















billions of dollars around the world. It's scientifically proved and globally accepted that the existing Electrical Systems of Protection at the moment like: Reticular Mesh of Grounding and Coperweld Bars don't have capacity to disperse and propagate to land mass the enormous energies associated to the Atmospheric Discharges (lightning), which are in the order: 500,000 Amperes, 1,000 million Kilowatts and High-Level Transient Voltage of 100 million Volts, enormous energies that cannot be dispersed by Reticular Mesh of Grounding, which it has a maximum capacity between 20,000 and 30,000 Amperes. This is the principal cause of major Blackouts and Electrical Faults around the world.

### Finally remarks

The Lightning Rod Ionizing Natural Ionca and the Ionic Electrode Active Trimetallic Triac of Grounding are Ecological, Natural, Don't Contaminate the Environment and fulfill all Electrical Codes and Norms International and National such as: IEEE, NFPA, ANSI, BSCP, WMO, NFC, NEC, CODELECTRA, COVENIN; and it has received the Certification and Recognition by: IEEE, The Institute of Electrical and Electronics Engineers, Latin America and The Caribbean Region. XXI World Energy Congress, WEC 2010, Canada, Author, Presenter, Venezuela Delegate. The New Highest Technology Paper: The International Energy Technology Data Exchange ([www.etde.org](http://www.etde.org)); US Department of Energy Office of Scientific and Technical Information, OSTI, Library and Archives Canada and Scientific Libraries Worldwide. IEEE, XV International Congress of Electrical, Electronic and Systems Engineer, INTERCON 2008, Peru, Author, Presenter, Venezuela Delegate. Polytechnic Experimental National University "Antonio Jose de Sucre" (UNEXPO), Arbitrated University, Venezuela. Antenor Orrego Private University (UPAO), Peru. Science, Technology and Innovation Award granted by Foundation for the Development of Science and Technology (FUNDACITE), Ministry of Science, Technology and Intermediate Industries, 2006, Venezuela. General Department of Science and Technology Research, Ministry of Science, Technology and Intermediate Industries, Venezuela. National Center of Technological Innovation. CVG MINERVEN. National and Internationals Publics and Private Companies. Projects and Construction built: Church La Chiquinquirá. CVG MINERVEN (Gold Mining). Promotora Minera Guayana (PMG), AGAPOV Group (Rusian) – Gold Mining. Corporación 80.000, C.A., AGAPOV Group (Rusian) – Gold Mining. CVG ALCASA (Aluminum). CVG VENALUM (Aluminum). Clinics: Medical Specialty Center, La Floresta, Chilemex, Maracay Medical Center. FIOR Venezuela (Iron Briquettes). CVG CARBONORCA (Anodes). Project: Toyota Venezuela (Toyomaya). Engineering Projects: Petróleos de Venezuela (PDVSA), PDVSA Boquerón, ENELBAR (Electrical Substations: Bárbula, Morón, Valle Seco, Chivacoa, Nirgüa, Yaritagüa), CADAPE (Electrical Substations: Tucupita, Temblador).

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