ATTENDEES
All members of the council were present except Mr. Skip Pruss, representing the Department of Energy, Labor & Economic Growth.

WELCOME, INTRODUCTIONS, AND REVIEW OF CHARGE
On behalf of Skip Pruss, DELEG Deputy Director Liesl Clark welcomed the council at 10:03 AM and outlined the tasks with which the council has been charged. She indicated the potential importance of the council’s work to position Michigan to be ready to accommodate wind power development in the Great Lakes off-shore areas. Her presentation is available online at http://www.michiganglowcouncil.org/meeting_materials/032509/presentations/Clark.pdf. Clark invited all council members and staff to introduce themselves.

COUNCIL PROCESS, SURVEY RESULTS, AND MEETING PROTOCOL
At 10:15, Bill Rustem of Public Sector Consultants (PSC) reviewed the process that will be used for the council’s deliberations and reviewed the issues council members raised in survey responses. His presentation is available at http://www.michiganglowcouncil.org/meeting_materials/032509/presentations/Rustem.pdf.

A councilmember asked whether there was a defined role for this council at future public meetings around the state. Rustem answered that none had been defined at this time, and the council should focus on the tasks outlined in the charge, including the council’s responsibility to develop a recommended plan for future public engagement strategies.

A council member requested talking points and a PowerPoint presentation about the council that he could present to interested groups. Council staff agreed to provide the council talking points and a presentation that describes the council’s purpose and charge.

A council member suggested that staff should provide a regular update to the council from the Wind Energy Resource Zone Board.

A council member requested updated information from NextEnergy and the Michigan Economic Development Corporation about turbine manufacturing in Michigan.

At 10:35, Rustem outlined the protocol for future meeting operations. He asked the group to review the protocol and indicated they would be asked to adopt it at the next meeting. A council member suggested a change to the protocol deleting the provision that allows alternates to sit for council members. Rustem agreed and the provision will be deleted.
For purposes of this council, only state agencies may send delegates, and that delegate should be the same person throughout the process to maintain continuity.

**U.S. AND EUROPEAN APPROACHES**

Mike Klepinger, Mikinetics Consulting LLC and staff to the council, provided a review of previous work in Michigan, including the Dry Run Permitting Report completed in 2008 and a selection of approaches to off-shore wind permitting used in other locations. His presentation is available online at [http://www.michiganglowcouncil.org/meeting_materials/032509/presentations/Klepinger.pdf](http://www.michiganglowcouncil.org/meeting_materials/032509/presentations/Klepinger.pdf).

A council member asked whether vandalism at offshore wind facilities was a confirmed problem in other locations. Klepinger said that it is not, but that there is a Homeland Security component to the permitting process because turbines may interfere with radar signals.

Klepinger then asked the council to talk about issues they are most concerned with related to offshore wind development. Those issues were categorized broadly into two areas, as follows. During this time, some council members also requested more information from staff on specific topics, which are outlined below.

**Issues related to criteria for permit application review and/or criteria for identifying most/least desirable areas for offshore wind development**

- Public input on criteria and mapping
- Great Lakes fishing/treaty fishing
- Underwater archeological sites
- Ceremonial use of properties (e.g., Garden Peninsula, Native American cemeteries)
- Bottom disturbance during and after construction
- Monitoring (before, during, and after construction)
- Aesthetics – “out of site” or other criteria; visual and sound issues
- National security – radar; Homeland Security permit
- Vandalism
- Shipping industry concerns
- Icing (where, how often, extent, impact on different structures) and waves
- Equipment durability, attachments (e.g., deep-water installations), retirements
- Transmission—installation of cable under water and near shore, maintenance, substations; boating issues

**Issues related to economics, policy, and planning**

- Grid operational issues associated integration of wind resources; energy storage technologies and capability; transmission interconnection and capacity
- Costs, incentives, and subsidies
  - Financing and capital—need to keep in mind and be pragmatic
  - Affordability and subsidies (Hoagland report mentioned as resource)
• Renewable requirements—incentives and other policies

