

The Offshore Wind Farm Round-Up

Issue #9

January 9, 2023

IN THIS ISSUE:

- Will your electric bill increase as a result of New Jersey's commitment to clean energy? The NJ Bureau of Public Utilities says it depends. Details with a link to the full report begin at the bottom of this page.
- Two recently published studies from Rutgers weigh in on the impact of offshore wind farms on commercial fishing. The links & highlights begin on page 3.
- It has been stated elsewhere that the NJ Bureau of Public Utilities has decided not to approve an offshore transmission network up our coast. When we went hunting for details, we found no confirmation of that statement, but what we *did* find might be the source of the confusion. Begin on page 5.
- Nine states on the Atlantic Coast are looking to band together and establish one Regional Fisheries Compensatory Mitigation Fund Administrator. The full press release from the NJ Department of Environmental Projection begins on page 6.
 - Compensating commercial fisheries for losses associated with the presence of offshore wind farms is not a new idea. Details about what is going on in Massachusetts begin on page 8.

The Offshore Wind Farm Round-Ups periodically provide a review of recent research efforts in which the effects of offshore wind farms have been studied. In addition, in response to readers' suggestions and questions, Round Ups occasionally include factual, clarifying information.

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

Please note that we are taking a short break and expect to resume publication in March 2023

Will your electric bill increase as a result of New Jersey's commitment to clean energy?

Answer: The NJ Bureau of Public Utilities ("BPU") says Yes, if you do not adopt some energy efficiency improvements and No, if you do.

BPU contracted The Battle Group to measure and report on the impact of the policies and strategies in the NJ 2019 Master Energy Plan on customers' 2030 energy costs. The final report was released August 2022 and features a comprehensive analysis of rate impacts and overall energy costs.

Access the full report by clicking on this link:

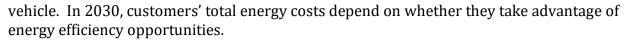
https://nj.gov/bpu/pdf/reports/2022-08-13 - BPU, EMP Ratepayer Impact Study
Report PUBLIC Brattle.pdf

From the report:

"These results imply that non-low-income-residential customer total energy costs are expected to increase through 2030 if they do not change their energy consumption patterns by taking advantage of energy efficiency programs [referred to in Scenario 2 below], adopting electric vehicles, or switching to electric heating. However, if customers are able to adopt these technologies and pair them with energy efficiency program participation, their 2030 energy costs are expected to be lower than their current costs, in real dollars."

Some highlights from the report

- Total energy cost for residential customers includes their energy expenses for electricity, natural gas, and transportation [the vehicle they drive], but it does not include the costs of purchasing or maintaining vehicles or purchasing heating and cooling equipment such as heat pumps.
- The study evaluates expected ratepayer energy costs in 2030 under three scenarios; all cost comparisons are done in 2022 dollars:
 - **Scenario 1** Current policies & programs go forward;
 - **Scenario 2** Includes additional clean energy programs that would be necessary to be added to meet New Jersey's goal of 100% clean energy by 2050; and
 - **Scenario 3** Same as #2, but re-evaluates relative energy costs associated with achieving 100% clean electricity in 2035 instead of 2050
- The study considered four types of residential customers in its analysis:
 - **Customer Level 1** uses the same amount of electricity and natural gas as in 2020;
 - **Customer Level 2** implements energy efficiency improvements and continues to drive an internal combustion engine vehicle;
 - **Customer Level 3** adopts the same level of energy efficiency improvements as Customer Level 2 and switches to driving an electric vehicle; and
 - **Customer Level 4** adopts the same level of energy efficiency improvements as Customer Level 2, switches to driving an electric vehicle and adopts electric heat pumps for space and water heating while staying on the natural gas system for other uses.
- In 2020, an average non-low-income residential customer spent approximately \$4,800 per year for electricity, natural gas and fuel bills for driving an internal combustion engine



- The cost for Customer Level 2 *increases* by 15% relative to the 2020 customer in Scenario 2. The cost for Customer Level 2 *increases* by 10% relative to the 2020 customer in Scenario 1.
- The cost for Customer Level 4 *decreases* by 15% relative to the 2020 customer. The cost for Customer Level 4 *decreases* by 16% relative to the 2020 customer in Scenario 1.
- Under Scenario 2, annual greenhouse gas emissions *decrease* by 30% from 2020 levels by 2030, which is equivalent to avoided emissions from 3.4 million homes' energy use for one year, or 5.8 million gasoline vehicles driven for one year.

