

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

Date	19 Jan 2026
Team ID	LTVIP2026TMIDS25025
Project Name	Plugging into the Future: An exploration of electricity
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 & Management	Import electricity dataset
		Clean and preprocess data
		Store cleaned dataset
FR-2	Dashboard Visualization	Display state-wise consumption
		Display year-wise trends
		Display sector-wise breakdown
FR-3	Filtering & Analysis	Filter data by state
		Filter data by year
		Compare multiple states
FR-4	Insights Generation	Identify high & low consumption
		Highlight peak demand trends
FR-5	Report & Export	Export dashboard data
		Generate downloadable report

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The dashboard must be simple, intuitive, and easy to navigate.
NFR-2	Security	Dataset and system access must be protected from unauthorized changes.
NFR-3	Reliability	The system should display accurate and consistent data without errors.
NFR-4	Performance	Dashboard should load and update visualizations within a few seconds.
NFR-5	Availability	The system should be accessible whenever users need it.
NFR-6	Scalability	The system should handle increasing dataset size without performance issues.