## LEEDCo Project Icebreaker Environmental Assessment (DOE/EA-2045)

Local, State and Federal Agency Comments Received During the Public Scoping Period

| Agency   | Summary of Comment   |
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| US Environmental<br>Protection Agency<br>(EPA) | The EPA letter referenced the list of resource areas and topics published in DOE's Notice of Scoping to be considered in the EA, and indicated that it is a robust list of relevant topics.  EPA had comments on some topics to ensure thorough analysis of impact and consideration of possible mitigation measures:  |
|  | 1) Alternatives - Recommended that the EA summarize the range of alternative sites considered in project development and the rationale for selection of the proposed site and elimination of other sites. Should summarize studies and provide full studies as appendices to the EA or as links on project website. For a demonstration project, the EA should describe what design and operational factors of this project, once built, would be studied further to inform other possible future offshore wind projects in the Great Lakes.   |
|  | 2) Geology, Sediments and Soils - Recommended that the EA describe the quality of sediments and soils in the project's offshore and onshore footprints, and describe how installation of turbine foundations and cables would avoid areas of contamination. Describe how this project would avoid, minimize and mitigate any suspension of sediment in water column and associated impacts to water quality and fisheries. Explain how dredged sediments would be tested for contamination and identify location for disposal of clean sediments.  |
|  | 3) Biological Resources - The EA should summarize and document studies done to date and ongoing coordination with USFWS and ODNR on fisheries, birds, bats, federally/state listed species. Look at tower lighting and turbine operational parameters as means of minimizaling/mitigating impacts to birds and bats. Describe monitoring measures to gauge effectiveness of minimization/mitigation measures. Discuss the extent to which the USFWS and ODNR bird/bat monitoring protocols for land-based uid projects can be adapted to the offshore environment. Also describe how submerged portions of towers will be maintained to minimize habitat use by aquatic nuisance species (zebra mussels, quagga mussels).  |
|  | 4) Air Quality and Climate Change - Recommended that the EA quantify air emissions, including GHGs, associated with onshore and offshore equipment and lake vessels used in construction, operation, maintenance and decommissioning. EPA's Construction Emission Control Checklist is attached and provides strategies that could be used in reducing emissions from the project. Need to analyze effects of climate change on the project (letter provides example.). Also the EA should quantify the air pollution and GHG emissions that would be displaced from existing electric power sources.  |
|  | 5) Traffic and Transportation - In addition to navigation impacts and ice floes, the EA should include discussion of how the project will comply with FAA safety standards.  |
|  | 6) Environmental Justice - Use EPA's website EJSCREEN, free online tool. Also recommended incorporating recommendations from Interagency Working Group for Environmental Justice (see letter).   |
|  | 7) Permitting and Interagency Coordination - Recommended that the EA summarize in a table all permits and approvals that will be required (federal, state, local) and include correspondence relevant to interagency coordination in an appendix.  |
|  | The letter states that USFWS is providing comments pursuant to the Bald and Golden Eagle Protection Act, the Migratory Bird Treaty Act, the Endangered Species Act, and the Fish and Wildlife Act (statutory citations found in the letter). The letter summarizes discussions/meetings with LEEDCo and ODNR that have occurred since 2008, and previous pre-construction wildlife surveys conducted by LEEDCo. <u>USFWS provides comments under various categories:</u> 1) General Comments - USFWS states that because of unknown consequences of developing offshore wind energy in Great Lakes, the pre- and post-construction evaluations of potential impacts on wildlife much meet greater standard of rigor than land-based wind projects. USFWS states that it is essential to have scalable pre- and post-construction studies to evaluate impacts.  2) Migratory Bird Comments - USFWS recommends that LEEDCo develop a Bird and Bat Conservation Strategy to address pre- and post-construction monitoring to assess risk to migratory birds and bats and to identify measures to minimize risk and identify potential mitigation actions if risk is too high. USFWS states that the data from the 2010 radar study is not sufficient to inform risk and that until they have the results of new radar studies to be conducted in 2017, they cannot assess the potential impact of the project on migratory birds.  3) Bald Eagle Comments - USFWS is working with LEEDCo to develop study protocol that will inform bald eagle risk during the winter. Until this study is completed, USFWS cannot assess the potential |
|  | impact of the project on bald eagles.  4) Endangered Species Comments - The project does not provide suitable habitat for most of the listed species. There may be some concern about impact during migration for certain species; however,  |
|  | additional acoustic surveys proposed by LEEDCo will help evaluate risk.  5) Fisheries Comments - Until studies developed jointly between ODNR and USFWS are complete, USFWS is unable to evaluate the potential impacts of the project on interjurisdictional fisheries.   |
|  | 6) Bat Comments - USFWS is working with LEEDCo to develop a new radar and acoustic monitoring protocol that will evaluate bat activity within the project area. Until these 2017 studies are complete, USFWS is unable to evaluate the potential risk to bats from the project. USFWS requests that if project is constructed, they curtail turbines during nights with low wind speed to reduce bat mortality.  |
|  | 7) Post-Construction Monitoring - Project needs valid post-construction monitoring plan that is approved by ODNR and USFWS.  |
|  | 8) NEPA Comments - USFWS provides citations from CEQ NEPA regulations and argues that the project warrants an EIS-level analysis and recommends DOE conduct an EIS, not an EA, for the project.  |
|  | The letter provides input from the NOAA Great Lakes Environmental Research Laboratory (GLERL) on scope of the EA for the Porject. Many of the issues that NOAA believes should be addressed were listed in the 9/14/16 Notice of Public Scoping.  Other recommendations for including in the EA:   |
|  | 1) Cultural resource review should include shipwrecks and other submerged maritime artifacts, coastal hazards issues should include consideration of the effects of ice and storms on installation. EA should also address consistency with Ohio Coastal Management Program as required by CZMA.   |
|  | 2) Other recommendations from NOAA scientists: Cable design and connection to the six structures should permit the attachment of physical, biological and water quality monitoring sensors for real-time monitoring (specs for connections listed in the letter); Impacts of ice and storms on the structures should be considered to prevent damage/failure.  |
|  | 3) A document "Offshore Wind Energy: Understanding impacts on Great Lakes Fishery and Other Aquatic Resources" is attached to the letter. The attached document supports how complex and uncertain the impacts are but makes the following suggestions: (1) a second workshop for fishery experts, (2) timely sharing of results, (3) advisory committee to advise regulators and managers.  |