

Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	31 January 2026
Team ID	LTVIP2026TMIDS24158
Project Name	Plugging into the Future: An Exploration of Electricity Consumption Patterns Using Tableau
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Data Collection	Collect electricity consumption data from public datasets
FR-1	Data Collection	Store collected data in SQL database
FR-1	Data Preprocessing	Clean missing values and incorrect formats
FR-2	Data Preprocessing	Aggregate data by time, region, and sector
FR-3	Data Visualization	Create time-series charts for electricity consumption
FR-3	Data Visualization	Analyze seasonal and peak consumption patterns
FR-4	Dashboard Management	Design interactive Tableau dashboard
FR-4	Dashboard Management	Apply filters (time, season, region, sector)
FR-5	Story Creation	Create Tableau story to present insights
FR-6	Web Integration	Embed Tableau dashboard into a web page

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	Dashboard should be easy to understand and navigate
NFR-2	Reliability	Data analysis and dashboards should run without errors
NFR-3	Performance	Visualizations should load within acceptable time
NFR-4	Scalability	System should handle large electricity datasets
NFR-5	Maintainability	Dashboards should allow easy updates and enhancements
NFR-6	Compatibility	Dashboard should work across web browsers and devices