

#### ENVIRONMENTAL LAW & POLICY CENTER'S COMMENTS TO THE ILLINOIS POWER AGENCY ON HOUSE BILL 3445 POLICY STUDY – OFFSHORE WIND POWER IN LAKE MICHIGAN October 20, 2023

On September 29, 2023, the Illinois Power Agency requested stakeholder feedback for development of a Policy Study regarding Illinois energy policy proposals included in House Bill 3445. While the Environmental Law & Policy Center (ELPC) is interested in all three policy proposals, these comments focus on House Bill 2132, which would require the Agency to develop a procurement process for an offshore wind project in Lake Michigan. These ELPC comments specifically address the Agency's Offshore Wind questions (b), (g), (h), (j), and (k) as follows:

#### (b) Given the infancy of the offshore wind industry in the United States, are current supply chains sufficient to support offshore wind development in the Great Lakes?

At present, many of the proposed East Coast offshore wind projects are facing substantial supply chain problems that are driving up previously stated costs and causing construction delays. Because project costs have risen sharply due to reassessments by developers, supply chain challenges, and high interest rates, several offshore wind developers in the Atlantic have sought to cancel or renegotiate power purchase agreements (PPAs). For example, over the past few weeks alone

- Avangrid filed settlements with Connecticut utilities Eversource Energy and United Illuminating to cancel its power purchase agreements for the 804-MW Park City Wind project.<sup>1</sup> Avangrid executive said that Financial challenges triggered by supply chain disruptions, rising interest rates and other factors rendered the Park City Wind project "unfinanceable under its existing contracts."<sup>2</sup>
- The New York Public Service Commission (NYPSC) on Thursday denied petitions from Ørsted, Equinor and BP to adjust offshore wind contracts, which the NYPSC recognized would have potentially increased ratepayer costs by a total of \$29.76 billion over the contract terms. This would result in cost increases of between 2.3% and 6.7% in each energy bill for residential customers, and between 2.5% and 10.5% for commercial customers, NYPSC estimated.

The developers sought the adjustments because, as the NY PSC noted, Ørsted said that for its 924-MW Sunrise Wind project: "the project's financial profile has worsened markedly — so much so that it is now not a viable investment." <sup>3</sup>

<sup>&</sup>lt;sup>1</sup><u>Avangrid moves to cancel Park City offshore wind contracts on heels of SouthCoast termination | Utility Dive</u>

<sup>&</sup>lt;sup>2</sup> Avangrid Statement on Park City Wind Offshore Project | Business Wire

<sup>&</sup>lt;sup>3</sup> NYPSC, CASE 15-E-0302 and CASE 18-E-0071, "ORDER DENYING PETITIONS SEEKING TO AMEND CONTRACTS WITH RENEWABLE ENERGY PROJECTS" (October 12, 2023) https://documents.dps.ny.gov/public/MatterManagement/MatterFilingItem.aspx?FilingSeq=314376&MatterSeq=48 235

• The Massachusetts Department of Public Utilities approved the termination of PPAs for the 1,200-MW SouthCoast Wind project, an offshore wind power development by Shell New Energies and Ocean Winds North America.<sup>4</sup>

Overall, cost overruns due to supply chain issues and inflation have made these offshore wind development projects much more expensive than projected, and that is leading to contract renegotiations and cancellations.

The situation is even more problematic in Lake Michigan and the other Great Lakes where no offshore wind power project in the United States has even begun construction let alone be completed. There has been no U.S. offshore wind power development in the freshwater – which freezes more readily in the winter than does saltwater on the Atlantic Ocean coast – and while supply chains were being developed for the number of large offshore wind power projects on the East Coast, no such activity for offshore wind power has actually happened on Lake Michigan. The only nearby example is hardly promising: the Icebreaker project in Lake Erie near Cleveland has been repeatedly delayed and the developers have continually revised the project costs upward with current projections around 20 cents per kwh.

# (g) What are the primary issues related to securing the rights to use the Lake Michigan lakebed for the construction of offshore wind, and how would those issues need to be addressed?

The State of Illinois holds the water and lakebed of Lake Michigan in trust for the benefit of and the use by its citizens. The "public trust" doctrine applies, as a matter of law, and limits the state from allowing offshore wind power development in Lake Michigan directly or indirectly by a private entity. The leading federal court decision on the public trust doctrine applicable to Illinois waters is *Lake Michigan Federation v. U.S. Army Corps of Engineers*, 742 F. Supp. 441 (N.D. Ill. 1990), in which the district court found that state legislation allowing Loyola University to create a lakefill for university facilities in Lake Michigan violated the public trust doctrine. The *Lake Michigan Federation* decision summarized three principles of Illinois public trust law: First, courts should be critical of attempts by the state to surrender valuable public resources to a private entity. Second, the public trust is violated when the primary purpose of a legislative grant is to benefit a private interest. Third, any attempt by the state to relinquish its power over a public resource should be invalidated under the doctrine. *Lake Michigan Federation*, 742 F. Supp. at 445.

