Hi Sir,

I hope you are happy and healthy.

I am writing this email for PowerCo.'s operations in SME segment where they want us to work for them and help them out with Customer Churn and their business strategy. For PowerCo's operations in SME segment, we can approach the problem by proposing a hypothesis of Customer Churn Probability and effect of prices on the same. We can include analysis of customer behaviour as Gas and Electricity are Inelastic products. The input data that we need from the client should include at least the following data:

- 1. Customer Churn Data: The data representing if a customer is churned or not. Binary data format will be useful for churn.
- 2. Customer Data: Type of Customer(Coorporate, SME, residential), Days since the customer joined, Energy Usage by the customer, Location of the customer and other demographics of the customer.
- 3. Historical Data of Gas and Electricity: Price of the utility, Density of Gas, Any grievances reported by the customers.

The data can be in the raw format and we can feature engineer the dataset as we want and according to our need. We will work with Binary classification model with specific kernel as Customer Churn will be yes or no after finding the probability of customer churning. We can deploy different models for the same and test their accuracy for the same and then provide 20% discount to the customers which are highly probable to be churned in couple of months. The selected model will help us to interpret the relation of price with customer churning and thus we can help PowerCo. with their business discounting strategy.

Regards Ashish