Business and Functional Requirements Specification

Business Requirements

BR1: The system must analyze electricity consumption trends across Indian states.
BR2: The system must compare 2019 and 2020 consumption.
BR3: The system must identify high and low consumption states.
BR4: The system must show region-wise distribution.
BR5: The system must analyze seasonal variation.
BR6: The system must show lockdown impact.
BR7: The dashboard must be interactive and filter-based.

Functional Requirements

FR1: Import CSV data into SQL database.
FR2: Perform aggregation queries using GROUP BY.
FR3: Connect database with Tableau.
FR4: Create minimum 8 unique visualizations:

- Line Chart (Time Series)

- Bar Chart (Region)

- Map Visualization

- Pie Chart

- Heatmap

- Top N Analysis

- Year Comparison

- Lockdown Comparison

FR5: Dashboard must contain:

- Filters (Year, Region, State)

- Calculated Fields

- Interactive tooltips

FR6: Story must contain minimum 5 scenes.

FR7: Dashboard must be published online.

Non-Functional Requirements

- Dashboard loading time < 5 seconds

- Accurate aggregation results

- Responsive design
- Data security during DB operations
- Clean UI layout