

ERIGrid Summer School “Advanced operation and control of active distribution networks”

Monday 10th – Friday 14th June 2019, NTUA, Athens, Greece

Agenda

	Monday	Tuesday	Wednesday	Thursday	Friday
Topics	<i>HIL simulation for active distribution networks</i>	<i>Primary control of active distribution networks</i>	<i>Secondary & tertiary control of active distribution networks</i>	<i>Future trends in power systems</i>	<i>Industry Session with HEDNO</i>
09:00-09:45	Welcome and Introduction Prof. Nikos Hatziargyriou (NTUA)	Microgrids as building blocks of smart grids Prof. Nikos Hatziargyriou (NTUA)	Optimal operation of distribution networks with high shares of DER Panagiotis Padiadis (NTUA)	Machine learning applications in smart grids Theodoros Konstantinou (NTUA)	Visit to HEDNO Attica DMS
09:45-10:30	Real time digital simulation: overview and applications Christian Jegues (RTDS)	Primary control of DER inverters Vasilis Kleftakis (NTUA)	Adaptive protection of distribution networks Prof. George Korres (NTUA)	Efficient grid integration of electric vehicles Dr. Evangelos Karfopoulos (NTUA)	
10:30-10:45	Coffee Break				
10:45-11:30	Interfacing issues of HIL simulation Dr. Panos Kotsampopoulos (NTUA)	Inverter dominated non-interconnected islands Dimitris Lagos (NTUA)	Energy markets and demand response Dr. Georgia Asimakopoulou (NTUA)	Service restoration of active distribution systems Prof. Pavlos Georgilakis (NTUA)	
11:30-12:15	Recent developments for PHIL and intro to sub-step simulation Christian Jegues (RTDS)	Microgrid applications using the RTDS Christian Jegues (RTDS)	Telecommunication systems for smart grids Dr. Ioannis Vlachos (NTUA)	Power system resilience assessment and enhancement Dr. Dimitris Trakas (NTUA)	
12:15-13:30	Lunch Break				
13:30-16:00	Lab session: PWM models, microgrid controllers and P-Q control (RTDS)	Lab session: CHIL tests of inverter controls (NTUA/RTDS)	Lab session: CHIL/PHIL tests of optimal network control (NTUA)	Visit to Meltemi camp (pilot site)	Session with HEDNO experts