## **TECHNICAL SESSION PLAN**

## **INTERNATIONAL O&M CONFERENCE: IPS-2019**

Theme: Generating Safe, Reliable, Eco-friendly, Flexible Power - With State of Art Technologies

<u>13<sup>th</sup></u>	13 <sup>th</sup> Feb 2019 Pandit Deen Dayal Upadhyay Auditorium, Raipur					
Inau	Inauguration of IPS- 2019 & "Techno Galaxy- 2019" at 1000-1130 hrs. High Tea – 1130-1230 hrs.					
Venue	Main Auditorium	Sankalp	Siddhi			
1230- 1330	Session- 1 Generating Safe, Reliable, Eco-friendly, Flexible Power - With State of Art Technologies  1. Theme Paper 2. Turbine-Generator Torsional Vibration Fundamentals , EPRI, USA 3. Digitalizing the Brownfield, Bentley, USA 4. Versatile use of UAV in power utilities, B&V USA	<ol> <li>Session- 4         Flexibilisation     </li> <li>Techno-Economics of Flexible Operation,         Deloitte, India     </li> <li>Flexible Generation &amp; Real-time prediction of equipment failure, Intertek, USA</li> <li>An Investigation Of Various Approaches To Flexibility In Thermal Power Plants, NTPC, Dadri</li> <li>Flexibilization of thermal power plant, NTPC, Bongaigaon</li> </ol>	Session- 7 Challenges in Power System  1. Catastrophic Turbo Generator Failure, Manav Energy, Bengaluru  2. Smart Distributed Power Generation through digitalization, ABB, Switzerland  3. Mitigation of ARC Flash Using Digital Technology, NTPC, Simhadri  4. ESP Up gradation for Eco friendly Power Generation, NTPC, Unchahar			
1330 -1430 hrs. Lunch						
	Main Auditorium	Sankalp	Siddhi			
1430- 1600	<ol> <li>Steam Turbine</li> <li>KWU design Turbine Hydraulic system         Modernization, Siemens, India</li> <li>Analysis Of Condenser Vacuum Deterioration Due To         Air Ingress From TDBFP Seals, NTPC, Ramagundam</li> <li>Innovative Technique To Separate Mineral Oil From         Contaminated FRF Oil, NTPC, Dadri</li> <li>Analysing Vibration Problems by Study of sidebands         in vibration signatures, NTPC, Korba</li> <li>In situ machining of HPT Inlet flange, NTPC, Farakka</li> </ol>	<ol> <li>Steam Generator &amp; Auxiliaries</li> <li>Design of High Energy Piping for Cyclic Thermal Loading, NTPC, Engg.</li> <li>Use of PAUT for evaluation of new &amp; old weld joints, NTPC, TSTPS</li> <li>Acromat Thermocouple weld failure, NTPC, Lara</li> <li>Countering High Upper Radial Bearing Temperature In XRP 1003 Mills, NTPC, Kahalgaon</li> <li>Improving Performance of HP-1103 Mills , NTPC, Mouda</li> </ol>	<ol> <li>Session-8         <ul> <li>Safety &amp; Environment Management</li> </ul> </li> <li>Innovative approaches for building safety Culture, NTECL, Vallur</li> <li>Bio mass Utilisation for air quality improvement, JCoal, Japan</li> <li>Safety Simulator Training Center-Based On VR &amp; AR Technology , NTPC, Gadarwara</li> <li>MAC Curve &amp; ICP Mechanism For NTPC APCPL, Jhajjar</li> <li>Waste Management: A Plethora of Opportunities, NTPC, Korba</li> </ol>			
1600 –	1630 hrs. Tea Session					
1630- 1815	<ul> <li>Session -3         Electrical Systems     </li> <li>Overview Of COMTRADE Standard, Practical Case Studies, Crompton, India</li> <li>Incipient Fault Detection In Generator, NTPC, Singrauli</li> <li>IoT Solutions in Centralized IED Management, NTPC, COS</li> <li>High Tank Body Temperature in Large GT, NTPC, Engg</li> <li>Complete Rewinding Of 250 MW Generator, NTPC, Bongaigaon</li> <li>400 KV Bus Splitting, NTPC, Kahalgaon</li> </ul>	<ul> <li>Session-6</li> <li>Innovative Operation Practices</li> <li>1. Condensate Throttling Technique for Flexible Load Control, Singareni Thermal Plant</li> <li>2. Achieving 105% unit capability, NTPC, Sipat</li> <li>3. Industry 4.0 in Power Plant Operations - A Step towards Digital Power Station, NTPC, Ramagundam</li> <li>4. 3-I Concept of Ash Utilisation, APCPL, Jhajjar</li> <li>5. Environment Friendly Utilization of Fly Ash, NTPC, Vindhyachal</li> <li>6. Pulse Power Technology for ESP performance,</li> </ul>	Session-9 Control & Instrumentation 1. UOI platform for Remote monitoring, NTPC, Kahalgaon 2. Reliable SWAS - A Challenge in Flexible Operation, NTPC, CQA 3. Control System Integration, NTPC, Simhadri 4. Clinker Detection and Evacuation Monitoring Mechanism, Lanco, Gurugram 5. Digital Transformation in Power Plants: The NTPC Way, NTPC, Engg			

