

Hunter College of the City University of New York
Department of Geography
Geography of New York State
Exercise 9– EXTRA CREDIT

Wind Power Potential

Due no later than the date of the midterm exam.

The purpose of this exercise is estimate the potential of locations within your counties to produce energy using the wind. NYSERDA, a NYS governmental agency, sponsors renewal energy projects that do not use fossil fuels or contribute to global emissions.

INSTRUCTIONS to access the wind energy potential reports: To see if your counties are potential economically viable producers of electricity using wind turbines go to <http://nyswe.awstruepower.com/>.

- Randomly select several locations within each of your counties. Click on a town name. *Consult your road map for the names of places within your counties.*
- For each location selected, click **Generate Report**.
- Then select **Customer Report**.
- Add a fictitious landowner name/location in the blank boxes. (*You can use Thomas Hunter, NY, NY!*)
- Click **I Agree** then click **Submit**.
- The report generated will show wind speed and energy potential at the location and indicate the location's potential as a power producer from poor to excellent.
- The wind rose will show predominant wind direction and percent of wind energy by direction.
- Select only **one** location from each county. Use the **Printer Friendly** button to print each report.

ASSIGNMENT: The “State of Wind Power” in your counties.

The NYSERDA Commissioner has assigned you the task of locating a wind farm in one of your assigned counties.

1. Using the Wind Energy Potential reports generated at <http://nyswe.awstruepower.com/> make a statement about each county's potential to produce energy using wind turbines.
2. From the Wind Energy Potential reports (table and wind rose), describe the characteristics of wind flow at the locations you selected.
 - a) What is the predominant direction of flow?
 - b) How strong are these winds?
 - c) How reliable are these winds?
3. Which of your counties has the greatest potential to use wind power to produce low cost energy?
4. Select one location from Question 2 above and explain why you would or would not recommend it to be designated the site of the next wind farm.

REMEMBER to attach the three reports to your write up.