

Michigan Great Lakes Wind Council

Meeting 3 Summary

9:30 AM, June 10, 2009
Hampton Inn & Suites
Okemos, Michigan

ATTENDEES

All members of the council were present except Wil Cwikiel and Margaret (Peg) Gale. Frank Ettawageshik participated remotely by Web conference.

WELCOME AND REVIEW OF AGENDA

At 9:35, Skip Pruss welcomed the council and asked the members to introduce themselves for the benefit of the members who were attending for the first time.

GREAT LAKES WIND FROM A DEVELOPER'S PERSPECTIVE

Peter Mandelstam was unable to attend due to a family medical emergency and so his local representative, Michael O'Brien presented for Bluewater Wind. His presentation is available online at: http://www.michiganglowcouncil.org/meeting_materials/061009_meeting_061009.html. Mr. O'Brien emphasized the need for a proactive approach to public communication in wind development. He also stressed the value of building and using partnerships for dissemination of information.

After his presentation, Mr. O'Brien took comments and questions from the council.

- What is the maximum depth at which a collection substation may be placed?
Response: The substation is always located to the shoreward side of the wind farm, which usually places it in more shallow water than the wind turbines. Using current technology, the substation is placed on monopiles in the same way the turbines are installed. Monopile technology currently works best in 30 meters of water or less.
- What is the actual capacity factor expected at Bluewater's offshore wind installation?
Response: In Europe, the offshore facilities are operating at a 40–45 percent capacity factor.
- What is the appropriate size of a contiguous block of bottomlands necessary to be commercially viable for a development?
Response: The necessary area will depend on the size of the installation. Developers need an initially large footprint to study. The actual development is usually placed on the most desirable area within the initial study footprint. A development should be between 350 and 400 megawatts to be eligible for financing, but the actual development footprint will depend on site-specific conditions. The most critical aspect of the area is that it must be contiguous.

- When attempting community outreach, how does one define the local community for an offshore wind development? Is it a statewide community?

Response: The local community can be difficult to define initially. The identification of the local stakeholders tends to be an iterative process. The preferred process is to start with the most inclusive definition of stakeholders and then identify specific interests as sites are selected. Nearby municipal governments and active local groups are important partners.

- How long should data be collected from a meteorological tower before the development plans are compiled?

Response: Datasets over longer time periods are more valuable, but the dataset should include at least one year's data.

- What rate of return does Bluewater Wind expect on its development?

Response: This question should be addressed by Mr. Mandelstam.

- Can you explain the financial model used by Bluewater Wind, including the model data and assumptions for cost of construction, production, and capacity factor?

Response: Some of these answers were provided in the presentation from Meeting 2 by Jeremy Firestone. Mr. O'Brien would like to return to the next Council meeting and conduct a question and answer session on this issue.

- Can satellite data substitute for meteorological tower data for the purposes of financing?

Response: Lenders are conservative and require good meteorological data from a tower at the site. Satellite data can have other value in planning a development.

- How do we balance the state's economic interests and local interests?

Response: Public education is the most important way to build support.

- What was the role of the U.S. Army Corps of Engineers (USACE) in Bluewater Wind's development in Delaware?

Response: The USACE will be the lead federal agency in the Great Lakes, but they did not play a lead role in Delaware because that development was on the outer continental shelf and the Minerals Management Service of the Department of Interior is the lead federal agency.

- What was the capital/debt structure of the Delaware project? What level of credit support was used?

Response: This question should be addressed by Mr. Mandelstam.

- Would a programmatic Environmental Impact Statement for offshore wind in the Great Lakes be favorable?

Response: Absolutely. It would clarify roles of federal agencies.

- Is there any indication whether the USACE or the Coast Guard are in favor of offshore wind development in the Great Lakes?

Response: These agencies will be active in the process. The Coast Guard has been organizing its data for use in reviewing offshore wind development proposals. Both organizations participated in the 2008 dry run exercise.