In a related article, Tom Johnson, Energy/Environment Writer for *NJ Spotlight News*, describes two opposing points of view about the economic and financial uncertainties around increasing the pace of offshore wind development.

We are including this article because it is related to the topic above and it is the best we have seen on this subject because it clearly and succinctly lays out the arguments from both sides while drawing no conclusions.

Access the full article by clicking on this link:

https://www.njspotlightnews.org/2022/12/offshore-wind-development-nj-raises-costs-rate-payers/

Two recently published studies from Rutgers weigh in on the impact of offshore wind farms on commercial fishing

An overview from the Rutgers website:

"The studies, which appeared in the *ICES Journal of Marine Science*, examined how offshore wind farms planned for the eastern United States could disrupt fishing of the Atlantic surfclam, a major economic driver from Virginia to Massachusetts that generates more than \$30 million in direct annual revenue.

Total fleet revenue declines measured by the studies ranged from 3% - 15%, depending on the scale of offshore wind development and response of the fishing fleet. In New Jersey, losses could be as high as 25% for fishing vessels based in Atlantic City.

The studies, funded by the U.S. Bureau of Ocean Energy Management, also determined the locations of the most vulnerable fleets and associated processors. Topping the list are fleets based in Atlantic City. The least affected port in the simulations was New Bedford, Mass."

Access the entire overview from the Rutgers website by clicking on this link: https://www.rutgers.edu/news/offshore-wind-farms-expected-reduce-clam-fishery-revenue-study-finds

The two studies are connected — they share the same title — and they were published together in the *ICES Journal of Marine Science* June 2022. The links to both studies are directly below.

The Atlantic surfclam fishery and offshore wind energy development:

1. Model development and verification

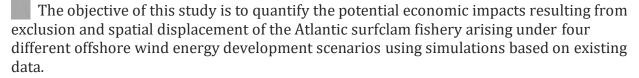
https://academic.oup.com/icesims/article/79/6/1787/6611678?login=false

The Atlantic surfclam fishery and offshore wind energy development: 2. Assessing economic impacts

https://academic.oup.com/icesims/article/79/6/1801/6611672?login=false

Note that these studies do not specifically focus on LBI. The areas targeted in the studies are Point Pleasant NJ, Atlantic City NJ and one location each in MA and MD.

Some highlights from 2. Assessing economic impacts



- For Atlantic surfclam fishing vessels with a homeport in Atlantic City, introducing fishing and transit restrictions in wind energy areas led to reductions in simulated fishing trips: 5.5% reduction in existing lease areas through which vessels could travel but not fish; a projected 20.5% reduction in fishing trips in yet-to-be-developed lease areas in which neither fishing nor transit were allowed.
- For Atlantic surfclam fishing vessels with a homeport in Atlantic City, introducing fishing and transit restrictions in wind energy areas led to increases in the average time at sea: 0.8% increase in existing lease areas through which vessels could travel but not fish; a projected 14.7% increase in yet-to-be-developed lease areas in which neither fishing nor transit were allowed.
- Simulated revenues for the Atlantic City fishing fleet and associated processors decreased from about 5% in existing lease areas through which vessels could travel but not fish to a projected decrease of over 25% in yet-to-be-developed lease areas in which vessels could neither fish nor travel. Average total costs and average fuel costs for these vessels also increased across all scenarios.
- The changes in revenues and costs for the Atlantic surfclam industry estimated here should be considered short- to medium-term effects. Over the longer-term, it is likely that the Atlantic surfclam industry will adjust to new conditions, adapting to maximize profits with added constraints on fishing behaviour related to development of offshore wind energy or failing to continue operations.

