Findings:

The analysis yielded several key findings. First, approximately 10% of customers were found to have churned. Additionally, the consumption data exhibited a high degree of skewness, requiring preprocessing steps before modeling. It was also noted that outliers present in the data should be addressed prior to modeling. Furthermore, there was a low correlation observed between price sensitivity and churn, indicating the need for feature engineering to enhance the predictive capability of price sensitivity. To improve churn prediction, the analysis suggests considering competitor price data, evaluating average utility prices across the country, and analyzing customer feedback, including complaints, calls, or feedback provided to PowerCo.

Suggestions:

1. Consider competitor price data: It is recommended to take into account the prices offered by competitors. Customers may be more inclined to switch to a different provider if they are presented with a better deal from a competitor, even if their current provider has reduced their prices.

2. Clarify the meaning of zero in price data: Understanding the reason behind zero prices is crucial. If zero prices represent free power or energy, it is important to ascertain the rationale behind such pricing.

3. Explore other potential factors, such as customer satisfaction: Evaluating customer satisfaction levels is vital. If providers consistently deliver excellent customer service, it is less likely that an increase in prices will result in customer churn.