about **government tax credits and other financial incentives** for offshore wind farms. Less has been in the news about these types of subsidies for other sources of electrical power, such as the fossil fuel, natural gas and nuclear.

All commercial providers of electrical power receive government subsidies. Below is information about the subsidies available from the federal government for each industry.

■ **WIND** Federal legislation has created opportunities for tax credits and other financial incentives. WINDEXchange, part of the Wind Energy Technologies Office at the U.S. Department of Energy,² mentions the following on its website:

- Production Tax Credits & Investment Tax Credits (in the 1992 Energy Policy Act & extended by the 2022 Inflation Reduction Act)
- The American Recovery & Reinvestment Act (2009)
- Modified-Accelerated Cost Recovery System (1986)
- Economic Stimulus Act (2008)
- American Taxpayer Relief Act (2012)

Access the Financial Incentives tab on the website by clicking on this link

<https://windexchange.energy.gov/projects/incentives>

² *From the website of windexchange.energy.gov: “The WINDEXchange team is supported by experts from several of the U.S. Department of Energy’s national laboratories. . . . They specialize in utility-scale wind, distributed wind, offshore wind, wind resource assessment, wind and wildlife, the wind industry workforce, and more.”*

■ **OIL, COAL & NATURAL GAS** Tax breaks to the United States oil & gas industry began in 1916. A chronology through 2013 published in early 2014 by *Mother Jones*³ can be accessed by clicking on the link below.

<https://www.motherjones.com/politics/2014/04/oil-subsidies-energy-timeline/>

- *From Reuters*⁴ November 23, 2023:
 - “U.S. fossil fuel subsidies stretch across the U.S. tax code, which makes detailing their costs complex.”
 - The IMF⁵ estimates China’s total fossil fuel subsidies in 2022 at \$2.2 trillion. Globally, only China spent more on these types subsidies than the United States did in the same year.

Access the full Reuters article by clicking on this link

<https://www.reuters.com/business/environment/global-fossil-fuel-subsidies-rise-despite-calls-phase-out-2023-11-23/>

- *From the IMF Blog*⁶ website August 24, 2023: The total U.S. subsidies in 2022 were \$757 billion — \$518 billion for oil, \$128 billion for coal and \$111 billion for natural gas.

³ *From Mother Jones website*: “Founded in 1976, *Mother Jones* is America’s longest-established investigative news organization. We are based in San Francisco and have bureaus in Washington, DC, and New York. . . . We are independent (no corporate owners) and are accountable only to you, our readers. Our mission is to deliver hard-hitting reporting that inspires change and combats ‘alternative facts.’” In 2017 *Mother Jones* won the Magazine of the Year Award from the American Society of Magazine Editors.

⁴ *From the Reuters website*: “Reuters, the news and media division of Thomson Reuters, is the world’s largest multimedia news provider, reaching billions of people worldwide every day. Reuters provides business, financial, national and international news to professionals via desktop terminals, the world’s media organizations, industry events and directly to consumers.”

⁵ IMF = International Monetary Fund. *From the IMF website*: “The IMF is a global organization that works to achieve sustainable growth and prosperity for all of its 190 member countries. It does so by supporting economic policies that promote financial stability and monetary cooperation, which are essential to increase productivity, job creation, and economic well-being.” <https://www.imf.org/en/About>

⁶ *From the IMF Blog website*: “IMFBlog is a forum for the views of the International Monetary Fund (IMF) staff and officials on pressing economic and policy issues of the day.”

■ On December 6, 2023, the results of a study done by two researchers in Rutgers University’s Center for Ocean Observing Leadership (“RUCOOL”) were published. The study focused on ocean water quality along the New Jersey coast during the late summer.

In the report titled “Rutgers Scientists Observe Unusual Ocean Conditions Possibly Linked to Mortality in Marine Life Off New Jersey,” researchers state that during the study, low dissolved oxygen and pH were observed in the ocean waters at various levels:

- Specifically, the levels ranged from **less than 3 - 5 mg/liter** and **less than 7.75** for dissolved oxygen and pH, respectively
- Normal, more optimal levels in seawater typically include dissolved oxygen concentrations **greater than 7 mg/liter** and a pH of 8.1.
- In addition, aragonite saturation states would be ideally **greater than 3**. The study reported aragonite saturation state was calculated to be **less than 1** in several locations. The bullet point below explains aragonite saturation state.

