Offshore Wind Energy

Professor Joshua Belcher Summer 2023 – Term 1

First Assignment:

Join the TWEN class.

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:
 - Citizen's Guide to the Bureau of Ocean Energy Management's Renewable Energy Authorization Process (BOEM, Dec. 2016)
 - BOEM, Environment Regulatory Framework and Guidelines (<u>link</u>)
 - DOE, EERE, Top 10 Things You Didn't Know About Offshore Wind Energy (link)
 - DOE, EERE How do Wind Turbines Work? (<u>link</u>)
- Recommended:
 - US Offshore Wind Power Economic Impact Assessment (AWEA, Mar. 2020)
 - BOEM, Renewable Energy Regulatory Framework and Guidelines (<u>link</u>)
 - NYSERDA, Offshore Wind 101 (link)
 - CNN, The Future of Offshore Wind Energy in the US (<u>link</u>)
 - Windpower Engineering & Development, Comparing offshore wind turbine foundations (<u>link</u>)
 - Windpower Engineering & Development, Vineyard offshore project will use GE HaliadeX turbines (<u>link</u>)
 - U. Delaware & DOE, Video: Offshore Wind Industrializing Development to Reduce Cost (<u>link</u>)