

Project Design Phase-I
Proposed Solution Template

Date	23 February 2026
Team ID	LTVIP2026TMIDS35942
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 stored in large Excel sheets, making it difficult to interpret, compare year-wise and region-wise trends, and identify high and low consuming states. Manual analysis is time-consuming and inefficient for decision-making.
2.	Idea / Solution description	Develop an interactive Tableau dashboard that visualizes electricity consumption data using bar charts, line charts, and pie charts. The dashboard includes year-wise comparison, region-wise distribution, Top N & Bottom N state analysis, monthly trend visualization, and interactive filters (Year, Region, State).
3.	Novelty / Uniqueness	The solution integrates dynamic filtering, parameter-based Top N and Bottom N analysis, and cross-sheet interaction in a single dashboard. It transforms static Excel data into an interactive, user-friendly analytical system.
4.	Social Impact / Customer Satisfaction	The dashboard helps energy planners and analysts make faster and more accurate decisions. It improves transparency in electricity consumption patterns and supports better energy planning and resource allocation.
5.	Business Model (Revenue Model)	The solution can be adopted by government agencies, electricity boards, and energy companies. It can be implemented as a data analytics service or integrated into energy management systems for performance monitoring.
6.	Scalability of the Solution	The dashboard can be expanded to include additional years, renewable energy data, predictive analytics, and real-time data integration. It can also be adapted for other sectors such as water consumption or fuel usage analysis. predictive analytics, and real-time data integration. It can also be adapted for other sectors such as water consumption or fuel usage analysis.

