

Reading

- BPS Chapter 0, Chapter 1.

Exercises

BPS Chapter 1 # 23, 24, 25, 28–34, 37, 41

R Project US Nuclear Reactors

This project uses the `us-reactors.csv` file containing data on active nuclear reactors in the United States.

1. There are eight variables in this data set. Identify them all and describe as quantitative or categorical.
2. What proportion of reactors are PWR (Pressurized Water Reactor), and what proportion are BWR (Boiling Water Reactor)?
3. Display the number of reactors by region in a graphical chart. Give your chart a title. **Print it.**
4. Plot the distribution of the Licensed Megawatts for these reactors. What is its shape and approximate center?
5. The output of each reactor is the Licensed Megawatts times the Capacity Factor. Plot this distribution and describe its shape and center. How does this compare your answer to question 4?
6. Compute the build time of each reactor (the difference between the construction permit year and the start of commercial operations). Plot the distribution of build times and describe it.
7. Compute the age of each reactor (based on its start of commercial operation). Make a chart displaying the age of US nuclear reactors. **Print it.** Describe what you see.