Report on 2019 IEEE 8th International Conference of Power Systems

The 2019 IEEE 8th International Conference of Power Systems (ICPS 2019) has been successfully organized by Malaviya National Institute of Technology Jaipur (MNIT), Jaipur, Rajasthan, India, during Dec'20th to Dec'22nd 2019. The conference venue was Vivekananda Lecture Theatre Complex, MNIT Jaipur. ICPS is a premier conference in the area of power engineering in the region of India and Nepal. ICPS 2019 continues a series of the biennial conference that began in 2004, and has been successfully organized by reputed institutions in its earlier versions.

ICPS 2019 has the patronage of IEEE PES-IAS Delhi Chapter as well as IEEE PELS-IES Delhi Chapter. With the theme of "Transition towards Sustainable, Smart and Flexible Grids", ICPS 2019 has reflected the state of art forum where researchers, academicians, industry personnel, and scientists presented their original research, exchanged ideas on the development of Smart, Sustainable and Flexible Power Grids and promoted networking for scientific & industrial collaboration. The conference hosted 26 paper Sessions, 8 Tutorials, 11 keynotes, 1 Industry Panel Session. The esteemed experts included Prof. Mohan Kolhe, Uni. of Agder, Norway, Dr. Rob Hovsapian, Research Advisor, NREL, USA, Dr. S Williamson, Ontario Tech. Uni., Canada, Dr. Jayant Kumar, Director (GDES), GE, USA, Prof. Bhim Singh, IIT Delhi, Prof. S. A. Soman, IIT Bombay, Prof. Sukumar Mishra, IIT Delhi, Prof. A. M. Kulkarni, IIT Bombay, Anuradha Annaswamy, MIT, USA, Dr. Rambabu Adapa, Tech. Executive (HVDC & PE), EPRI, USA, Shri. S. R. Narasimhan (POSOCO), Shri. Arun Kumar Mishra (NSGM), Dr. Anukram Mishra (Genus Power Infra.), Shri. Preetham Yalla (ABB), Prof. Anoop Singh (IIT Kanpur), Prof. Mukhtiar Singh (DTU), Prof. T S Siddhu, Ontario Tech. Uni., Canada, Prof. Aniruddha M. Gole, University of Manitoba, Canada, Prof. Alberto Borghetti, University of Bologna, Italy, Dr. Anurag K. Srivastava, Washington State University, USA and Shri. S K Soonee, Advisor, POSOCO. It was a pleasure of the MNIT Jaipur that ICPS hosted ten IEEE fellows together for the first time in the Institute.

The total registration of the conference reached upto 220 participants. NIT Uttrakhand partnered with MNIT for the organization of the conference. TEQIP Phase 3 and SERB INDIA were the institutional supporters. Prominent companies of India also supported the conference. Power Grid India Ltd was the platinum supporter while POSOCO ltd. was Gold supporter. The others were Opal RT Technologies as Silver supporter, PWSIM as bronze supporter and GENUS power infrastructure ltd, Quarbz, Nayak Power, ETAP and REIL were exhibitors. The inaugural ceremony of the conference was graced by Sh. Shreemat Pandey, Chairman, Rajasthan Electricity Regulatory Commission as Chief Guest, Sh. K.V.S. Baba, Chairman and Managing Director, POSOCO as Guest of Honour. Prof. Udaykumar R Yaragatti, Director MNIT Jaipur and Prof. S.L. Soni, Director NIT Uttarakhand as the Presiding Guests. The conference Gala dinner showcased the enriched Indian Culture through Classical Sitar and Kathak Dance performance. This was garnished by the Rajasthan Folk dance at the Dinner site.

The table below gives the list of best paper award in different paper sessions, followed by certain glimpses of ICPS 2019

DATE	NAME OF SESSION		NAME OF SESSION NO		NO OF	BEST PAPER		
			CHAIR		PAPERS			
	Power System Protection-I (PSP-I)		Dr. Pra Agarwal, Jaipur	iveen K. MNIT	7	Accelerated protection transmission	zone-2 scheme for lines using	
						travelling wav	es	
	Renewable	Energy	Prof	Indraman	6	Predictive b	ased control	

