SAARC Energy Center, Islamabad

On-line Training of Stakeholders on Digitizing Industrial Motor Systems for Energy Efficiency

December 6 – 10, 2021

Timetable for online training

Day	Time (Pakistan Standard Time)	Titles and Speakers	Description
Session 01: Inauguration & Efficient motor systems approach			
Day-1, Dec-6,	2:00 – 2:05 PM	Welcome and Introduction *by Tula Ram Poudel, Research Fellow (Energy Trade), SEC*	
	2:05-2:15 PM	Inaugural address by **Director SAARC Energy Centre**	
	2:15 – 2:25 PM	Overview of training program By *Mr. Hu Bo, Top10 China*	
	2:25 – 3:10 PM	**Slot 1:** Overview of motor system energy efficiency improvement By *Mr. Conard. U. Brunner, CUB, Switzerland*	• Motor system energy saving potential overview • Motor and motor system standardization
	3:10 – 3:30 PM	**Q&A session and Break**	
	3:30 – 5:00 PM	**Slot-2:** Motor Systems efficiency and check with model tools By *Mr. Rolf Tieben, Impact Energy, Germany and Mrs. Rita Werle, Impact Energy, Hungary*	• Motor system energy conservation projects management in factories • Assess factory motor saving potential with SOTEA tool • Manage factory motor systems with ILI+Tool • Calculate motor system efficiency with motor system tool
	4:50 – 5:00 PM	**Q & A Session and day's wrap up**	
Session 02: Digital pump system and smart solutions			
Day-2 Dec-7	2:00 – 3:15 PM	**Slot-1:** Pump system with pump demonstrator By *Mr. Hu Bo, Top10, China*	• Conduct remote digital live training via pump demonstrator training facility • Pump system operation and energy saving cases with pump demonstrator
	3:15 – 3:30 PM	**Q&A session and Break**	
	3:30 – 4:50 PM	**Slot 2:** ABB Ability Industrial Internet of Things (IoT) for smart motors and digital powertrain By *Mr. Teijo Karna, Product manager, ABB motion Service division, Finland*	• ABB Ability Industrial IoT solutions • ABB motor system application cases
	4:50 – 5:00 PM	**Q & A Session and day's wrap up**	

	Session 03: VFD and motor system saving potentials		
Day-3 Dec-8	2:00 – 3:20 PM	**Slot-1**: Complete drive Systems – motors & VFD By *Mr. Andrea Vezzini, IEC TC member, Switzerland*	• VFD application in system energy conservation and efficiency • VFD and motor efficiency • Motor system transmission efficiency, belt/gears
	3:20 – 3:40 PM	**Q&A Session and Break**	
	3:40 – 4:50 PM	**Slot 2:** Motor system energy-saving best practices from China *By China National Institute of Standardization, China* MEPSY – motor saving potentials in different scenarios By *Mr. Colin Taylor, CLASP, USA*	• Introduction and demonstration of MEPSY online calculation tool for policy development • China motor and related system energy efficiency standardization and best practices • Motor system energy performance contracting
	4:50 – 5:00 PM	**Q & A Session and day's wrap up**	
	Session 04: Digitalization of motor and energy systems		
Day-4 Dec-9	2:00 – 3:00 PM	Slot-1: Electricity monitoring and digitalization By *Mr. Hu Bo, Top10, China*	• Smart meters application in motor systems • Electricity monitoring meters and technical solutions
	3:00 – 4:00 PM	**Slot-2: Industrial communication protocol training I: Modbus** By *Mr. Hu Bo, Top10, China*	• Modbus protocol introduction • Modbus protocol demonstration and application
	4:00 – 4:20 PM	**Q&A Session and Break**	
	4:20 – 4:50 PM	**Slot-3:** Industrial communication protocol training II: OPC UA By *Mr. Hu Bo, Top10, China*	• OPC UA protocol introduction • OPC UA protocol modeling • OPC UA protocol programming and application
	4:50 – 5:00 PM	**Q & A Session and day's wrap up**	
	Session 05: Digitalization of motor systems and closing ceremony		
Day-5 Dec-10	2:00 – 2:50 PM	**Slot 1:** ABB motor efficiency improvement applications matching with motor technologies and different case studies By *Mr. Lokesh B.M, R&D Hub Manager India, ABB Motion IEC motor division, India*	• ABB Ability Industrial IoT solutions • ABB motor system application cases
	2:50 – 3:00 PM	**Q & A Session**	
	3:00 – 4:00 PM	**Slot-2:** Industrial communication protocol training II: OPC UA II By *Mr. Hu Bo, Top10, China*	• OPC UA protocol introduction • OPC UA protocol modeling • OPC UA protocol programming and application
	4:00 – 5:00 PM	**Valedictory session**	Closing Remarks by Director SEC and Mr. Conrad U. Brunner