“Wind Energy in Iowa” and “Why Wind Energy?” Worksheet

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Iowa has the best natural wind resources in the nation – TRUE or FALSE
2. Iowa has 700-799 kV AC lines that help it to deliver wind generated electricity to more populous eastern states – TRUE or FALSE
3. South East Iowa including the Cedar Rapids area has some of the best wind resources in the state - TRUE or FALSE
4. Wind speeds in Iowa are strongest during which season \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
5. Wind speeds in Iowa are weakest during which season \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. This season has the greatest electrical demand \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
7. What percentage of Iowa’s power comes from wind?
8. Iowa is the \_\_\_\_\_\_\_ (1st, 2nd, 3rd, 4th, 5th, etc.) state in the nation for total wind power generation.
9. MidAmerican Energy is the \_\_\_\_\_\_\_ (1st, 2nd, 3rd, 4th, 5th, etc.) largest utility owner of wind turbines.
10. Wind Energy is close to being cost competitive with fossil fuels - TRUE or FALSE
11. Some of the byproducts of coal burning include: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
12. The DOE has determined that \_\_\_ % of the country’s energy could be generated by wind by 2030.