- What is a reasonable timeline for permitting from the start of site assessment to production?

Response: Seven to ten years.

PROCESS FOR CONSENSUS

At 10:30 AM Bill Rustem presented the process that would be used by the council to determine consensus on recommendations.

MAPPING CRITERIA WORK GROUP RECOMMENDATIONS

Dennis Knapp presented the work group recommendations for macro-level or planning area criteria. He explained that the work group methodically discussed two different levels of criteria:

- Categorical exclusions: those sites that due to existing regulation or potential conflict are off limits for development, and
- Sites of low suitability, or buffer, areas: those sites that may be developable, but will require additional investment in site assessment and/or mitigation.

This method resulted in identification and mapping of the remaining type of area, or what could be considered the “most favorable areas” as requested in the executive order.

Knapp described the buffers and rationale for each of the criteria. He explained that the work group did not address the economics of development, but assumed that technology and engineering would eventually overcome barriers, particularly water depth. The group looked at maps showing shallower areas of less than 45 meters depth and referred to them as “currently technologically feasible” areas.

The mapping criteria work group recommendations are available online at: http://www.michigan glowcouncil.org/meeting_materials/061009/Mapping%20Criteria%206-5%20final.pdf.

Christine Geddes of UM/IFR then presented statewide and regional images from the GIS decision-support tool to show the results of applying the work group’s criteria.

Discussion

After the presentations, the council discussed the recommendations and reached the following conclusions:

- The work group should meet one more time via conference call to resolve outstanding issues and clarify the definition of the three categories.
- The GIS maps should show the results in three colors: red, yellow and green.
- The areas referred to as “low suitability” should be described as buffer locations that are not excluded from development, but that may contain sites that present permitting challenges for a developer unless data collected suggests there is not a substantial negative impact. The council discussed the potential to distinguish between buffer and nonbuffer areas and opportunities for considering a “fast track” permitting process. The work group should consider adding a column to the table that defines the

burden of proof a developer would be required to meet for each criteria. A member asked: Could a developer build in buffer areas if data collected during site assessment suggested there would not be a significant negative impact?

- The setbacks outlined in the recommendations should be equal to a distance instead of greater than a distance.
- The council agreed with the recommendations on coastal airports, harbors and marinas, international and state boundaries, islands, transmission lines, wind resources, and high biological activity.
- The council needs more information on confined disposal areas; specifically, whether they are developable once properly closed.
- The criterion for military radar should follow federal guidelines and should not be a categorical exclusion.
- The buffer for shipping lanes should be revisited with a representative from the shipping industry.
- The Audubon Society should be consulted on the high biological activity and islands criteria.
- The visual buffer should be set at six miles, and should not be a categorical exclusion. Concerns about wind turbine impacts to ceremonial lands are directly related to the view from the ceremonial lands.

The council also discussed whether the work group should identify a few areas (selected from the “suitable/feasible” areas shown in green on the statewide map) that appear optimal for wind development and meet the criteria in a way that their permitting could be put on a fast track. The council recognized that any fast track activity would require enabling legislation.

BOTTOMLAND LEASING AND PERMITTING CRITERIA WORK GROUP RECOMMENDATIONS

Marty Lagina presented the recommendations of the work group to the council. His presentation is available online at: http://www.michiganglowcouncil.org/meeting_materials/061009/meeting_061009.html. The work group’s recommendations are available online at http://www.michiganglowcouncil.org/meeting_materials/061009/Mapping%20Criteria%206-5%20final.pdf. Lagina explained that the work group assumed a minimum site requirement of 20 square miles.

After the presentation, the council presented the following questions:

- How much would the proposed compensation scheme collect from the developer annually?
Response: Roughly \$850,000 annually, if one assumes a 40 percent capacity factor, today’s energy prices, and a 2 percent royalty.
- Should decommissioning be paid for with money collected from royalties?
Response: No, the developer should be responsible for those costs.
- What is the estimate of the cost disadvantage of offshore development compared to onshore development?

