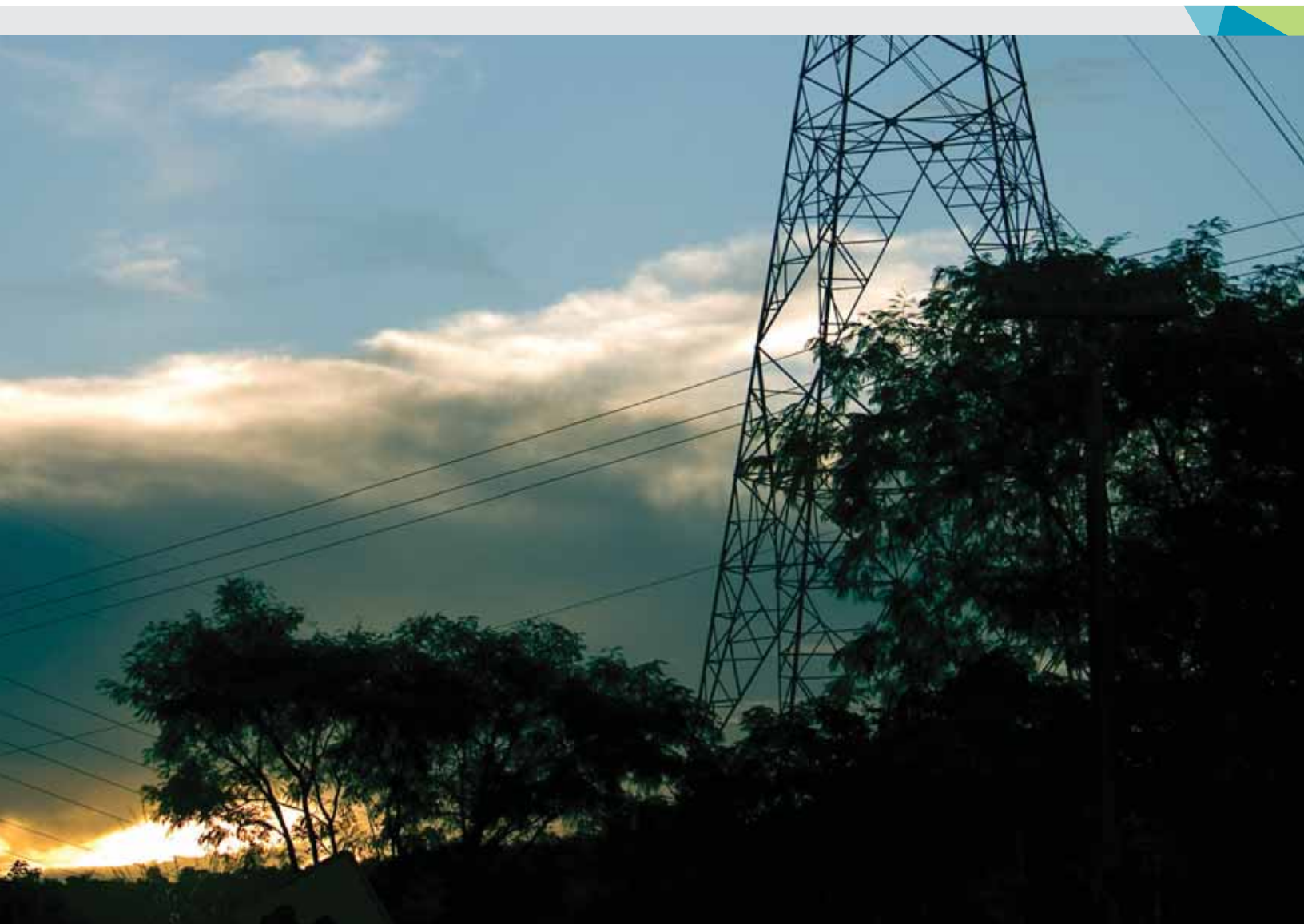


Cemig develops a geo-referred system for electric power transmission and sub-transmission lines using Hexagon's technologies



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Cemig, one of the most solid and important group in the electric power industry in Brazil, implemented the GEOCEMIG project, which presents as the most efficient way to manage business information. This is due to its high ability to gather, connect and integrate high volume of data from different formats and disciplines from different company databases, everything analysed under the geographic distribution of this information. These factors make the GEOCEMIG essential to plan and analyse new business depending on decisions based on information.

Under this structure, Cemig developed the GEOTRANS project, which uses the GeoMedia platform, to register and keep updated the data of gaps and structures of all the electric power sub-transmission (from 35.4 to 161KV) and transmission (from 230 to 500KV) infrastructure.

KEY BENEFITS

- Unified database of the transmission and sub-transmission systems in geo-referred environments;
- User-friendly and updated visualization and queries to information of the electrical system;
- Availability of a platform to develop new computer applications for the involved areas processes;
- Possibility of analysis development involving electrical system and other themes, e.g. State infrastructure, environment and satellite imagery;
- Integration with other applications used in the company, e.g. Gedoc (electronic management of documentation), SAP/R3.

For job execution, it were developed computer programs to be installed in the PDAs and desktops pc to input attribute data and publish on GeoCemig, Cemig's geographic information system. All this process is integrated in an intranet environment. Cemig developed a research job to reduce the project costs that resulted in the definition of a survey methodology using differential correction with a GPS receiver attached to the PDA. Cemig's technicians were responsible for the execution phases. In parallel with the periodic LT inspection, they also executed the characteristics of each structures and gaps from the more than 13 thousand miles that composes Cemig's transmission lines.

