OFFSHORE WIND ENERGY
Course No. ENG5402.01
Vermont Law School
Summer Session 2023, Term 1

Friday, June 2, 2023: 4:00-6:00 PM (208 Oakes Hall)
Saturday, June 3, 2023: 9:00 AM - 11:30 AM & 1:30 PM - 4:00 PM (208 Oakes Hall)
Sunday, June 4, 2023: 9:00 AM - 11:30 AM & 1:30 PM - 4:00 PM (208 Oakes Hall)

Joshua L. Belcher

Syllabus and Course Information

1. **Course Overview:** Offshore wind development in the US is growing at a rapid pace as companies pour hundreds of millions of dollars to obtain offshore leases from the federal government and the right to invest billions more to develop, construct and operate massive offshore wind farms. This course will examine the federal statutory and regulatory frameworks that govern offshore renewable energy leases and the permitting requirements associated with project development and construction and the ways in which they have been challenged in the courts. The instructor is outside offshore permitting counsel to a number of projects currently under development. Students completing this course will obtain a firm understanding of the permitting framework for offshore wind projects and the potential legal challenges associated with their development, construction and finance.

2. **Materials:** Materials are available on the course website on the TWEN site. Email Courtney Collins (ccollins@vermontlaw.edu) if you need assistance accessing this site.

3. **Examination:** Open book, take home. Further detailed instructions will be provided at the end of the course.

4. **Instructor Contact Information:**
   - Office Phone: (703) 470-6250
   - E-mail: jbelcher@vermontlaw.edu
   - LinkedIn: https://www.linkedin.com/in/jlbelcher

5. **Course Requirements:**
   - **Class Attendance:** Vermont Law School (VLS) requires that you attend class. We will circulate the roll at each class for your signature. Your signature without amendment on the roll indicates that you attended the entire class period. Anyone who is more than five minutes late for class without an acceptable excuse, or anyone who is more than five minutes late for two classes for any reason, will be marked absent for the class.
   - **Preparation:** This is a reading-intensive course covering multiple and complex areas of law. So that we can have a meaningful discussion of the issues, you are expected to come to class fully prepared by reading all the required materials in advance. Extensive materials have been provided in the digital course packet, but note the required reading often refers only to specific sections and subparts of the provided statutes and regulations. You will be held responsible for the contents of all required reading materials on the final exam.
• **Final Exam:** There will be a written final examination. This examination will be take home, open book. Performance on the exam will be a major determinant of your grade in the course.

• **Conduct/Honor Code:** You are expected to conduct yourself in a professional manner throughout all aspects of the course. You are expected to abide fully by the VLS Honor Code.

• **Class Participation:** A portion of your grade will be based on "class participation." Note that participation is not defined by the quantity but rather the quality of your participation. Please plan to be an active but respectful member of the class!

6. **Grading:** Your grade in this course will be based on the following:

   • Class Participation: 40 percent
   • Final Examination: 60 percent

7. **Schedule and Required Readings:**

   **CLASS 1**
   Friday, June 2, 2023: 4:00 PM to 6:00 PM

   **US OFFSHORE WIND: INTRODUCTION TO THE REGULATORY FRAMEWORK**

   We will use the first part of Class 1 to get acquainted personally and professionally and to discuss the learning objectives for the course. Following introductions, we will discuss at a high level the various laws and policies applicable to offshore wind in the US, including economic drivers and the framework of federal and state laws governing permitting, construction and operations, which we will explore in greater detail over the following two days.

   **Reading:**

   • **Required:**
     - BOEM, Environment – Regulatory Framework and Guidelines ([link](#))
     - DOE, EERE, Top 10 Things You Didn't Know About Offshore Wind Energy ([link](#))
     - DOE, EERE – How do Wind Turbines Work? ([link](#))

   • **Recommended:**
     - US Offshore Wind Power Economic Impact Assessment (AWEA, Mar. 2020)
     - BOEM, Renewable Energy – Regulatory Framework and Guidelines ([link](#))
     - NYSERDA, Offshore Wind 101 ([link](#))
     - CNN, The Future of Offshore Wind Energy in the US ([link](#))
     - Windpower Engineering & Development, *Comparing offshore wind turbine foundations* ([link](#))
     - Windpower Engineering & Development, *Vineyard offshore project will use GE Haliade-X turbines* ([link](#))
     - U. Delaware & DOE, *Video: Offshore Wind - Industrializing Development to Reduce Cost* ([link](#))
**CLASS 2**  
Saturday, June 3, 2023: 9:00 AM to 11:30 AM

**THE PRIMARY FEDERAL LAWS GOVERNING OFFSHORE WIND**

Class 2 will begin a deeper dive into the primary federal laws governing the process for leasing portions of the Outer Continental Shelf for offshore wind projects, starting with the key authorizing statutes and implementing renewable energy program regulations promulgated by the Bureau of Ocean Energy Management.