- Warming waters throughout the Mid Atlantic Bight have caused a northward shift in range for the Atlantic surfclam over the last several decades, reducing catch per unit effort for the southern and inshore portions of the stock and ultimately resulting in a northward movement of processing capital and fishing vessels.
- This economic analysis indicates that the effects of offshore wind energy development will disproportionately impact Atlantic surfclam fishing activity in the Mid-Atlantic, where the areas designated for development overlap with existing fishing grounds or are used in transiting to and from fishing areas. Offshore wind energy development may, therefore, act as an added stressor for this portion of the industry, exacerbating and accelerating reductions in profitability.
- Future research integrating environmentally-dependent resource dynamics with spatially explicit models of fishing and processing activity are needed to more fully understand the potential interactive and cumulative effects of climate change and offshore wind energy development on commercial fishing industries across the US Northeast and Mid-Atlantic.

Has the NJ Bureau of Public Utilities decided not to approve an offshore transmission network up our coast?

We could find no reporting that confirms that assertion.

We would appreciate hearing from you if you have information to the contrary. Please email us at RoundUpLBI@gmail.com with a link to your source(s).

Perhaps some of the confusion has been caused by the NJ Bureau of Public Utilities' ("BPU") decision to allow \$1 billion of funds for upgrading the existing power grid to go forward **AND** to wait for federal financial incentives to become available in the future to be used to offset some of the costs of building an offshore transmission network, which was recently announced as approved by the BPU.

Press release from the BPU October 26, 2022:

Headline: New Jersey Board of Public Utilities Selects Offshore Wind Transmission Project Proposed by Mid-Atlantic Offshore Development and Jersey Central Power & Light Company in First in Nation State Agreement Approach Solicitation

Secondary Headline: Selected Projects Will Save New Jersey Ratepayers \$900 Million

Access the full press release by clicking on this link:

https://www.nj.gov/bpu/newsroom/2022/approved/20221026.html

Reported by NJSpotlightNews.org October 27, 2022:

Headline: No Deal On Offshore Power Grid

Secondary Headline: Regulator Waits Until Federal Tax Credits Can Help Defray The Costs

Excerpts from the NJSpotlightNews.org article:

A state agency held off, at least for now, approving projects aimed at bringing power from offshore wind farms to land, but it did allow for \$1 billion to upgrade the existing power grid.

The Board of Public Utilities balked at the more expensive projects needed to begin building what is essentially a backbone transmission system off the coast to deliver power ashore. Instead, it opted to wait until federal financial incentives are available to defray the costs to utility customers.

A law signed by President Joe Biden this summer provides lucrative tax credits to operators of offshore wind farms, but those credits are not available to most transmission projects....

In the board order approving the projects, BPU staff said the action positions the state to seek direct federal funding for future expansions of the offshore transmission grid, including the potential to award a full offshore-wind backbone in future solicitations.

"We're not finished," said BPU President Joseph Fiordaliso, who said the approved projects will minimize the impact on New Jersey's coastline, avoiding multiple projects coming ashore at different landing points. . . .

The project involves building a new substation at JCP&L's Larrabee substation in central Jersey, a site designated as the single interconnection point for the initial offshore wind farms approved by the BPU. Eventually, the new substation is projected to be the interconnect for up to 6,400 megawatts of offshore-wind electricity. . . .

Access the full article by clicking on this link:

https://www.njspotlightnews.org/2022/10/bpu-offshore-backbone-offshore-wind-federal-funds-atlantic-city-electric-baltimore-gas-and-electric-ls-power-peco-energy-co-ppl-corp-psegtransource/

Nine Atlantic Coast States Release Request for Information to Inform Establishment of a Regional Fisheries Compensatory Mitigation Fund Administrator

That is the headline of the press release issued by the NJ Department of Environmental Projection on December 13, 2022.

The complete press release is included below with zero changes in wording, but we bumped the section called "Background" — originally positioned at the end of the press release — to the beginning because it provides a context that is helpful to know before you read the rest.

