**CURRICULUM VITAE**

**of**

**Anna Pinnarelli**

Anna Pinnarelli (Itali 1973) is a researcher in Electrical Energy Systems at the Department of Mechanical, Energy and Management Engineering (DIMEG) - University of Calabria. She has obtained the title of PhD from the University of Naples “Federico II”, in 2002.

She is currently Associate Professor of Electrical Systems and Electrical Systems for Energy at the Department of Mechanical, Energy and Management Engineering of the University of Calabria.

She is one of the professors proposing the academic spin-off of the University of Calabria Creta Energie Speciali S.r.l. which deals with technologies and systems for the production of renewable energy and sustainability and in particular, the research and innovation division. She is a member of the Scientific and Technical Council of the CRETA Consortium (Regional Consortium for Energy and Environmental Protection).

The sectors of scientific research activity concern:

* FACTS devices,
* automation and control of electrical and electronic systems with particular attention to the consequences of the market, distributed generation and demand response,
* simulation models of the free energy market,
* optimal management of energy flows in a Smart-grid and micro-grid.

In these fields she has co-authored over 100 publications at conferences and in international journals. She is co-author of the following Italian patent n° 102016000065916 - electronic control device of a free-piston stirling engine with linear alternator and related control method filed on 24/06/2016. She has carried out/carry out your teaching activity at the University of Calabria in courses of: electrotechnics, electrical systems, electrical machines, power electronic systems and smart grid. As an expert for electrical system research referred to in art. 11 d.m. 8 March 2006 she is a member of the evaluation commission for the verification of the achievement of the final results and the verification of the adequacy, relevance and admissibility of the research results and the documented expenses of various System Research projects. Expert of the Italian Regulatory Authority for Energy, Networks and the Environment (ARERA) for the expert-based verification of interventions in the 2018 Development Plan scheme.

She is the scientific director of the working group of the University of Calabria for the following projects within the programs:

* European H2020: Ebalanceplus - Energy balancing and resilience solutions to unlock the flexibility and increase market options for distribution grid;
* POR Calabria FESR-FSE 2014-2020: Hybrid Energy System – SEI;
* CSEA - Three-year plan 2019-2021 for National Electricity System Research: ViStoFaRe – Virtual Storage for the Fast Reserve and integrated synthetic inertia, peak shaving and load leveling services;
* Research and Development for hydrogen within the PNRR - M2C2 investment line 3.5: SmartHydroGrid - Smart Hydrogen Microgrid for the energy transition and deep decarbonisation;
* MUR - PRIN: Call 2022 - Prot. 2022SPFP9R: Distributed DC nanogrids to restore the system frequency and dynamic stability providing SYNthetic inertia and damping – DCNanoSyn;
* National Recovery and Resilience Plan (PNRR), Mission 4, Component 2 Investment 1.4, funded by the European Union – NextGenerationEU: Tech4You - Technologies for climate change adaptation and quality of life improvement.

She is a member of the research group of projects of national interest (PRIN) and responsible for research activities within two projects financed by the European H2020 program (SENSEI and SMARTGEMS) and several projects financed through national (PON) and regional competitive calls (POR), including: PON MIUR PNR 2015-2020/ “ComESto Community Energy Storage: aggregate management of energy storage systems in Power Cloud”; DOMUS ENERGIA: “Home automation systems for the cooperative energy intermediation service”. PON03PE\_00050\_2-MIUR; POWER CLOUD: “Technologies and algorithms within the current regulatory framework of the electricity market towards a “new deal” for consumers and small producers of energy from renewable sources”; PON I&C 2014-2020 - MISE F/050159/01-03/X32.4. μSB-MP - “Micro-cogeneration: biomass boilers with off/on Stirling grid generators”. System Research (RdS): national research on electricity 2012-2014 and annual plan 2013.

<https://www.unical.it/portale/strutture/dipartimenti_240/dimeg/persone/show_persona.cfm?q_id=10901>