**Reading:**

- **Required:**
  - Outer Continental Shelf Lands Act (OCSLA), Sections 1331, 1332 & 1337(p)
  - DOI, “Secretary’s Duty to Prevent Interference with Reasonable Uses of the Exclusive Economic Zone, the High Seas, and the Territorial Seas in Accordance with Outer Continental Shelf Lands Act Subsection 8(p), *Alternate Energy-related Uses on the Outer Continental Shelf*” (Dec. 2020)
  - DOI, “Secretary’s Duties under Subsection 8(p)(4) of the Outer Continental Shelf Lands Act When Authorizing Activities on the Outer Continental Shelf” (April 2021)
  - Holland & Knight, Bureau of Ocean Energy Management Proposes Amendments to Modernize Offshore Wind Regulations (January 31, 2023) ([link](#))
  - Vineyard Wind, Lease OCS-A 0501 (pp. 1-7 & Addendum C)
  - Site Assessment Plan, Vineyard Wind (pp. 3-20; 62-69) ([link](#))
  - Construction and Operations Plan, Vineyard Wind (Vol. 1, Sec 1.6 & Table) ([link](#))

- **Recommended:**
  - Excerpt from EPAct 2005
  - BOEM, Governing Statutes ([link](#))
  - BOEM, Lease and Grant Information ([link](#))
  - *OCS Renewable Energy Leases, Map Book* (BOEM Mar. 2021) ([link](#))
  - Inside Clean Energy: Explaining the Record-Breaking Offshore Wind Sale (Mar. 3, 2022) ([link](#))

---

**CLASS 3**  
Saturday, June 3, 2022: 1:30 PM to 4:00 PM

**OTHER PERMITS AND APPROVALS**

Class 3 will consider the key federal permits outside of BOEM’s purview that proceed in parallel with the consideration and approval of an offshore wind project’s Construction and Operations Plan.

**Reading:**

- **Required:**
  - Construction and Operations Plan, Vineyard Wind, Vol. 1, Sec. 5 ([link](#))
  - Migratory Bird Treaty Act (MBTA) (16 USC Subch. II), Sections 703(a), 707
  - Endangered Species Act of 1973 (ESA), Sections 1536, 1538(a) and 1539(a)
  - NOAA Fisheries, Section 7: Types of Endangered Species Act Consultations in the Greater Atlantic Region ([link](#))
- ESA Interagency Cooperation (50 CFR Part 402), Subparts A and B
- Marine Mammal Protection Act of 1972 (MMPA), Sections 1362, 1371(5)(A)(i) and (D), 1372(a) and 1374(a)-(b)
- Regulations Governing Marine Mammal Takes (50 CFR Part 216), Subpart I
- Rivers and Harbors Act (RHA), Section 403
- Clean Water Act (CWA), Section 1344
- USACE Permit Regulations, 33 CFR Parts 322, 323, Sections 325.1, .2 and .4, and Appendix B
- Coastal Zone Management Act (CZMA), Sections 1456 and 1465
- CZMA Federal Consistency Regulations (15 CFR Part 930), Subparts A and D

- Recommended:
  - Vineyard Wind ROD (Section 1, pp. 3-10) (link)
  - NOAA Fisheries, Incidental Take Authorizations Under the Marine Mammal Protection Act (link)
  - BOEM, Coastal Zone Management Act (link)
  - NOAA, CZMA: Federal Consistency Overview (Feb 24, 2020) (link)

**CLASS 4**
Sunday, June 4, 2023: 9:00 AM to 11:30 AM

**ENVIRONMENTAL REVIEW**

Class 4 will continue our review of other key federal permits and their common environmental review process under the National Environmental Policy Act.

**Reading:**

- Required:
  - CRS, The Legal Framework of the National Environmental Policy Act (link)
  - National Environmental Policy Act (NEPA) (42 USC 4321 et seq.)
  - NEPA Implementing Regulations (40 CFR Subchapter A) Parts 1500-1502
  - Kern v. US Bureau of Land Management, 284 F. 3d 1062 (9th Cir. 2002) (link)

- Recommended:
  - CEQ, A Citizen’s Guide to NEPA (link)
  - National Historic Preservation Act (NHPA) Section 106
  - NHPA Section 106 Regulations (36 CFR 2021 Part 800)
  - The Federal Permitting Improvement Steering Council & FAST-41 (link)