Response: It is likely a 200 percent penalty plus the connection costs. It was suggested that there should be no rent or reduced rent on the first developments in order to offset this penalty and encourage development.

- How will the competitive bid be designed?

Response: there should be an initial auction where the bidder pays a bonus (a flat rate during site assessment) and then the rent should be adjusted during negotiation of the lease or construction and operation permit.

Discussion

The council agreed to shorten the time frame for the initial site assessment lease to a period of five years, with a clearly defined assessment schedule and/or objective benchmarks, and an easy renewal if those benchmarks have been met.

The council agreed that the work group should develop a recommendation on whether the royalties should be collected on the wholesale price of energy or the wholesale price plus the value of the renewable energy credits.

The council requested that the work group revisit its recommendations to develop a process in which initial rents and royalties are very low or waived entirely, but that as a development progresses and/or as new developments are approved an agency has the discretion to increase the fees and rates of royalty for subsequent projects.

The work group will meet again by conference call to clarify the remaining issues for the council.

PUBLIC ENGAGEMENT WORK GROUP RECOMMENDATIONS

Jim McGinnis presented the work group's recommendations to the council. His presentation is available online at: http://www.michiganglowcouncil.org/meeting_materials/061009/meeting_061009.html. The work group's recommendations are available at http://www.michiganglowcouncil.org/meeting_materials/061009/Public_engagement-6-5final.pdf.

After McGinnis' presentation, the following comments were presented:

- There should be a significant education effort before any permitting hearings or before the state offers any requests for bids.
- There are several grant-funded projects beginning in the state that aim to assess the conflicts posed by wind development, both onshore and offshore, in different regions of the state.
- Information should be provided to members of the public at all hearings; this may be more valuable, especially in the early stages, than providing the opportunity for the public to comment.

The council agreed with the recommendations of the work group and the staff's attempt to reconcile the public engagement process with the permitting and leasing process recommended by the bottomlands leasing and permit criteria work group.

REPORT PREPARATION AND OTHER NEXT STEPS

Rustem outlined the process for the remaining work group meetings and the development of the draft report before the July 29 meeting. He asked that the council members commit to a full day meeting (9:00 AM to 5:00 PM) on July 29 to allow enough time to thoroughly review the document.

Mike Klepinger asked the group to consider one of the requirements of the executive order that had not been addressed to determine the role of the council after September 1, 2009. The council agreed that there are specific issues that will require additional work after September. Staff agreed to add a section to the draft report that will outline the next steps that are required to move from the recommendations of the report to implementation of offshore wind development. Rustem asked for volunteers to serve on a work group to develop a prioritized list of remaining and continuing activities and their associated costs. This group should ensure that the report accurately reflects the amount of work remaining after the council's initial charge has been completed. This group should also ensure that the document reflects the sense of economic urgency and the awareness of the potential economic implications of wind development in Michigan.

Tom Hickner, James Clift, and Joe Welch volunteered to serve on the work group.

PUBLIC INPUT

Chuck Bauer of Peregrine Properties encouraged the council to create incentives for deep water technology and platform development, and insisted that the technology could be brought to the market faster than most people realize.

Lynn Remington expressed concern that contaminated sediments disturbed during the installation of the monopiles would move downstream and may pose a threat to the public health.

Steve Pugsley commended the council's effort. He urged the council to recommend a series of public open houses modeled after the method used by the state highway department. He stressed the value of an open dialogue in a nonthreatening venue to discuss the benefits of development. He also said that these open houses should span a wide range of hours to accommodate as many members of the public as possible. He suggested the notice requirements should be expansive and that within a predetermined radius of the proposed development, every resident should be individually notified before the open house is held.

Martha MacFarlane urged the council to consult with the Coast Guard on the guidelines for building around aids to navigation (lighthouses). Lighthouses have both navigation value and a cultural and historical value that may be impacted by wind farm development.