Description of Qualifier Exam
for the Ph.D. Program in
Wind Energy Science, Engineering and Policy (WESEP)
Revised January 3, 2017

Objective of exam: The objective of the qualifier exam is to determine if the student is able to perform research at the level required by the Ph.D. degree.

Expected time frame of exam: The qualifier exam is to be administered during the third full semester following the students entering the program.

Evaluation committee: The evaluation committee is comprised of four members of the WESEP graduate faculty. The initial committee (for academic year 2013-2014) will be the members of the WESEP Core Committee (Jackman, McCalley, Sarkar, Takle). Two members will be replaced at the end of every academic year while retaining two members from the WESEP core committee for ensuring consistency. The evaluation committee will be the same for all students taking the qualifier exam during a given academic year; this facilitates consistent evaluation from one student to the next; it also facilitates faculty understanding of the breadth of research ongoing within the WESEP program. A member of the evaluation committee who is also major professor of a particular student being examined will be recused during committee deliberations pertaining to that particular student.

Exam format: The student submits a 5-7 page research paper one week in advance and provides a 15 minute oral summary of the paper, followed by approximately 15 minutes of questioning by the evaluation committee. The qualifier exam is "open," i.e., anyone may attend. The major professor is particularly encouraged to attend. The student may be questioned on the contents of the submitted paper and the presented materials, information from graduate courses taken to date (particularly fundamental concepts), and research methods and approaches.

Research paper: Students must develop a research problem; it is encouraged that the developed problem be related to their dissertation, either a sub-problem to it or an attempt to articulate their dissertation problem itself. The research paper must include a description of the problem and its relevance/importance with respect to wind energy, a review of relevant literature, methodology, results, and conclusions. The student should drive the idea and area of work but the major professor can provide guidance.

Exam result: The result of the exam will be either pass or fail. A student not passing can repeat once. No third attempt is allowed.