Project Development Phase
Model Performance Test

Date	17 February 2026
Team ID	LTVIP2026TMIDS55781
Project Name	Plugging into the Future: An Exploration of Electricity Consumption Patterns Using Tableau
Maximum Marks	5 marks

Model Performance Testing:

Project team shall fill the following information in model performance testing template.

S.No.	Parameter	Screenshot / Values
1	**Data Rendered**	Rendered from cleaned CSV datasets containing state-wise and regional electricity consumption data for 2019–2020, including monthly usage, quarterly totals, and regional distribution (1000+ records covering multiple states and time periods)
2	**Data Preprocessing**	Handled missing/null consumption values and corrected inconsistencies. Standardized state and region names. Created derived fields for year, quarter, peak usage periods, and regional classification.
3	**Utilization of Filters**	Tableau filters applied for State, Region, Year, Month, and Quarter. Interactive filtering enables quick analysis with response time under 3–5 seconds.
4	**Calculation Fields Used**	• Year-over-Year Consumption Growth • Monthly Peak Demand Identification • Region-wise Consumption Totalling • State Contribution Percentage • Quarterly Usage Comparison • KPI Metrics (Total Consumption, Peak Month, Highest Consuming State, Regional Share)
5	**Dashboard Design**	Multiple visualizations designed to present electricity consumption insights, including: • State-wise Consumption Map • Region-wise Consumption Comparison • Monthly Trend Line Chart • Quarterly Usage Analysis • Top & Bottom Consuming States • Year Comparison (2019 vs 2020) • Regional Share Pie Chart
6	**Story Design**	One Tableau Story created with sequential story points highlighting: • National Electricity Consumption Overview • State-wise Consumption Distribution • Regional Consumption Patterns • Peak Usage Periods • Yearly Comparison Insights

7	**Publishing and Web integration**	Dashboard and story published to Tableau Public / Tableau Server and embedded into a web interface using Tableau embed code. • Hosted on web platform (HTML, CSS, JavaScript) • Interactive filters functional online • Responsive design for laptop/projector view • Shareable public link for stakeholder access • Real-time dashboard interaction via browser