NTPC, NETRA

6. Drone Based inspection & Monitoring, NTPC, NETRA

## 14th FEB 2019 Pandit Deen Dayal Upadhyay Auditorium, Raipur

Venue	Main Auditorium	Sankalp	Siddhi		
0930-	Session – 10		Session – 13		
1115	Efficiency & Energy Conservation	Vendor Session	Chemistry		
	1. Innovative Approach for Energy Efficiency, SAGTA Eng.		1. Water Chemistry Management, Mettler tolledo, USA		
	Ltd., China		2. Best practices of Power Plant Chemistry, <b>Tata Power</b> ,		
	2. Acoustic gas temperature measurement -	Presentation by the participants of "Techno	Mundra		
	Improvement of efficiency, <b>B &amp; D GmbH, Germany.</b>	Galaxy – 2019"	3. VGB Standard S006-2012 - A guideline for modern		
	3. Resolution of High Condensate DO issue, NTPC, Korba		SWAS in cycling Power Plants, Swan Analytische		
	4. Multifunctional Combustion Catalyst for reduction of		Instrumente AG, Switzerland		
	Emission, Abhitech Energycon Ltd		4. Challenges of Online Chloride monitoring, <b>NTPC</b> , <b>TSTPS</b>		
	5. Plant Economist – O&M Techno Economic Decision		5. Challenges of Cycle Chemistry Management during		
	Model, <b>Lanco, Amarkantak</b>		Cyclic operations, NTPC, COS		
	6. Reliability Centered Maintenance of Crushers, NTPC,		6. Impact Of Coal With Different Characteristics On Boiler		
	Kudgi		Performance And Plant Operability, NTPC, Mouda		
1115 -1	130 hrs. Tea Session				
1130-	Session – 11		Session – 14		
1300	Renewable Energy	<u>Vendor Session</u>	Hydro Generation		
	1. Thermal Energy Storage System For Solar, NTPC,		1. Sediment management in hydropower reservoirs, <b>CEA</b> ,		
	Kayamkulam		МоР		
	2. Battery Energy Storage System for Optimum Solar	Presentation by the participants of "Techno	2. Impact of environmental flow on hydropower projects,		
	Energy Integration, NTPC, Engg.	Galaxy – 2019	NTPC, Engg		
	3. Microgrids Co-existing with the Grid, NSB, Noida	·	3. In-house design modifications - TGB temperature		
	4. Utilization of Biomass (paddy straw) as co-fuel in		stabilization, NHPC, Parbati		
	thermal power plants, NTPC, Dadri		4. Challenges in Small Hydro Project, NTPC, Singrauli		
	5. Solar thermal energy storage using reversible		5. Experience in hydropower generation, NTPC, Koldam		
	thermochemical route, NTPC, CenPEEP				
1300 -1	400 hrs. Lunch				
1400-	<u>Session – 12</u>	Session – 15	<u>Session – 16</u>		
1530	Fuel & Ash Management	Cooling Tower & Water Management	Academics for Power generation		
	1. Unloading through wagon tippler, NTPC, Mouda	1. Water Treatment and Reutilisation, Jcoal,	1. Capacitance based wireless power transfer: Future of EV		
	2. Innovative approaches for repair of highrise structure,	Japan	charging station, <b>KIET, Ghaziabad</b>		
	NTPC, Korba	2. Optimisation of Specific Water Consumption,	2. Cooling Tower Performance Improvement- Case Study,		
	3. Ductile Iron pipeline solution for transporting wet ash	APCPL, Jhajjar	IIT Delhi		
	slurry, Electrosteel castings ltd., Kolkata	3. Underground CW Duct Leakage Arresting,	3. Requirement of Air Drying Plant for Pneumatic		
	4. Sustainable Solutions for Bottom Ash & Fly Ash	NTPC, Farakka	Conveying of Fly Ash, <b>Thapar Institute</b> , <b>Patiala</b>		
1	Disposal, <b>NTPC, Mouda</b>	4. Fill Pack Clogging Problem – A Threat To	4. Analysis Of Convective Heat Transfer, <b>NIT Raipur</b>		
	5. Optimization Of Coal Supplies For Generating Reliable,	Induced Draught Cooling Tower, NTPC, TSTPS	5. Energy Saving in Industries by selection of proper		
1	Cost Effective And Eco Friendly Power, NTPC, FM	5. Addressing CW Pump Vibrations – Case Study,	Lubricants for Machines and Equipments, NIT Raipur		
		NSPCL, Bhilai			
1530 –	1530 – 1545 hrs. Tea Session				
1600-17	1600-1730 Valedictory Session and Internal Review Meeting				