ABSTRACT

Rising energy needs in India due to rising population load and economic aspirations, traditional emphasis on conventional energy sources has led to loss of foreign exchange as well as deteriorating air quality, keeping this in mind GOI has laid its emphasis on creating gas-based economy by giving greater importance to natural gas as a main source of fuel due to its availability in India and its environment friendly nature. City gas distribution system involves delivery of natural gas as a cooking fuel through a pipeline-based network to households. Study area chosen is Vadodara city. Visualisation of the CGD system for Vadodara city has been performed through web-based application built using the open source technologies. Considering the complex nature of the CGD system, the query module is built for selective visualisation of components based on the selection criteria. Network tracing module is built to trace the portion of the pipeline network present on the upstream and downstream side of the punctured pipeline for impact assessment. Application enables effective joining between the spatial and there corresponding nonspatial attributes.