

Issue Paper 3: Michigan's Great Lakes Bottomlands and Wind Energy

Development of offshore wind energy in Michigan requires placement of wind turbines on or over the bottomlands¹ within the state-owned waters of the Great Lakes. The bottomlands of the Great Lakes are held in trust by the State of Michigan for use and enjoyment by Michigan's residents.² The State, as the owner and trustee, has a perpetual responsibility to the public to manage Great Lakes waters and bottomlands for the prevention of pollution, for the protection of the natural resources, and to maintain the public's rights of hunting, fishing, navigation, and commerce. Wind development proponents are making the case that harvesting Great Lakes wind resources is a potential new form of commerce in Michigan. Recognizing these responsibilities, the governor's Executive Order No. 2009-1 instructs the Great Lakes Wind Council to include in its report:

- Options for how the public could be compensated for bottomlands leasing and wind rights for wind energy systems, and
- Recommendations for legislation and for changes in administrative rules and policies related to the siting and development of offshore wind energy systems.

These directives in the Executive Order raise the following questions:

- How should bottomlands access be provided to wind energy developers?
- How should the public be compensated for the use of the bottomlands and wind rights?
- How will public resource values be protected, or at least not substantially impaired, during the siting, operation, and decommissioning of offshore wind turbines and related facilities?

This paper examines a range of issues for the council to consider as it develops recommendations for the final report.

ACCESS TO BOTTOMLANDS

Presently, access to Michigan's Great Lakes bottomlands is regulated by the Michigan Department of Environmental Quality (MDEQ) under the Great Lakes Submerged Lands Act, Part 325 of Act 451 of 1994, Natural Resources and Environmental Protection Act (NREPA) as amended (M.C.L. 324.325 et seq.). This act regulates the use of Great Lakes bottomlands by requiring a permit for any occupation or alteration of the bottomlands, such as dredging, construction of a marina, or shore protection.

¹The term "bottomlands" refers to lands in the Great Lakes and the bays and harbors of the Great Lakes lying below and lakeward of the natural ordinary high-water mark (M.C.L. 324.32502).

²"[Public trust] is a title held in trust for the people of the state that they may enjoy the navigation of the waters, carry on commerce over them, and have liberty of fishing therein, freed from the obstruction or interference of private parties." *Illinois Central R. Co. v. Illinois*, 146 U.S. 387 (1892) at 452.

The Part 325 permit process is part of the MDEQ and U.S. Army Corps of Engineers joint permitting process and was the focus of the 2008 Dry Run permitting exercise.³ No procedural changes to the Part 325 permit process were suggested by the dry run project. However, the report noted that there are no clear wind energy project permitting or leasing guidelines/criteria for decision-makers.

Part 325, when written and amended, only contemplated the use of offshore bottomlands for development directly related to an adjacent upland use. As written, it facilitates only the extension of onshore uses into the nearshore areas (e.g., boat launching). As a result, a process for approving or denying offshore use of bottomlands for wind energy or any other use has never been developed. MDEQ decision-makers have asked for clear guidance on this, and for evidentiary standards related to other issues that must be addressed (including impacts on fish, wildlife, or navigation) in order to adequately review and approve or deny a permit application for the use of Michigan's bottomlands for wind energy development.

At present, if the MDEQ received a permit application for offshore wind energy development in Michigan's bottomlands, the review process would prove inadequate and would likely lead to confusion within the agency as well as with the applicant and the public. Developing guidelines for this process before the first application is received would clarify the expectations for all involved.

Other jurisdictions have instituted a moratorium for a defined time period on offshore wind energy development applications until regional planning and site permitting processes have been developed. As the council considers making a recommendation on this issue, it is important to consider that there may be downsides to instituting a moratorium, including the possibility that Michigan may appear to applicants to be an unwelcoming state for offshore wind energy development. The moratorium's time period may provide a sense of urgency to the development of permitting criteria.

Leases and Use Agreements

Part 325 also allows the MDEQ to convey bottomlands by lease or use agreement in limited instances when the public use of those lands will not be impaired or substantially affected (M.C.L. 324.32502). In the past, leases and use agreements have allowed the following uses on Great Lakes bottomlands:

- Marinas, yacht clubs, and boat clubs
- Commercial ferry operations
- Boat repair yards
- Commercial bulk loading docks for sand, gravel, ore, petroleum, etc.

