

CURRICULUM VITAE

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Enrico Elio De Tuglie

Professor Enrico De Tuglie obtained the degree in electrical engineering with honors in 1994 at the Polytechnic University of Bari. In November 1996 he began his PhD at the same Polytechnic in the area of Electrical Systems for Energy. In 2000 he obtained his doctorate with a thesis entitled "the dynamic security of the transmission system in a de-regulated environment". In January 1999 he held the position of researcher in the area of the electrical system at the Department of Electrotechnics and Electronics of the Polytechnic of Bari. Since December 2003 he has held the role of associate professor at the 2nd Faculty of Engineering of the same Polytechnic and since 2021 he has been Professor Full professor in the scientific disciplinary sector ING-IND/33 "Electrical Systems for Energy", in service at the Department of Electrical and Information Engineering (DEI) of the Polytechnic University of Bari.

At the Faculty of Engineering of the Polytechnic of Bari, Prof. De Tuglie has held courses on Electrical Energy Systems, Electrotechnics, Network Theory, Industrial Electrical Systems, Operation and Planning of Electrical Energy Systems, Principles of Electrical Engineering, Distribution and use of electricity, design of electrical systems, Automation of Industrial Electrical Systems and Smart Electric Systems.

Prof. De Tuglie's research activity has mainly focused on the following topics: smart microgrids; Impacts of distributed generation on electrical distribution systems and electricity quality control; Evaluation of the contributions deriving from distributed generation technologies and energy efficiency actions on energy planning studies; Methodologies for the development of control strategies in large-scale power systems; Extended real-time control of dynamic safety in the transient time scale; Competitive electricity markets and congestion management due to dynamic problems; Competitive markets and management of system losses, line flows and reactive powers in the transmission system.

On the topics set out above, Professor De Tuglie is the author of over 100 scientific publications, most of which appear in international journals.

Prof. De Tuglie was the evaluator of research projects of the Consortium for Electrical Reliability Technological Solutions (CERTS) and of the Electric Power Group (EPG) for the California Energy Commission (CEC) and the California Independent System Operator (CAISO). Prof. De Tuglie is a reviewer of several international journals: IEEE Transaction on Power Systems; IEEE Trans. on Industrial Electronics; Journal of Power Technologies; Energies. Furthermore, Prof. De Tuglie was included in the editorial board of the International Journal on Power System Optimization (IJPSO). He is currently Associate Editor of the Electrical Engineering (ELEN) Journal.

Prof. De Tuglie has participated in numerous research programs and has been scientific director of numerous research projects financed by public and private companies regarding the management of distribution networks with high penetration of distributed resources, energy saving for elevators, in public lighting systems and water supply systems, management of power system losses in competitive electricity markets, flywheels, performance analysis of photovoltaic systems, smart microgrids.

From November 2007 to January 2008, Prof. De Tuglie was Visiting Scientist at the Pacific Northwest National Laboratory (PNNL) of the Department of Energy (DOE), collaborating with the energy development group, dealing with problems related to the integration of resources non-programmable renewable systems in electrical systems.