

Surge Protection Hall of Fame



Dr.-ing. Karl-Heinz Weck

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Expert in Insulation Coordination and Standards

Dr. Weck has spent his entire career working to improve electrical power systems. His first efforts were as an assistant professor at Darmstadt TU and then through his leadership at [FGH](#) a German non-profit organization dealing with power systems. His influence and expertise extends far beyond surge protection, but still his influence in IEC arrester standards is unparalleled in Europe for the past 25 years.

When Dr. Weck is in a standards meeting, there is no doubt that he is there. His input is substantial and substantive. His big voice carries a lot of weight and is universally respected. He has been the lead delegate of the IEC arrester technical committee for many many years and when there is a tough technical problem to tackle, you will find him in the middle of it searching for the correct and equitable solution. When there is a tough political problem to solve in standards, you will also find Dr. Weck leading the effort to resolve it.

Dr. Weck has retired from FGH recently but remains active in the power systems world as a consultant.

Dr. Weck's words of Wisdom

Although surge arresters represent one of the cheapest equipment in the power transmission and distribution system, its application as an overvoltage protection device for expensive apparatus as power transformers requires some of the most complex procedures in power engineering, called insulation co-ordination. For



this task the future engineer needs to know power system construction and operation as well as external influences on the power system as lightning or pollution. Without these considerations an adequate overvoltage protection by surge arresters cannot be achieved. I wish that future electrical engineers will develop the same passion in this complex field as I always have myself.

Brief Bio

- Born 12. December 1938
- Studies of electro techniques at the Technical University of Darmstadt 1958 to 1964.
- 1964 to 1970 Assistant Professor for high-voltage and measurement techniques.
- 1970 doctor thesis on control circuits for industrial gas flames.
- Since 1971 with FGH e.V., a non-profit organization of German power supply companies

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- Up to 2003 director responsible for power transmission and distribution equipment;
- up to 2002 managing director of the test laboratories of FGH Engineering & Test, today a member laboratory of the CESI group;
- Presently consultant and publicly certified expert to the court of justice.

Technical activities within CIGRE as member of various Working Groups in

- Study Committee 22 “Power Cables”;
- Study Committee 23 “Substations”;
- Study Committee 33 “Overvoltages and insulation co-ordination”;
- Up to 1995 Working Group convener of Working Group 33-06 “Insulation co-ordination for AC power systems” of Study Committee 33 including surge arrester application and UHV systems.
- 1988 to 1996 Special Reporter for Group 33

Technical activities within IEC as member of various Working Groups in

- Technical Committee 14 “Transformers”
- Technical Committee 28 “Insulation Co-ordination”
- Technical Committee 36 “Insulators”
- Technical Committee 37 “Surge arresters”
- Since 1996 Chairman of the Technical Committee 28 “Insulation co-ordination” of IEC