

ECE 333 Green Electric Energy

Homework 3

Due Tuesday, September 23, 2014

Reading:

Text: From Masters' 2nd edition

- chapter 7 (sections 7.1,7.2,7.4,7.5.1 and 7,6)

Solve the following problems:

Text: 7.1 and 7.2

Problem a. **Compare** the total wind energy at 0°C , 1 atm of pressure, contained in 1-m^2 surface area under the following wind patterns:

(i) 100 hours of 10 m/s winds;

(ii) 50 hours of 8 m/s winds plus 50 hours of 12 m/s winds

What are the implications of your findings? Can you draw a generalization concluded on the average wind speed?