ICPS 2019 TECHNICAL PAPER SESSIONS

	Integration (REI)	Tamrakar, IOE Nepal		algorithm for hybrid diesel- battery stand alone power generation system
21/12/2019	Power System Economics (PSE)	Dr. Anoop Singh, IIT Kanpur	8	A scenario-based stochastic dynamic economic load dispatch considering wind uncertainty
	Power System Planning and Reliability (PSPR)	Prof A.R Abhyankar, IIT Delhi	7	Impact of BESS operating methods on reliability of renewable energy sources
	Demand Side Management (DSM)	Dr. Deepti Saxena, MNIT Jaipur	7	A semi-instructive load monitoring approach for demand response applications
	Power System Optimization -I (OPTM-I)	Dr. Kusum Verma, MNIT Jaipur	7	SSB-CPSO based multi- objective security constrained unit commitment solution using NBI
	Power Electronic Applications to Power Systems-I (PEAP)	Prof. Rajive Tiwari, MNIT Jaipur	7	A novel adaptive droop control strategy for improved power sharing and dc voltage control in MTDC grids
	Control Application to Power Systems-I (CAPS-I)	Dr. Gurunath Gurrala, IISc Bangalore	8	CAN-based architecture for MSC-GCCI with maximum power point tracking in large PV installations
	Power System Protection: Fault Detection (PSP -FD)	Prof K.R Niazi, MNIT Jaipur	6	A faculty section identification scheme in thyristor controlled series compensated transmission lines using superimposed currents
	Distribution System Analysis (DSA)	Dr. S. Siva Subramani, IIT Patna	6	Utility-user Co-operative algorithm for flexible load scheduling in distribution system
	Smart Grids-I (SG-I)	Dr. Prerna Jain, MNIT Jaipur	6	Practical approaches towards securing edge devices in smart grid
	Energy Storage Systems (ESS)	Dr. Parul Mathuria, MNIT Jaipur	5	Battery energy storage system operational control for distribution transformer overload management
	DC Micro-grid (DCM)	Dr. V.P Singh, MNIT Jaipur	6	A hybrid RC-droop control strategy for power sharing and voltage restoration in

				islanded DC microgrids
	PowerSystemProtection:RelayCoordination (PSP- RC)	Dr. S.D Varwandkar, VJTI Mumbai	5	Machine learning based setting-free reach element for zone-1 distance protection
	Power Systems Measurement (PSM)	Prof. Manoj Fozdar, MNIT Jaipur	6	An adaptive IIR notch filter based half-cycle P-class phasor measurement estimation scheme
	Renewable Energy System (RES)	Prof. Mukhtiar Singh, DTU	5	Dynamic photovoltaic array reconfiguration for standalone PV water pumping system
	Power System Protection-II (PSP-II)	Dr. Santanu K. Mishra, IIT Kanpur	6	Leakage current based analysis of suspension insulator for effective determination of ESDD
	Power System Dynamics and Stability (PSDS)	Mohammad Badruddoza,	7	Investigation of passivity behavior of synchronous generators connected to passive network
22/12/2019	Smart Grids-II (SG-II)	Dr. Ankush Sharma, IIT Kanpur	5	Successful mitigation of week roll over issue of global positioning in Indian power system- A case study
	Power System Operations (PSO)	Mr Sanjay Mathur,	7	Success story of India-Nepal power system operation
	Electric Vehicles (EV)	Dr. Tripta Thakur, MANIT Bhopal	7	Performance analysis of a lithium-ion battery pack in EV application using an auto- upgraded neural network model
	Energy Storage Integration (ESI)	Dr. Nava Raj Karki, IOE Nepal	6	Operational flexibility enhancement through flexible ramp products from energy storage
	Power Electronic Applications to Power Systems-II (PEAP-II)	Dr. Prabod Bajpai, IIT Kharaghpur	6	An efficient LLC resonant converter design for photovoltaic application
	Control Application to Power System-II (CAPS-II)	Dr. Neeli Satyanarayana, MNIT Jaipur	6	A simplified approach to controlled islanding of power sytem
	Micro Grids (ACM)	Dr. Hemant Kumar Meena, MNIT Jaipur	7	Dynamic state estimation of synchronous generator based distributed energy resource in autonomous microgrid
	Power System	Dr. Satish Sharma,	7	A linearised optimal power

Optimization-II (OPTM-II) MNIT Jaipur	fl	low frameworl	c for	а
		b	balanced active	distributi	on
		n	network		

SOME GLIMPSES OF ICPS 2019



























