Project Design Phase Proposed Solution Template

| Date | 20/06/25 |
|---------------|--|
| Team ID | LTVIP2025TMID59112 |
| Project Name | Plugging into the Future: An Exploration of |
| | Electricity Consumption Patterns Using Tableau |
| Maximum Marks | 2 Marks |

Proposed Solution Template:

| 110 | Proposed Solution Template: | | |
|-------|--|--|--|
| S.No. | Parameter | Description | |
| 1 | Problem Statement | Electricity usage data in India is often raw and scattered, making it hard for utility providers and policymakers to analyze trends and make informed decisions. | |
| 2 | Idea / Solution Description | Our solution transforms raw electricity consumption data into interactive dashboards using Tableau. Data is cleaned, stored in MySQL, and visualized through a web app built with Flask. | |
| 3 | Novelty / Uniqueness | Unlike static reports, our system provides real-time, interactive insights. It's flexible, extendable, and integrates forecasting using optional ML tools. | |
| 4 | Social Impact / Customer Satisfaction | Helps improve energy planning, reduce wastage, and supports better decision-making by energy companies and government bodies. | |
| 5 | , | Can be offered as a SaaS tool to utility firms and government bodies. Advanced features like forecasting or data export can be monetized. | |
| 6 | Scalability of the Solution | Built on a modular and cloud-friendly architecture, it can be expanded to cover more regions, sectors, or even other utilities like water or gas. | |