

Project Design Phase-II
Data Flow Diagram & User Stories

DATE	18 February, 2026
TEAM ID	LTVIP2026TMIDS40169
PROJECT NAME	Plugging into the Future: An Exploration of Electricity Consumption Patterns Using Tableau
MARKS	4 marks

Data Flow Diagram:

[Raw Electricity Consumption Dataset (CSV / Database)]



[Data Preprocessing in Tableau]

- Clean null values
- Format date fields (Month, Quarter, Year)
- Rename headers
- Create calculated fields (Growth %, Lockdown Impact, Total Usage)



[In-Memory Tableau Storage]



[Visualization Layer (Tableau Sheets)]

- State-wise Map (2019 & 2020)
- Total Consumption KPI
- Region-wise Pie Chart
- Top N & Bottom N Charts
- Month-wise & Quarter-wise Charts
- Lockdown Impact Chart
- Metro City Usage Chart



[Dashboard View + Filters]

- Year Filter (2019 / 2020)
- Region Filter
- State Filter
- Quarter Filter



[Energy Board Officials / Policy Makers / Decision Makers]

User Stories:						
User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Electricity Board Officer	Analyze State Consumption	USN-1	As an electricity board officer, I want to compare state-wise electricity usage for 2019 and 2020	Can view map visualizations showing state consumption comparison	High	Sprint-1
Energy Analyst	Analyze Seasonal Trends	USN-2	As an energy analyst, I want to analyze monthly and quarterly electricity trends	Can view month-wise and quarter-wise charts with clear trends	High	Sprint-1
Policy Maker	Evaluate Lockdown Impact	USN-3	As a policy maker, I want to compare electricity usage before and after lockdown	Can view comparative charts highlighting lockdown impact	High	Sprint-1
Utility Manager	Identify Top & Bottom Consuming States	USN-4	As a utility manager, I want to rank states by electricity consumption	Can view Top N and Bottom N charts dynamically	Medium	Sprint-2
Energy Planner	Filter Dashboard for Detailed Analysis	USN-5	As an energy planner, I want to filter dashboards by region and year	Can apply filters and see updated visualizations instantly	High	Sprint-1
Government Official	Export Reports	USN-6	As a government official, I want to export dashboards for reporting	Can export dashboard as PDF or image format	Low	Sprint-3