**CLASS 5**
Sunday, June 4, 2023: 1:30 PM to 4:00 PM

**PROJECT RISKS & JUDICIAL CHALLENGES**

Offshore wind energy projects face multiple risks throughout the stages of development, construction and operation that must be carefully managed. One of the key hurdles is whether a project can withstand the scrutiny of the inevitable judicial challenges to the project authorizations issued by the various federal agencies. Class 5 will examine these various risks and challenges and how they can be anticipated and managed.
Reading:

- Required:
  - Cape Wind Decision
  - RODA Complaint for Declaratory and Injunctive Relief (DDC Jan. 31, 2022) (pp.19-67)
  - Memorandum & Order, Nantucket Residents Against Turbines v. BOEM (D. Mass May 17, 2023) (focus on Section VI, skim the rest)

- Recommended:
  - CRS, An Introduction to Judicial Review of Federal Agency Action (Dec. 7, 2016) ([link](#))
  - Seafreeze Complaint for Declaratory and Injunctive Relief (DDC Dec. 15, 2021)

8. **Further Information/Updates:** This course syllabus provides tentative assignments for this course and may be amended depending on how the class develops. Additions or modifications to assignments will be announced in class. This is designed to be a formative, collaborative class. In other words, unless you take responsibility for your own learning, you will not get much out of this course.
OFFSHORE WIND ENERGY
Course No. ENG5402.01
Vermont Law School
Summer Session 2023, Term 1

Course Materials

CLASS 1
US Offshore Wind Power Economic Impact Assessment (AWEA, Mar. 2020) .................................. 1B

CLASS 2
Outer Continental Shelf Lands Act (OCSLA) (43 USC Ch. 29, Sub. III) ........................................ 2A
DOI, “Secretary’s Duty to Prevent Interference with Reasonable Uses of the Exclusive Economic Zone, the High Seas, and the Territorial Seas in Accordance with Outer Continental Shelf Lands Act Subsection 8(p), Alternate Energy-related Uses on the Outer Continental Shelf” (Dec. 2020) .......................................................... 2B
DOI, “Secretary’s Duties under Subsection 8(p)(4) of the Outer Continental Shelf Lands Act When Authorizing Activities on the Outer Continental Shelf” (Apr. 2021) ...................... 2C
BOEM Renewable Energy Program Regulations (30 CFR Part 585) ................................................ 2D
Vineyard Wind, Lease OCS-A 0501 ................................................................................................. 2E
EPAct 2005 (excerpt) .................................................................................................................. 2F
OCS Renewable Energy Leases, Map Book (BOEM Mar. 2021) .................................................... 2G

CLASS 3
Migratory Bird Treaty Act (MBTA) (16 USC Subch. II) ................................................................. 3A
Endangered Species Act (16 USC Ch. 35) ..................................................................................... 3C
ESA Interagency Cooperation (50 CFR Part 402) ........................................................................ 3D
Marine Mammal Protection Act (16 USC Ch. 31) ...................................................................... 3E
Regulations Governing Marine Mammal Takes (50 CFR Part 216) ............................................. 3F
Rivers and Harbors Act (RHA), Section 403 ............................................................................. 3G
Clean Water Act (33 USC Ch. 26, Sub. IV) ................................................................................ 3H
Permits for Structures or Work in or Affecting Navigable Waters of the United States,
33 CFR Part 322 ......................................................................................................................... 3I
Permits for Discharges of Dredged or Fill Material into Waters of the United States,
33 CFR Part 323 ......................................................................................................................... 3J
Processing of Department of the Army Permits, 33 CFR Part 325 ............................................. 3K
Coastal Zone Management Act (CZMA) (16 USC Ch. 33) ......................................................... 3L
CZMA Federal Consistency Regulations (15 CFR Part 930) ....................................................... 3M

CLASS 4
National Environmental Policy Act (NEPA) (42 USC 4321 et seq.) .............................................. 4A
NEPA Implementing Regulations Desk Reference (40 CFR Subchapter A) ........................................ 4B
National Historic Preservation Act, Section 106 (54 USC Sec. 306108) ........................................ 4D
NHPA Section 106 Regulations (36 CFR 2021 Part 800) ............................................................. 4E
BOEM, National Environmental Policy Act (NEPA) Substitution for Section 106 Consulting Party Guide (May 4, 2021) ................................................................. 4F

CLASS 5
Public Employees v. Hopper, 827 F. 3d 1077 (DC Cir. July 5, 2016)(Cape Wind) ...................... 5A
RODA Complaint for Declaratory and Injunctive Relief (DDC Jan. 31, 2022) ................................. 5B
Seafreeze Complaint for Declaratory and Injunctive Relief (DDC Dec. 15, 2021) ....................... 5C
Memorandum & Order, Nantucket Residents Against Turbines v. BOEM ................................. 5D