Background

Since June 2021, the States have worked closely together, including issuing <u>a letter</u> to the <u>Biden Administration</u> expressing that the expansion of the offshore wind industry creates an unprecedented opportunity for the United States. The letter emphasized the shared federal-state responsibility to address critical areas of port infrastructure, permitting, research and development, fisheries support, and natural resource restoration and mitigation.

Carrying forward this partnership, in November 2021, the States sent <u>a letter to BOEM</u> to encourage the development of a standardized fisheries compensatory mitigation framework. In June 2022, BOEM issued the draft framework for mitigating impacts to commercial and recreational fisheries.

The Special Initiative on Offshore Wind (SIOW) and the Consensus Building Institute (CBI) have been convening and facilitating the States' discussions on a regional approach to fisheries compensatory mitigation. SIOW and CBI will continue to support this critically important effort as consultation with the fishing and offshore wind development industries continues. [END OF THE BACKGROUND SECTION]

Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Maryland, and Virginia (the States) have been advancing an initiative to establish a regional fund administrator for fisheries compensatory mitigation which would provide financial compensation for economic loss from offshore wind development off the Atlantic Coast.

Recognizing the importance of sustaining a vibrant fishing community that can coexist and thrive alongside offshore wind energy development, the States have released a Request for Information (RFI) aimed at receiving input from impacted members of the fishing industry, offshore wind developers, corporate and financial management entities, as well as interested members of the public, to inform efforts to establish a regional fisheries compensatory mitigation fund administrator.

This effort supports the implementation of the Bureau of Ocean Energy Management's (BOEM) <u>Draft Fisheries Mitigation Framework</u> in a fair, equitable, and transparent manner for impacted Atlantic Coast fishing industry members and offshore wind developers. The States' RFI seeks feedback on concepts and proposals on how to best establish a single regional administrator for the Atlantic Coast to collect, hold, determine eligibility, and dispense funds for economic losses to affected fishing industry members. The States are focused on ensuring that a regional administrator also engages appropriately with both the fishing and offshore wind industries. To that end, the States developed the RFI and accompanying Scoping Document with input from representatives of the fishing and offshore wind industries, including support from the Responsible Offshore Development Alliance (RODA) and other fishing industry leaders, to help engage with and understand concerns from the broader industry.

Responses to the RFI are due by 5pm Eastern Standard Time on January 31, 2023. Visit the following website for additional information and to download

the Scoping Document and RFI: https://offshorewindpower.org/fisheries-mitigation-project

Kris Ohleth, Director of the Special Initiative on Offshore Wind, can provide contact information for each of the States' representatives for this issue. kris@offshorewindpower.org

Compensation for commercial fishers impacted by the presence of offshore wind farms is not a new idea.

Note that construction of the Vineyards Wind offshore wind project is currently underway off the coast of Massachusetts. The articles below refer to pauses in the process leading up to the actual start of construction, which was accurate at the time these articles were published in 2019.

Reported by ecoRI.org January 18, 2019: Fishermen Receive Compensation Offer from Vineyard Wind

https://ecori.org/2019-1-18-usl6krcfgyqnavglyha2tzveu7slxb/

From the publics radio.org August 6, 2019: How will Vineyard Wind's Compensation Plan To Fishermen Actually Work?

https://thepublicsradio.org/article/you-asked-we-answered-how-will-vineyard-windscompensation-plan-to-fishermen-actually-work-

And in a further development:

From seafoodsource.com December 23, 2022: US lawmakers Pursuing National Compensation Plan For Offshore Wind Impacts

https://www.seafoodsource.com/news/supply-trade/massachusetts-lawmakers-pursuing-national-compensation-plan-for-offshore-wind-impacts

This Round-Up was prepared by a group of writers and researchers from Long Beach Island, New Jersey. Questions about the content of Round-Ups and suggestions for topics to be covered in future issues 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 taxpayer and property owners 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.

Please note that we taking a short break and expect to resume publication in March 2023