

Brian Campbell 01824 Comments:

On average in the United States, residential customers of consumer-owned utilities have rates 13 percent cheaper than customers of investor-owned utilities, according to the American Public Power Association, a trade group for consumer-owned utilities. In Maine, it's the opposite: The two investor-owned utilities have an average rate cheaper than the average rate of the state's nine consumer-owned utilities. <https://energycentral.com/news/are-private-or-public-electric-utilities-cheaper>

That being said, Massachusetts voted for Privatization, so we have to live with this crazy complicated ISONE RTO == one of the most Expensive \$\$ RTO's in usa with high Emissions! So now the States in ISONE are Legislating Emissions reductions, Yet ISONE area decided to Prematurely close VT Yankee 2014 and Pilgrim 2019 Nuclear Plants = 1310 MW of Green EGEN Capacity.

The Governance@NewEnglandEnergyVision.com VISION is to replace that capacity with "BACKBONE" = OFFSHORE WIND EGEN==\$\$ SCAM + Blackouts!

1. Ontario CANDU Atomic Powered, LOW Emission, LOW Cost Grid VS Massachusetts High Emission, Expensive Grid PRICES

1.1 2021-02-10 Electric Bill from Cambridge Massachusetts \$0.2285 / KWhr + \$7.00 monthly customer charge, meter # removed for privacy. Mathematical Comparison of Ontario CANDU Atomic Powered, LOW Emission, LOW Cost Grid VS Massachusetts High Emission, Expensive Grid.

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Total \$\$\$ USD KWhr for Toronto Hydro	\$0.1060	VS	Total USD \$\$\$ KWhr for Cambridge, Massachusetts	\$0.2285
Grams of CO2 Emitted / KWhr for Toronto Hydro	71 g	VS	Grams of CO2 Emitted / KWhr for Cambridge, MA	243 g

Calculations using Ontario's

independent energy regulator electricity bill

Calculator [https://www.oeb.ca/rates-and-your-bill/bill-](https://www.oeb.ca/rates-and-your-bill/bill-calculator)

[calculator](https://www.oeb.ca/rates-and-your-bill/bill-calculator) 1.1 **MASSACHUSETTS is # 5, 2019, in electricity rates in usa, with, average retail price (cents/kWh) \$18.40 Sources: U.S. Energy Information Administration, but 2021 pay more**

\$0.2285. • <https://www.eia.gov/electricity/state/massachusetts/index.php>.

Brian Campbell comment: Emissions of ISONE compared to Ontario's independent energy regulator. <https://www.electricitymap.org/zone/CA-ON> CLEAN, Ontario's independent energy regulator is because Ontario RTO has CANDU Nuclear Reactors are ~ 60 % of Ontario EGEN Capacity == GREENEST GRID IN N. America. Rather than model ISONE on GREEN and Inexpensive GRID, ISONE

& Governance@NewEnglandEnergyVision.com VISION is FAIL= GERMan 2X Expensive \$\$ and 5X the Grams of CO2 Emitted / KWhr of Nuclear Powered France==INSANITY!== <https://www.electricitymap.org/zone/FR>

1. Offshore Wind Plans Will Drive Up Electricity Prices And Require Massive Industrialization Of The Oceans'

<https://www.forbes.com/sites/robertbryce/2021/02/05/offshore-wind-plans-will-drive-up-electricity-prices-and-require-massive-industrialization-of-the-oceans/?sh=2abc09c37965>

Building several dozen gigawatts of offshore wind capacity will require installing thousands of

The regatta for setting the loftiest targets for offshore wind energy development has set sail.

Today, [South Korea announced plans for 8.2 gigawatts](#) of offshore wind. British Prime Minister Boris Johnson recently called for [40 gigawatts of offshore wind](#) capacity to be built in UK waters by 2030. If achieved, it would be one of the biggest British maritime deployments since the Battle of Trafalgar. Meanwhile, the European Union has targeted some than [300 gigawatts](#) of offshore capacity by 2050.

Joe Biden's climate advisors are calling for the immediate approval of a slew of pending offshore wind projects. In New York, Governor Andrew Cuomo is calling for 9 gigawatts of [offshore wind capacity to be built by 2035](#). Other East Coast governors are also floating multi-gigawatt offshore plans. In all, according to a report issued by the Bureau of Ocean Energy Management last June "[approximately 22 gigawatts of Atlantic offshore wind development are reasonably foreseeable](#) along the East Coast."

Here's some advice: Take all of these offshore plans with a large grain of sea salt.

The history of offshore wind in domestic waters is replete with canceled plans – yes, Cape Wind, I'm talking about you – cost overruns, cabling problems, and permit delays. Furthermore, [offshore wind continues to be one of the most expensive forms of electricity generation](#). That high-priced juice will cost ratepayers untold billions of dollars over the coming years. That means higher-cost electricity for low- and middle-income consumers. The impact will be particularly hard in northeastern states like New York and in New England, where consumers already endure some of the highest electricity prices in the country.

