1 - Data Cleaning

Electricity Contract Selection

INTRODUCTION

Just over a year ago you had a smart electricity meter installed at your home. This particular model of smart meter reports your usage to your electricity provider every hour. Your electricity contract is due for renewal and being a top financial analyst you decide to identify which contract will minimize your annual electricity cost.

There are 3 different types of electricity contracts available to you:

• **No Flex:** The cost per kWh of electricity is constant for the entire year

• **Monthly Flex:** The cost per kWh of electricity fluctuates depending on the month

• **Hourly Flex:** The cost per kWh of electricity fluctuates based on the time of day

    To decide which contract is optimal, you decide to compare the costs under each of the contracts assuming your usage remains exactly the same as last year. You've contacted your current electricity supplier to obtain your electricity usage history for the last year. Unfortunately, they provided it to you in a poorly structured and unsorted format, so you will need to clean it up prior to doing your analysis.
In the data the hour field identifies when the hour starts, so 8AM would be from 8:00AM until 8:59AM.

SUPPORTING DATA

You've placed your usage history and the specifics of each of the electricity contracts into the supplied workbook. Your usage history is located on the "Usage" sheet while the specifics about each of the electricity contracts