

Project Design Phase-I
Proposed Solution Template

Date	31 January 2026
Team ID	LTVIP2026TMIDS24158
Project Name	Plugging into the Future: An Exploration of Electricity Consumption Patterns Using Tableau
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Electricity consumption data is large and complex, making it difficult for stakeholders to identify usage patterns, peak demand periods, and seasonal variations. The lack of clear visualization limits effective energy planning and decision-making.
2.	Idea / Solution description	The project proposes an interactive Tableau dashboard that visualizes electricity consumption patterns across time, seasons, and regions. It enables users to analyze trends, identify peak usage periods, and gain actionable insights through filters and visual analytics.
3.	Novelty / Uniqueness	The solution combines time-series analysis, seasonal insights, and regional comparisons into a single interactive dashboard. The use of calculated fields, dynamic filters, and storytelling provides an intuitive and user-friendly approach to electricity consumption analysis.
4.	Social Impact / Customer Satisfaction	The project supports energy efficiency and sustainability by helping users understand electricity usage behavior. Improved insights can lead to reduced energy waste, better demand management, and increased customer satisfaction through informed energy planning.
5.	Business Model (Revenue Model)	The dashboard can be offered as a subscription-based analytics service for utility companies and energy consultants. Additional revenue can be generated through customized dashboards, premium analytics features, and enterprise-level data integration.
6.	Scalability of the Solution	The solution is scalable to larger datasets, multiple regions, and additional sectors. It can be extended by integrating real-time data, smart meter inputs, and advanced forecasting models to support broader energy management applications.