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Finally, building gigawatt-scale offshore wind will be lousy for the oceans, navigation, and marine life. The forecast buildout of offshore wind in the U.S. will require industrializing vast swaths of some of the most heavily fished and navigated waters in North America. It will require anchoring thousands of offshore platforms along the Eastern Seaboard, which could interfere with marine mammal migration and wreak navigational havoc during a hurricane, major storm, or oil spill. It will also add yet more noise pollution to the already-noisy ocean.

Before delving into those issues, it's worth remembering why offshore wind has become such a priority for states like New York. The answer is simple: Rural New York is in a full-scale uprising that is halting the growth of several proposed solar and wind projects, including ones proposed by Invenergy and Apex Clean Energy.

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In 2018, Anne Reynolds, the executive director of the Alliance for Clean Energy New York, explained why the backlash is occurring: "I personally think the arguments against wind energy are because people don't want to see the

turbines.” So many rural New Yorkers don’t want to see the turbines that state officials in Albany are in the process of stripping local governments of their home rule authority over the approval and siting of renewable projects (Just for a moment, imagine if the state government was doing the same for oil and gas drilling. If that would happen, perhaps the *New York Times* [NYT +0.3%](#) would cover the backlash against wind in New York.)

With surging friction onshore, the renewable industry wants to set anchor in saltwater. But that effort has been met with fierce headwinds. Over the last two decades, numerous offshore projects, including the ill-fated [468-megawatt Cape Wind project](#) have been scuttled, delayed, blown off course, or abandoned.

In California, New York, Massachusetts, and other coastal states, the siting approval process has been protracted and often hinges around the condition that, if built, the giant seabird-killing machines will not be visible from beach-front swankiendas in Malibu, Montauk, and Hyannisport.

The Hyannisport story is instructive. In 2001, the backers of Cape Wind filed their first permit application. It would become one of the most contentious energy projects — of any kind — in US history. The backers of Cape Wind filed their first permit application in 2001. Despite getting environmental approvals from the federal government, and the backing of many elected officials in Massachusetts, the project faced enormous opposition, including from Robert F. Kennedy Jr., whose family owns a modest compound in Hyannisport. Cape Wind [was officially deep-sixed in 2015](#). Since then, Massachusetts legislators have floated a plan to increase the [offshore target to 5.6 gigawatts](#), or roughly a dozen projects the size of the scuttled Cape Wind.

The promise of offshore wind has long lain just over the horizon. [In 2010, Google announced the Atlantic Wind Connection](#), an offshore transmission project that aimed to connect 6,000 megawatts of offshore wind capacity. Back then, Google [GOOG +0.2%](#) [GOOG +0.2%](#) said, “We believe in investing in projects that make [good business sense and further the development of renewable energy](#).” Google (now Alphabet) and three other partners, including Marubeni Corporation, said they would spend some \$5 billion on the project. But as one summary put it: “The proposal ran into significant [regulatory and financial hurdles](#) before it fell apart.”

In 2011, then-Interior Secretary Ken Salazar spoke at [a conference sponsored](#) by the American Wind Energy Association at which he declared “From Texas to Oregon, to up and down the Atlantic Coast, there’s movement on offshore wind.” He continued, saying the Obama administration had set “an ambitious – but achievable – goal of deploying 10 gigawatts - that’s 10,000 megawatts - of offshore wind generating capacity by 2020 – and 54 gigawatts by 2030.”

How has that worked? Well, ten years after Salazar’s speech, the US has five turbines offshore with a total of capacity of 30 megawatts – or some 9,970 megawatts short of that ambitious but achievable goal laid out in 2011.

In 2017, Dominion Resources said that after losing some \$40 million in federal subsidies in 2016, it would be delaying a 12-megawatt offshore wind project until 2021 at the earliest. “One challenge facing offshore wind development is its [complex and costly installation and maintenance](#) when compared to onshore wind,” the company said.

The only offshore wind project in US waters is the Block Island project off the coast of Rhode Island. That project [began producing power in 2017](#). But

significant problems have already emerged and the owners of the 30-megawatt project have been forced to shut the turbines down while contractors re-bury the power cable that brought the juice to shore. The initial phase of re-burying it will [total more than \\$30 million](#). Orsted, the company that now owns the project, has refused [to disclose the total cost of the cable reburying](#) effort.

Offshore wind hit another shoal last November when the federal environmental impact assessment for the 800-megawatt Vineyard Wind project located a few dozen miles east of Long Island, [was delayed yet again](#). In December, the backers of Vineyard Wind – Copenhagen Infrastructure Partners and Avangrid, a subsidiary of Spanish utility Iberdrola SA, which has aggressively pursued renewable projects in the United States over the past few years – withdrew their permit application.

The high cost of offshore wind will impose a regressive tax on low- and middle-income consumers. [As economist Jonathan Lesser pointed out in the New York Post](#) last year, the electricity to be produced from two of the projects being slated for New York waters – Empire Wind and Sunrise Wind – will cost about \$100 per megawatt-hour. That's high-priced juice, particularly when you consider that the average cost of wholesale electricity in New York in 2019, according to [the New York Independent System Operator, was about \\$33](#), a record low.