■ Integrated resource planning at the state or regional level
  • Forecasting of supply and demand
  • Costs, benefits, and timing of offshore wind vs. other resource options (e.g., energy efficiency, wind facilities on land, conventional power plants)

■ Positioning of Michigan wind for economic development and manufacturing

■ Related initiatives—Great Lakes Wind Collaborative (Great Lakes Commission); DOE’s 20% by 2030 plan and joint coordinated system plan; Great Lakes Wind Atlas; American Wind Wildlife Institute

**Member requests for more information from staff**

■ Difference between and interaction with Wind Energy Resource Zone Board
  • Response: Staff will prepare a comparison of two bodies.

■ Process, timing, and outcomes of existing installations (e.g., environmental impacts)
  • Response: Presentation scheduled for April 23 meeting.

■ Deep water technologies
  • Response: Staff will post links to industry websites on www.michiganglowcouncil.org.

■ Cost trends
  • Response: Staff will post a selection of reports on www.michiganglowcouncil.org

At 11:45 the council recessed for lunch.

**RISK ANALYSIS AND DECISION MAKING**

At 1:15 PM, Bonnie Ram of Energetics presented to the council on the need for integrated analysis of risk to environmental and human systems. She illustrated this point by discussing some lessons learned in Europe. Her presentation is available online at http://www.michiganglowcouncil.org/meeting_materials/032509/presentations/BonnieRam.pdf.

Council members asked a number of questions including:

■ How are cables buried in these offshore wind developments?
■ Is the substation generally included within the footprint of the offshore wind farm?
■ Is there storage during peak production at offshore wind farms?

In response to a council member’s question on the top three issues for offshore wind development in Michigan, Ram identified: (1) public perception; (2) recreational/aesthetic issues; and (3) issues specific to freshwater systems (e.g., ice, impact of structures on benthic communities, sedimentation shifts). With regard to the last issue, Ram noted that most studies have been conducted for saltwater.
ONTARIO POWER AUTHORITY STUDY

At 2:05 Patrick Henn from Helimax presented to the council on a recent study Helimax conducted for Ontario in which specific sites with potential for wind power generation were identified and prioritized. His presentation is available online at http://www.michiganglowcouncil.org/meeting_materials/032509/presentations/PatrickHenn.pdf.

During the discussion after his presentation, Henn noted that this study did not exclude areas based on their distance away from existing transmission lines; this contrasts with a similar study done in Quebec where areas more than 25 kilometers away from transmission were excluded from the analysis.

COUNCIL COMMENTS, WORK PLAN, AND NEXT STEPS

Rustem welcomed ideas and discussion from the council. One council member indicated that the final report should note the existing barriers to offshore wind development, including the financial barriers. Another council member requested a staff presentation on the economics including incentives and barriers that impact wind development. Another council member asked about models of public and private partnerships that would reduce the cost of entry for offshore wind development.

Council members were asked to review the work plan before the next meeting, when they will be asked to adopt it.

Rustem listed the future meeting dates and said that the details of meeting locations would be e-mailed to the council and posted on the council’s website (www.michiganglowcouncil.org) as they became available.

PUBLIC INPUT

Rustem moderated the public comment period. Three public comments were received.

One comment was anonymously written on a comment card and asked about issues associated with the placement of wind turbines in Great Lakes Areas of Concern.

Mr. Lauer of Paragon Properties asked the council members to consider the importance of their task in light of a potential manufacturing development in Michigan that would bring jobs back to the former automotive manufacturing sites.

Mr. Winton Dahlstrom encouraged the council to consider local opposition to wind power very seriously. He suggested that the council should recommend methods to soften local opposition by (1) creating community ownership, (2) focusing on projects from the standpoint of pollution prevention (3P), and (3) emphasizing the value of the jobs that wind power can bring to communities.