An offshore wind power development project in Lake Michigan would appear to violate the public trust doctrine as applied in *Lake Michigan Federation*. Renewable energy projects, including both onshore and offshore wind power, in Illinois are developed by private for-profit businesses. Using the Lake Michigan lakebed and/or waters for construction of an offshore wind power project by a private entity directly or indirectly would likely violate the applicable public trust law and the State of Illinois' legal responsibilities.

<sup>&</sup>lt;sup>4</sup> <u>DPU approves termination of SouthCoast wind contract - CommonWealth Magazine</u> and <u>18033710</u> (comacloud.net)

### (*i*) What considerations must be made for preserving Lake Michigan's natural resources during development and operation of offshore wind projects?

Any offshore wind project must go through a comprehensive environmental impact statement review and analysis to protect and preserve Lake Michigan's vital natural resources from destruction and degradation. An offshore wind power project of the size contemplated by HB 2132 will be an enormous construction project. The offshore wind turbine blades are about 350 feet long – that's longer than the length of a football field. GE is looking to build offshore wind towers more than 850 feet high.

This will require massive onshore assembly and staging activities at the Chicago Port District or other community area with continual deliveries of heavy machinery, and wind turbine blades, towers and other equipment, continual deliveries by super-long heavy trucks, and many barges causing much air pollution affecting community residents and water pollution in the vicinity. The offshore construction in Lake Michigan itself involves pile driving, a large increase in barge and other vessel traffic, and potential construction-related pollution and physical disturbances that can impact water quality and the Lake's ecosystem.

# (*j*) What development of State and federal permitting needs to be done to support construction, O&M, and decommissioning of wind energy developments in the Great Lakes?

There are multiple federal permits related to the National Environmental Policy Act, Clean Water Act and other laws that a project like this would need to obtain. At the state level, Illinois must develop a leasing and permitting process under the Lake Michigan Wind Energy Act of 2013.

(k) To what degree should offshore wind be considered as an option to meet Illinois' renewable energy and clean energy goals? What studies, analyses, or other information should the IPA consider for understanding the potential role of offshore wind in meeting the State's decarbonization objectives, and how offshore wind compares to other strategies?

Offshore wind power is an extremely expensive renewable energy resource compared to onshore wind power, solar energy, solar energy + storage, and demand response and energy efficiency resources. The Illinois Power Agency should consider the recent New York State Energy Research and Development Authority (NYSERDA) Great Lakes Wind Energy Feasibility Study.<sup>5</sup> The NYSERDA White Paper summarizing the study concluded "that Great Lakes Wind currently does not offer a unique, critical, or cost-effective contribution toward the achievement of New York State's Climate Act goals beyond what existing, more cost-competitive programs are currently expected to deliver."<sup>6</sup> That NYSERDA analysis was conducted in 2022 and based on data <u>before</u> the recent wave of offshore wind power cost increases due to previous underestimates, escalating interest rates in 2023, and supply chain constraints as explained in ELPC's response to question (b) above. While there are certainly differences in the energy markets and profiles of those states,

<sup>&</sup>lt;sup>5</sup> <u>https://www.nyserda.ny.gov/-/media/Project/Nyserda/Files/About/Publications/Energy-Analysis-Technical-Reports-and-Studies/GLWEFS/LSR-GLW-main.pdf</u>

<sup>&</sup>lt;sup>6</sup> <u>https://www.nyserda.ny.gov/-/media/Project/Nyserda/Files/About/Publications/Energy-Analysis-Technical-Reports-and-Studies/GLWEFS/22-12wp-New-York-State-Great-Lakes-Wind-Energy-Feasibility-Study-white-paper.pdf</u>

Illinois can look to the NYSERDA study and the recent offshore wind power project cancellations for sobering economic reality guidance.

The only U.S. Great Lakes offshore wind power project currently under consideration is the proposed 20.7-megawatt Icebreaker project offshore from Cleveland in Lake Erie, which is the shallowest of the Great Lakes. In 2021, the Icebreaker project developers' estimated financing and construction cost was \$173 million.<sup>7</sup> That 2021 cost estimate was: (1) made well before the soaring offshore wind power project costs on the East Coast, as described above, and (2) for a project in freshwater that freezes more readily in the winter than the proposed East Coast development projects in the saltwater Atlantic Ocean. The project proposed in HB 2132 will be "at least 150 megawatts" and will likely be much more expensive than other renewable energy and DR/EE resource alternatives. Illinois' renewable energy budget should prioritize other, more cost-effective means for meeting Illinois decarbonization goals.

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<sup>&</sup>lt;sup>7</sup> <u>https://www.cleveland.com/news/2021/10/icebreaker-wind-project-proposed-for-lake-erie-needs-to-find-more-financing-soon.html</u>