In order to allow wind energy development in the offshore areas of Great Lakes bottomlands in the future, Part 325 will require an amendment to address issues unique to offshore development. The two most prominent issues requiring an update are (1) the current requirement that an applicant under Part 325 must be a riparian property owner or

³ M. Klepinger, *Michigan Great Lakes Offshore Wind Permitting Dry Run, Final Report* (May 2008).

occupant, and (2) the current application of the law that presupposes applications for water-dependent uses in the bottomlands directly adjacent to related upland uses.

The largest of these issues is the current requirement under Part 325 that allows permits and leases to be granted *only* to riparian land owners⁴ (MCL324.32504[1]). Riparian owners enjoy the right to dockage, access to navigable water, and reasonable use of water for household uses, as well as the rights of hunting, fishing, swimming, pleasure boating, or navigation; these rights are subject to the public trust doctrine (M.C.L. 324.32502). This riparian requirement, which was conceived for a program that historically focused on the regulation of the nearshore area, appears to be unsuitable for offshore wind. In order to allow offshore wind energy development by non-riparians, this section would require amendment.

To date, applications for permits and leases/use agreements have been reviewed by the MDEQ with an understanding that the proposed use of the bottomlands is a water-dependent activity.⁵ Wind turbines are not necessarily a water-dependent activity and may not fit within the existing application of Part 325. However, based on data collected on the relative strength of winds available to harness in the Great Lakes,⁶ it has been argued that offshore wind development is a water-dependent activity that is dependent on unique Great Lakes resources. The MDEQ will likely require guidance on this point to accommodate wind energy development applications. The issue of “water dependency” arises primarily from the Coastal Zone Management Act and is not settled. It is being discussed by policymakers in several other states.

Issues for Council Consideration

These issues are provided for council consideration and are intended only as a starting point for council discussion. Staff expects the council to suggest additional issues and options and develop the final recommendations for inclusion in the report.

- Should the MDEQ develop clear guidelines and rule modifications for granting access to bottomlands for offshore uses unconnected to an adjacent upland use?
- Should Michigan institute a moratorium on wind lease applications until clear guidelines for granting access to offshore bottomlands have been established?
- Should Part 325 and related rules be amended to allow non-riparians to apply for a bottomlands lease or use agreement for the development of offshore wind energy?
- Should Part 325 and related rules be amended to explicitly allow offshore wind energy development even though its status as a water-dependent use is in question?
- Should the state develop a checklist of information that must be provided by the applicant in order for the MDEQ to adequately assess the impacts of wind energy development to the offshore area? (The MDEQ currently uses a checklist to obtain all the necessary information from an applicant before reviewing a nearshore permit application.)

⁴ A riparian owner is one whose property borders on a body of water or watercourse. *Black's Law Dictionary*, 7th Ed. (St. Paul, Minn.: West Group, 1999).

⁵ Tom Graf, Michigan Department of Environmental Quality, personal communication, April 10, 2009.

⁶ USDOE, National Renewable Energy Laboratory, 2008.

COMPENSATING THE PUBLIC FOR USE

When approving a lease or use agreement for bottomlands, Part 325 requires the MDEQ to determine the dollar amount to be paid to the state by the applicant for the lease (MCL 324.32506). In the past, certain agreements have been negotiated on the basis of a one-time payment to compensate the people of Michigan for the use of the public trust lands. More recently, all use agreements and marina leases require annual payments to the state for the duration of the use period.⁷ Existing nearshore lease provisions also include terms related to assurances for long-term site maintenance and eventual site restoration, which could be a component to leases negotiated for offshore wind energy development.

Creating the appropriate compensation package for offshore wind energy development will be a complicated process. The structure of the leases may include provisions related to minimum production requirements, payments for the initial option to develop the site, ongoing rental of the site, and potential royalties from the operations of the energy facility (production or non-production). For example, a recent offshore wind field lease written for the State of Texas calls for a minimum of 150 MW power production capacity and anticipates projected royalties between \$15 million and \$25 million over 30 years.

It will be important to consider the impact of the compensation package on the viability of offshore wind energy development in Michigan. Texas and other jurisdictions have instituted a phased compensation package that creates an incentive for offshore wind energy development.

