1 GridAI Intended Users

1.1 PROBLEM STATEMENT

The power grid is growing more complex and adding more infrastructure each day. With this growth comes a drastic need for power companies to increase monitoring and gain insight into the health of the grid. To improve our insights and allow for predictive analytics to keep the power grid in a functioning state, we will build a platform that intakes and analyzes power grid data to provide insights into failures to the responsible maintenance teams. Additionally, to prevent further outages, we will build machine learning applications to evaluate current power grid conditions and predict when potential outages or anomalies may occur to decrease response time for responders and keep the grid functioning to its fullest capacity.

1.2 INTENDED USERS AND USES

1.2.1 Energy Companies

The primary intended users for our project are energy companies. The energy sector relies on robust operations and uninterrupted service to customers. As our project provides visibility and analytics of power grids, their specific operators are our most important client. As grid complexity increases year by year, it is increasingly important for these companies to utilize every tool available to proactively address emerging threats.

i. Headquarters

The power companies will need to monitor the grid on a large scale to make important decisions and fix issues before they happen.

ii. Repair and Maintenance Technicians

Our project will benefit field technicians by providing them with visibility into specific issues and confirmation when corrected.

1.2.2 Government Organizations

Local, regional, and national governments have vested interest in maintaining power grid uptime. Issues and resulting downtime can be major headaches to governments at every level. While not directly responsible for power grids and their upkeep, recent history has shown that incompetent power companies can fail to responsibly manage their domain. Thus, it would be prudent to provide governments with the tools to keep energy companies accountable.

*Note: Due to the sensitive nature of data we collect and display, we limit who is allowed to access our product. Only the power companies, and potentially the government with jurisdiction, will have access. No other users are allowed.