

Environmental Siting & Permitting for Wind Energy in Minnesota

*Andrea Moffatt, PWS
Senior Environmental Scientist
WSB Engineering*

Overview

- ž Introduction
- ž Siting and permitting process in MN
- ž Current issues

Introduction

Andrea (Andi) Moffatt, PWS
WSB Engineering
701 Xenia Ave – Suite 300
Minneapolis, MN 55416
763-287-7196
amoffatt@wsbeng.com

Siting & Permitting Process

ž Two agency players

- Public Utility Commission (PUC)
- Dept of Commerce – Office of Energy Security (OES)

Siting & Permitting Process

- ž LWECS (5 MW or greater) requires permit from PUC
 - Site permit application is similar to State MEPA
 - May also require local approvals or meet local standards
- ž SWECS (less than 5MW) may require local permit
- ž County can assume jurisdiction for 5-25 MW projects

<http://energyfacilities.puc.state.mn.us/wind.html>

Siting & Permitting Process

ž MN PUC LWECs process handout

Current Issues

- ž Airports
- ž Noise
- ž Flicker
- ž Birds and bats
- ž Federal issues with T&E and fed land

Studies for Minnesota

- ž “Avian Monitoring Studies at the Buffalo Ridge, Minnesota Wind Resource Area: Results of a 4-Year Study”, September 2000.
- ž “Bat Interactions with Wind Turbines at the Buffalo Ridge, Minnesota Wind Resource Area: An Assessment of Bat Activity, Species Composition and Collision Mortality”, November 2003.
- ž “Public Health Impacts of Wind Turbines: An Evaluation of the Potential Health Effects of Low Frequency Vibrations and Sound Associated with Wind Turbines, May 2009

Wind Permitting Tips

- ž Get ahead of environmental issues
- ž Early coordination with local, state, and federal agencies is key
- ž Communicate with OES/PUC early and often