

Project Design Phase-I
Proposed Solution Template

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| Date | 23 February 2026 |
| Team ID | LTVIP2026TMIDS35961 |
| 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. |

