Meeting: 1003, Atlanta, Georgia, MAA CP L1, MAA Session on Using Real-World Data to Illustrate Statistical Concepts, I

1003-L1-588  Elaine Thompson Hale* (thompson@che.utexas.edu), The University of Texas at Austin, Department of Chemical Engineering, 1 University Station C0400, Austin, TX 78712-0231. Power Outage Data for the Statistics Classroom.

Although not directly available on the web, data on power outages may be obtainable from some power companies. For instance, I requested a year’s worth of data on power outages from a local, publicly owned company, and they were kind enough to oblige. The data lists each outage, its suspected cause, its duration, and the number of customers affected. While I asked my students to use descriptive statistics and graphical methods to determine and illustrate which causes of outages had the most impact, one could also use statistical inference to compare various measures (count, average duration, average amount of customer time lost) across causes, or could obtain and compare data from several different companies (maybe in places with vastly different climates or population densities). (Received September 23, 2004)