





15th IAC Meeting Exposure to ELF EMFs 2009 Annual Report - Brasil

General Research Activities

There is a major undergoing Research Project "Epidemiologic Evaluation of EMF exposure near installations of Eletrobras_Furnas Company". The design of this project was developed with collaboration of experts form WHO, and has a good database, since this is a big company of the Brasilian Power Sector, whose transmission lines cover several thousand kilometers.

This Project is funded with resources from a national R&D program, and is being coordinated by Furnas_Eletrobras and the Department of Preventive Medicine from the University of São Paulo.

Eletrobras_Cepel is developing research activities aimed at the measurement of electrical characteristics of living tissues, to be used in the evaluations made to assess basic restrictions compliance, whenever necessary. Another research project is focused on the development of techniques for field mitigation, to be used both on existing as well as new installations, in order to ensure exposure to as low EM fields as technically and economically reasonable.

New Policies and Legislations

In may 5th, 2009, a National Law establishing EMF exposure limits was signed by the President of the Republic. The Law states that limits endorsed by WHO should be applied, specifically the ones issued by ICNIRP, considering eventual actualizations.

The Law also states that the Regulating Agencies (energy and telecommunications) must provide and periodically update the rules the utilities must follow in order to comply with the law, and also provide complete information to the public.







All utilities in the Electric Power Sector have a schedule ranging from 3 months to one year to declare their compliance with limits, or else to present an adecquation plan.

The process of demonstrating the adequacy of each installation in terms of field exposure levels allow a series of steps:

- If the calculated or measured electric and magnetic fields are below the ICNIRP reference levels for each of the categories (occupational and general public) the installations is approved.
- If there are fields above reference levels, the company has the possibility, within a 90 days period, to present a conformity report demonstrating that the basic restrictions are met.
- In the last case the company must present and execute an execution plan to make the necessary alterations in order to met the required field levels.

Areas of Public Concern

With the enforcement of the Law for EMF exposure there are, at the moment, no big public concerns. The experience gained in the last decade, dealing with EMF exposure situations, is proving useful when the Power Sector is expanding to regions where there are still few power plants and transmission lines.

New Public Information Activities

The Brasilian Law determines that public must have full access to information regarding exposure to EM Fields. The Regulating Agencies have the responsibility to have fields measurements performed in all installations (power plants, transmission lines and substations) and made that information available via WEB. An extensive measurement program is being undertaken by all electric utilities in order to have most of the information available at the end of the year.