## MSCI 718 STATISTICS FOR DATA ANALYSIS

## Analysis of Ontario power Demand

**Project Team Members:**

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**Data description and Data source:**

The data that we have selected deals with Ontario’s Hourly demand for electricity. The data is collected from <http://www.ieso.ca/en/power-data/data-directory> which is used for the model and analysis. The dataset contains Date, Hour, Total Market demand and Ontario demand. For the scope of our analysis we are only including Date, Hour and Ontario demand. The dataset contains hourly electricity demand of Ontario for the past 15 years from 2002 to 2017.

### Date:

### The field represents date of the year in DD-MON-YY format. The date ranges from 01-MAY-02 to 31-DEC-2017.

### Hour:

### The hour field represents the hour of the day from 1 to 24.

### Ontario Demand:

### Demand here refers to the amount of electricity required in Ontario at any given hour. Ontario demand represents the total energy that was supplied from the IESO-administered market for the sake of supplying load within Ontario.

**Data Range and forecast:**

We have selected 15 years and 5 months of data from 2002 to 2017 for the demand of electricity in Ontario region. The date ranges from 1-May-2002 to 31-Dec-17. The training set will consist of 75% of the data ranging from the year 2002 to 2013 and the rest of the data, from the year 2014 to 2017 will be tested on the model that we find from the training set. The demand for the year 2018 will be forecasted by using the model that we obtain based on the test set.