**Data Tables for the United States Power Grid Analysis**

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* Edge\_List.csv
  + Line\_ID |Start\_Object\_ID | End\_Object\_ID
    - Start and End Object IDs are unique identifiers for power plants and substations
    - Line ID is a unique identifier for the subsections of the electric transmission lines. The electric transmission line with have a numeric unique ID. If there are multiple pairs of start/end nodes along the line, each section of the line will be the unique ID followed by a letter (ex. 1234a, 1234b). If there are more than 26 node pairs on a line, the letters will double (ex. 1234aa, 1234bb).
    - This data contains all information about the connectivity of the network
* Line\_Length\_Voltage.csv
  + Line\_ID | Voltage | Line\_Length\_Meters
    - Line ID is a unique identifier for the electric transmission lines (not including letter suffixes)
    - Voltage is the voltage of the specified line (-999999 if unknown)
    - Line length in meters is the length of the total line in meters (not the subsections of the lines between node pairs).
* Object\_Longitude\_Latitude.csv
  + Object\_ID | Longitude | Latitude
    - Object ID is the unique ID of the powerplant or substation in the network
    - Longitude and Latitude are the measurements for that object
* Sub\_Counties\_States.csv
  + Sub\_ID | County | State
    - Sub ID is the unique ID of the substation in the network
    - County and state are the county and state that substation is in and, therefore, serves demand for.
      * If a substation serves demand for more than one county, the county value will be a string of a list of the counties the substation serves for (ex. “[Montgomery, Radford”]) and the state value will be a string of a list of the states those counties are in (ex. “[Virginia, Virginia]”)
* County\_State\_Demand.csv
  + County | State | Estimated\_Usage\_2016
    - This table gives the estimated demand for each county and state in total MW for 2016.
    - The estimation was based off of the electric demand per person in California (which there was data for) and inferred based on population counts for counties in the rest of the United States.
* Plant\_MWProduce\_PrimarySource.csv
  + Plant\_ID | Total\_MW | PrimSource
    - Plant ID is the unique identifier for each power plant in the network
    - Total MW is the total amount of Megawatts the plant can produce
    - Primary source is the type of power plant (solar, wind, geothermal, etc.)