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

Date	31 January 2025
Team ID	LTVIP2025TMID51141
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 Ingestion	Upload consumption data (CSV/API), Connect smart meter data
FR-2	Data Preprocessing	Handle missing values, normalize formats, timestamp conversion
FR-3	Dashboard Visualization	Line/bar graphs, pie charts, interactive filters (region, device, time)
FR-4	Alerts & Insights	Trigger overconsumption alerts, generate daily/weekly insights

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Dashboards should be interactive and easy to interpret for all user levels
NFR-2	Security	Data access must be restricted to authenticated users
NFR-3	Reliability	System must consistently process and display accurate consumption data

NFR-4	Performance	Dashboards should load and respond within 2 seconds
NFR-5	Availability	Dashboards should load and respond within 2 seconds
NFR-6	Scalability	Should handle large datasets and multiple user sessions simultaneously