In a separate piece, for Real Clear Energy in September, [Lesser noted that the initial price of juice from the Southfork Wind Project](#), to be built off the coast of Long Island, starts at a whopping \$160 per megawatt-hour, or roughly five times the average wholesale price in New York. Lesser concluded that offshore

wind means “higher-priced electricity for consumers and businesses – and fewer dollars to spend or invest.”

The cost of offshore wind isn't limited to higher electricity prices. Several East Coast states have pledged big subsidies in the form of infrastructure. New York state has pledged [\\$200 million in tax dollars](#) to make port improvements for offshore wind.

Finally, the environmental impacts and dangers to navigation posed by offshore wind cannot be ignored. Indeed, the number of offshore platforms being proposed for wind energy production boggles the imagination. Today, the global hydrocarbon sector operates about 6,000 offshore oil and gas platforms. If the EU follows through with its plans to install 300 gigawatts, it would require – assuming each turbine is 10 megawatts – installing 30,000 offshore platforms in European waters. Thus, Europe's offshore wind industry, by itself, could soon have *five times as many offshore platforms as the entire global oil and gas sector*.

The potential impact on American offshore is also gobsmackingly large. The U.S. Gulf of Mexico, which is one of the most productive offshore oil and gas provinces on the planet, has [about 1,900 platforms](#).

According to an October article in *E&E News*, Maine, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Maryland and Virginia, have set goals for offshore wind totaling some [28.5 gigawatts and another 7.5 gigawatts is being targeted](#). If those states want 36 gigawatts of capacity, it will require installing about 3,600 offshore platforms. Thus, if the offshore wind promoters have their way, the Eastern Seaboard alone could soon be carpeted with nearly twice as many offshore platforms as are now in the Gulf of Mexico.

One of the leases will put dozens of wind turbines smack on top of one of the [best scallop and squid fisheries on the Eastern Seaboard](#). Numerous groups, including the Fisheries Survival Fund, [Long Island Commercial Fishing Association](#), as well as the [Bonackers, a small group of fisherman](#) whose roots on Long Island go back centuries, are adamantly opposed to the wind projects slated for the region. On Friday morning, Bonnie Brady, the executive director of the Long Island Commercial Fishing Association, and a board member of the Responsible Offshore Development Alliance, told me that the long-term environmental impact of the proposed projects isn't well understood. "We know these giant machines change wind patterns and they could change marine migration patterns. Let's do the science before we destroy the ocean and our ocean food supply."

The draft environmental impact statement for Vineyard Wind, which was released in June, said "Major direct impacts on navigation could occur" due to the "presence of structures" needed for the project. It also said, "Major cumulative effects [could occur on commercial fisheries](#)."

The flood of wind turbines will also add more [anthropogenic noise to the oceans](#), a problem that was spotlighted this week by a new academic paper. The *New York Times* reported, "humans — and their ships, seismic surveys, air guns, pile drivers, dynamite fishing, drilling platforms, speedboats and even surfing — have made the ocean an unbearably noisy place for marine life, according to a sweeping review of the prevalence and intensity of the impacts of anthropogenic ocean noise published [on Thursday](#) in the journal *Science*. The paper, a collaboration among 25 authors from across the globe and various fields of marine acoustics, is the largest synthesis of evidence on the effects of oceanic noise pollution."

A new paper published in Science, "The soundscape of the Anthropocene ocean," underscored the ... [+]

SCREENSHOT FROM SCIENCE MAGAZINE, FEBRUARY 5, 2021

To understand what the offshore wind juggernaut might mean for our oceans, I asked [Jesse Ausubel](#), the director of the program for the Human Environment at Rockefeller University, for a comment. Ausubel is among the world's foremost experts on the ocean and the creatures that live in it. To cite just one example, he was one of the [early proponents](#) of the [Census of Marine Life](#), a 10-year, multi-nation project that resulted in some 540 expeditions that engaged some 2,700 scientists who discovered more than 1,000 new marine species and have several thousand more waiting to be described. (For more on that see [this video](#).)

In an email, Ausubel told me that we humans are creating "a fast-growing 'ocean of things'" that is "populating the water column from floor to surface." He said the EU's plans for 300 gigawatts of wind capacity would "alone require acreage of about 100,000 square kilometers or about two-thirds the surface of the Baltic or Black Seas or a bit less than half the land area of Great Britain plus Ireland." He concluded, "Environmentalists have not yet grasped the massive industrialization of the oceans now underway and proposed."

Back in 2011, Salazar declared that offshore wind energy was "America's new energy frontier." A decade later, America's offshore wind potential is still just that, potential. If offshore wind does achieve a huge expansion under Joe Biden, the invoice for that expansion will be equally huge and the price impacts will be felt most acutely by low- and middle-income Americans who will struggle to pay their electricity bills.

If the advisors on Biden's climate team are serious about protecting the environment, now would be a good time for them to reconsider the massive industrialization of the oceans that is now underway. It might even make them think about [preventing America's existing fleet of nuclear reactors from being prematurely shuttered](#).

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Robert Bryce