End Uses of Compensation

When the public has been compensated under existing programs for the use of public lands, the compensation has been applied to a variety of end uses. In many programs, compensation contributes to the state's general fund, which then supports the regulatory agency programs that administer the leases (e.g., marina leases). Reviewing applications for offshore wind energy development in a way that adequately protects the public trust is likely to be administratively expensive and time consuming. Current law outlines application fees for a Part 325 permit or conveyance application; the maximum fee under the law is \$2,000.

Existing Michigan laws and regulations do not prescribe how much of the compensation stream from offshore wind development should be applied to the MDEQ bottomlands regulatory program or the promotion of other public interests. Other states and nations have instituted revenue split programs with local jurisdictions or utility districts. For example, rental payments received from leases granted by the State of Ohio accrue to the Lake Erie Submerged Lands Fund (O.R.C. 1506.11). From the fund, 50 percent of each rental is paid to the Ohio Department of Natural Resources for administration of submerged lands and for the Coastal Management Assistance Grant Program. The other 50 percent of the rental is paid to the municipality, county, or port authority with jurisdiction over the area for which the lease was executed.

Another alternative is to direct all or a portion of the income from offshore wind energy development into an end use that is directly related to or affected by the development. In

⁷ Tom Graf, MDEQ, personal communication, April 10, 2009.

the case of oil and gas leases on public land, rentals and royalties contribute to the Michigan Natural Resources Trust Fund (Article 9, Section 35 of the Michigan Constitution and Part 19 of the Natural Resources and Environmental Protection Act, 451 PA 1994, as amended), and are applied to purchase of recreation lands and development of recreation amenities on existing public lands. This arrangement links the lost recreation opportunities on the lands developed for oil and gas to increased recreational opportunities for Michigan's residents elsewhere.

Issues for Council Consideration

The following issues are provided for council consideration and are intended only as a starting point for council discussion. Staff expects the council to suggest additional issues and options and develop the final recommendations for inclusion in the report.

- Should the state develop guidance on the mechanisms to be used to assess the value of the lease for offshore wind energy development? For example, these mechanisms could consider the base value of the right to occupy and develop the bottomlands, an ongoing compensation for the continued use and occupation (rental), and a potential royalty related to the energy production at the facility.
- Should Part 325 be amended to set fees for permit and conveyance applications to cover the extensive review necessary to site wind turbines on the Great Lakes?
- Should policymakers be encouraged to consider the end use of the compensation from offshore wind energy development for a range of related activities, including supporting the MDEQ's bottomlands regulatory program; supporting related programs for offshore fisheries habitat; developing recreation opportunities; protecting and managing bottomlands, including shipwreck management; and/or contributing to additional energy efficiency advancements within the state?

PROTECTION OF THE PUBLIC TRUST

Michigan law requires the MDEQ to protect the public trust when applying the provisions of Part 325 (M.C.L. 324.32502). The MDEQ must consider the impact on the public trust when reviewing Part 325 permit and conveyance applications. This consideration includes boating and navigation, as well as the impact on fisheries and wildlife habitat, which are directly related to other public trust uses such as hunting and fishing. In other words, if a proposed private use would substantially and adversely impact the public trust, the MDEQ's regulatory authority requires that the proposal be modified, mitigated, or denied altogether in order to minimize those impacts.

The complex installations and the geographical space requirements involved in developing offshore wind energy will undoubtedly impact the public trust. The extent to which impacts are considered "substantial" (M.C.L. 324.32502) will determine the approval or denial of bottomlands permit and lease applications. Legislative enumeration of the various public benefits that may be provided by offshore wind energy development would provide guidance to MDEQ staff in determining whether offshore wind energy development impacts are substantial and adverse to a degree that warrants a denial of the permit application. Examples of these public benefits may include reduced reliance on fossil fuels, improved air quality, or local economic development related to

manufacturing and installation. Another alternative that would provide guidance to MDEQ staff would be an opinion from the Michigan Attorney General's office that analyzes the potential impacts of offshore wind energy development on the public trust.

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- Should formal direction from the legislature or the executive branch be requested regarding the potential adverse and beneficial impacts of wind energy development on the public trust resources?
- Should an opinion from the Attorney General's office be requested that indicates whether and how development of wind energy on the Great Lakes bottomlands could be sufficiently mitigated to protect the public trust?