■ **What is aragonite saturation state and why is it important?**

From the website of the National Oceanic & Atmospheric Administration (“NOAA”):

- “Organisms such as corals, clams, oysters, and some plankton use carbonate ions to create their shells and skeletons.
- Aragonite saturation state is commonly used to track ocean acidification because it is a measure of carbonate ion concentration.
- When aragonite saturation state falls below 3, these organisms [mentioned above] become stressed, and when saturation state is less than 1, shells and other aragonite structures begin to dissolve.

Access information about ocean acidification and saturation state on the NOAA website by clicking on this link

<https://sos.noaa.gov/catalog/datasets/ocean-acidification-saturation-state/>

■ **Why are the study’s findings about low dissolved oxygen and pH concerning?**

From the study:

- “Although [dissolved oxygen] concentrations between 3-5 mg/liter may not be low enough to directly cause death in many marine animals, research focused on New Jersey species has identified other negative impacts such as reduced metabolism, feeding, growth, and reproduction at these levels. . . . concentrations of dissolved oxygen [below 3 mg/liter] have been directly associated with mortalities in some organisms in New Jersey and in other coastal regions around the world.
- Increased carbon dioxide in seawater leads to a series of chemical reactions that increases the acidity of the ocean . . . and reduces carbonate ions that are vital to the

production of shells and other protective structures of marine animals (made of calcium carbonate, such as aragonite).

As such, aragonite saturation state is used as an indicator of ocean acidification because as the ocean absorbs atmospheric carbon dioxide, both pH and aragonite saturation state decrease, and can lead to reduced survival, calcification rates, growth, and reproduction in marine animals.

- Any one stressor may not itself be an issue due to the resiliency of many coastal species to fluctuating natural environmental conditions. However, when more than one stressor occurs simultaneously, an organism may become unable to fully withstand changes.”

Access the full RUCOOL report by clicking on this link

<https://rucool.marine.rutgers.edu/rutgers-scientists-observe-unusual-ocean-conditions-possibly-linked-to-mortality-in-marine-life-off-new-jersey/>



UPDATE ON LAWSUIT FILED DECEMBER 2023 REGARDING ATLANTIC SHORES

■ On December 14, 2023, *the Asbury Park Press* reported that Ventnor City and Brigantine had joined the six LBI towns in filing a lawsuit in Mercer County’s Superior Court earlier that month. The lawsuit was filed in an effort to secure an independent review of the Atlantic Shores project and accuses the NJ Department of Environmental Protection of failing to be impartial when considering this project.

Access the full December 14th article by clicking on this link

<https://www.app.com/story/news/local/land-environment/2023/12/14/nj-offshore-wind-projects-dep-lawsuit/71893711007/>

■ Subsequent research through January 5 did not yield any additional updates.



This Offshore Wind Farm Round-Up was prepared by a group of writers and researchers from Long Beach Island, New Jersey.

Round-Ups endeavor to periodically provide a review of recent research efforts in which the effects of offshore wind farms have been studied. In addition, they occasionally offer factual, clarifying information, in response to readers’ suggestions and questions.

Research included in Round-Ups points you in the direction of the science and assumes no point of view one way or the other about the presence of offshore wind farms off our coast. Likewise,

clarifications are provided without editorial comment; they are there for you to consider so you can draw your own conclusions.

Questions about the content of Round-Ups and suggestions for future topics can be directed to RoundUpLBI@gmail.com. The Round-Up research and writing team welcomes questions and comments.

Round-Ups are distributed to the voting representatives of the eleven member organizations of the Joint Council of Taxpayers Associations of LBI (JCTA). Each association then distributes this information to its members and the community via its regular communication methods, e.g., through newsletters; posted on websites; social media.

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will pause in March 2024 and resume the following month**

