

GeoAmpere

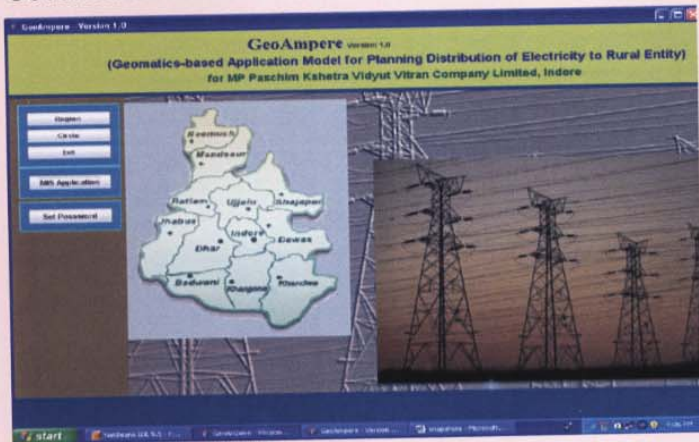
Geomatics-Based Application Model for Planning Distribution of Electricity to Rural Entities



**M.P. PASCHIM KSHETRA VIDYUT VITARAN
COMPANY LIMITED, INDORE**

Highlights

- Showcased in XIIth National e-Governance Conference' 2009



Product Features

- Sector-specific compilation of thematic maps.
- Special tool bar for map viewing / editing.
- Support for zoom, pan and map composition.
- Built-in traverse-aid and distance computation.
- Query - based map output.
- MIS for attribute data
- Printing of maps

Salient Features

- Information on feeder characteristics like feeder length, conductor size, voltage ratio
- Village Profile Information
- Feeder Profile Information
- Information about villages covered under a substation & feeder.
- It has built-in traverse-aid and distance computation
- Site suitability for new electrical resource/ connectivity.
- Module for attribute data updation.

Product Overview

At a time when the country is aiming at a double-digit growth rate, the acute shortage of power is a serious impediment. The per capita consumption of electricity is 580 units as compared to 10,000 units consumed in the developed country.

GeoAmpere is a Geomatics-based Decision Support System for planning and management of Electrical Power Distribution Network (33 / 11 KV). GeoAmpere has been designed & developed by Geomatics Division, NIC M.P. State Centre and successfully deployed at Madhya Pradesh *Paschim Kshetra Vidyut Vitaran Company Limited, Indore* in western region of M.P. covering 14 districts.

The development of GeoAmpere was carried with following scope and assumptions:

- Digitized power distribution network (substations and feeder network)
- Digitized administrative boundaries, major roads and railway network
- Attribute data related to substations, feeders, village information, demography
- GPS based Survey data

Product Specifications

- ArcGIS Engine
- Open Source (J2EE) front-end
- Geo-database
- Higher-end WorkStation
- Color Printer

Impact/Benefits

- Geo-referenced Distribution Network helps in better planning, management of the network and to achieve transparency and easiness in planning & monitoring process.
- Holistic view of entire Power Distribution System.
- Verification of the spread & location of electrical resource / assets.
- Lead to minimize the T&D (Transmission and Distribution) losses.
- Voltage Profile improvement.
- Reliable assessment of Load Growt.
- Overload elimination by suitable planning.
- Enables faster response to changing ground realities and prompt corrective action.



MPPKVCL, Indore

MP Paschim Kshetra Vidyut Vitaran Company Limited
GPH Compound, Polo Ground
Indore 452 015 MP India
Website: www.mppkvcl.org
Email : cmdwz.indore@gmail.com

Geomatics Division
National Informatics Centre MP State Centre
C - Wing Basement Vindhyachal Bhavan BHOPAL MP 462004 India
Website: <http://gismp.nic.in>
Email : gis-mp@nic.in