

Preface –

Electric utilities must maintain a thorough and complete inventory of their physical assets to provide regular services (expanding the network, performing maintenance, etc.) and fulfil their legal duty to disclose their facilities to outside parties. The introduction of new information technology, GIS (Geographic Information System), which performs complex power system analyses (such as fault analysis, network optimization, and load forecasting) in a reasonable amount of time, is justified by the complexity of the electrical distribution power system. The utility engineer may build and assess an electrical distribution network more quickly and correctly by combining contemporary GIS with his own custom-built tools.

To facilitate the analysis, management, modification, and mapping of geographical data, GIS were created. In the discipline of utility engineering, it is combined with a specific dataset to create a map that may display the geographical link between assets and their clients. The Editor Module and Tracer Module are the two components that make up the project area.

Features like Add, Update, Merge, Copy, Split, and Delete are included in the Editor Module. Upstream and downstream tracing are both included in the tracer module. The distribution lines, transformers, and other assets will be mapped using longitudinal and latitudinal characteristics.