Project Design Phase Proposed Solution Template

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| Date | 10 June 2025 |
|---------------|--|
| Team ID | LTVIP2025TMID59754 |
| Project Name | Plugging into the Future: An Exploration of Electricity Consumption Patterns Using Tableau |
| Maximum Marks | |

Proposed Solution Template:

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

| S.No. | Parameter | Description |
|-------|--|---|
| 1. | Problem Statement (Problem to be solved) | Electricity consumption data is often underutilized due to its complexity, lack of visualization, and accessibility challenges. Stakeholders such as policymakers, analysts, and citizens lack clear insights to identify consumption trends or inefficiencies. |
| 2. | Idea / Solution description | Develop an interactive Tableau dashboard that visualizes electricity consumption patterns across regions, sectors (residential, industrial, commercial), and time periods. The dashboard will enable stakeholders to explore, compare, and make informed energy decisions through clear, user-friendly visuals. |
| 3. | Novelty / Uniqueness | While electricity data exists, our solution uniquely combines open data, advanced visualization, and interactivity in Tableau. It brings together seasonal patterns, sector-wise breakdowns, and geographic comparisons in one unified tool. |
| 4. | Social Impact / Customer Satisfaction | The solution empowers government bodies and citizens to make energy-efficient decisions, supports environmental sustainability, and promotes awareness through intuitive visual storytelling. Households can see usage trends; planners can optimize policy. |
| 5. | Business Model (Revenue Model) | The solution can be extended as a subscription-based analytics service to municipalities or utility companies. It could also be offered as a freemium public dashboard with advanced features for enterprise or government use. |

| 6. | Scalability of the Solution | The dashboard can be scaled to incorporate |
|----|-----------------------------|--|
| | | national or international datasets, integrate |
| | | predictive analytics, and include additional KPIs |
| | | such as carbon emissions or cost forecasts. It |
| | | can also be adapted for other utilities like water |
| | | or gas. |