Project Design Phase
Proposed Solution Template

Date	14 June 2025
Team ID	LTVIP2025TMID47623
Project Name	Exploration of Electricity Consumption Patterns
Maximum Marks	2 Marks

Proposed Solution Template:

S. No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Government agencies and energy planners face challenges in understanding electricity consumption patterns across different Indian states and time periods. Without visual analytics tools, they rely on static spreadsheets, which limit insight generation and delay effective energy planning.
2.	Idea / Solution Description	We propose an interactive Tableau dashboard that uses state-wise and time-series electricity usage data to visualize patterns, trends, and anomalies. The dashboard enables filtering by region, year, and lockdown period, allowing analysts and decision-makers to monitor consumption, evaluate the impact of events like COVID-19, and make data-driven energy policy decisions.
3.	Novelty / Uniqueness	This solution combines multiple dimensions—geographic, temporal, and event-based—into a unified visual platform using Tableau. It supports filters, calculated metrics (e.g., Year-over-Year change), and storytelling views, making the analysis both intuitive and scalable. Unlike static reports, it offers dynamic interactivity accessible to technical and non-technical users alike.
4.	Social Impact / Customer Satisfaction	Enables better electricity resource management by identifying peak demand zones and evaluating event-based consumption patterns. This contributes to energy efficiency, improved power distribution, and smarter infrastructure planning—ultimately benefiting both citizens and government agencies through more informed decision-making.

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

S. No.	Parameter	Description
5.	Business Model (Revenue Model)	This is a B2G (Business-to-Government) or B2B data visualization solution. The dashboard can be monetized by offering it as a data analytics tool to government agencies, energy departments, or consulting firms. Revenue can be generated through project-based analytics services, dashboard customization, or a subscription model for access to hosted Tableau Public/Cloud versions.

S. No.	Parameter	Description
6.	Scalability of the Solution	The dashboard is built with a modular and scalable architecture. It can be expanded to include additional datasets such as new states, years, or energy categories (e.g., solar, industrial). The solution supports integration with cloud-hosted datasets (like Google Sheets), Tableau Cloud for enterprise access, and can evolve to support real-time APIs (e.g., smart meters or live grid data) for continuous updates and monitoring.