Dear Associate Director,

We would need to model customer churn probabilities and derive the effect of prices on churn rates in order to test the hypothesis that churn is driven by price sensitivity. To build the following models, we'll need the following information.

Data required:

1. Customer data - this should include information about each client, such as their industry, historical electricity consumption, and the date they became a customer, among other things.
2. Churn data - this should show whether or not a customer has churned.
3. Historical price data - which should show the prices charged by the client to each customer for both electricity and gas at granular time intervals.

Once we have the data, we must engineer features based on the data and construct a binary classification model (e.g., Logistic Regression, Random Forest, Gradient Boosted Machines, to name a few), selecting the most appropriate model based on the complexity, explanability, and accuracy of the models. We would be able to understand the direction and magnitude of the impact of prices on churn rates, as well as the relative importance of prices in comparison to other factors, based on the model we chose. Furthermore, the model would enable us to assess the client's proposed discounting strategy's business impact.

Sincerely,

Pattarapon Buathong