

NTPC O&M Conference (IPS 2025): Session Plan

Venue	Main Auditorium	Sankalp	Siddhi
Day 1: 13th February 2025			
1215-1345	Session- 1 Reliable & Sustainable Generation, Asset Management and Energy Transition	Session- 2 Safety in Power Plants	Session- 3 Asset Management
	Theme Paper, NTPC CC OS	Bulge Wagon Auto Detection System, NTPC Bongaigaon	A Digitalization Roadmap and methodology for Asset Management Excellence, EPRI International, South Africa
	Green hydrogen for Grid Balancing, 2029-30, CEA	Enhancement of safety during overhauling by a change in planning of permits, NTPC Sipat	Process Optimization and technological upgrades for Flexibility to ensure safe, reliable, and sustainable operations, Intertek USA
	Risk-informed approaches to optimize Asset Management approaches, EPRI USA	Safety in Power Plants - FirePro Condensed Aerosol System, KV Fire	Centralized C&I Asset Management Solution for NTPC using Open-Source Tools, NTPC Solapur
	Energy Transitioning with CCUS: Experience sharing of World's Unique CO2 to Methanol Project, NTPC Vindhyachal	Improving Behavior Based Safety through the concept of Safety Acts Index, NTPC Mauda	Study on applicability and scope of AI and Data Analysis Tools for Optimization of Maintenance Practices for Capital Equipments in Thermal Power Plant, NTPC Korba
1345 -1430 hrs.		Lunch	
1430-1600	Session -4 Steam Generator & Aux. Systems	Session-5 Water systems	Session-6 Power Plant Efficiency
	Ensuring long-term reliability of Boiler, NTPC Telangana	Water Management in Power Plant, OPGC	Enhancing Power Plant Reliability in India_ The Critical Role of Performance Testing for Boilers and Steam Turbines, McHale USA
	Enhancing Boiler Reliability: Strategies to Prevent Condensate Blocking in Pendent Coils, NTPC Sipat	Water Management in Mejia Thermal Power Station - a Case Study, DVC	Improvement in Cooling Tower Performance: A Case Study on Identifying and Mitigating Defects in Cost Effective Manner, NTPC Farakka
	A Case Study on Failure of Finish Super Heater Tubes in Boilers at NSTPS, NTPC Nabinagar	Sustainable Generation – Closing on the Crucial Water Linkage, NTPC PE	AdvX® system for thermal power plant efficiency improvement and Heat management, Arvos Ljungström Energy
	BTL Reduction Through Skill Development and Identification Scheme (S-DAIS) for IBR Welders, NTPC Kahalgaon	Production of 'Green DM Water' by using waste heat recovery- An innovative, sustainable, economic approach for conserving natural resources, NTPC Simhadri	Tool for Digital Furnace Temperature Mapping and using AI/ML to predict Furnace Temperature with the available Real-Time, Adani Power
	Boiler Tube Leakage: A persistent Challenge - Unfolding strategic solutions for reliability, NTPC Lara	Strategies for Reducing Evaporation Loss in Power Plant Operations: A Path to Sustainable Water Management, NTPC Ratnagiri	Important Factors for Better Condenser and Cooling Tower Performance, Ion Exchange
1600 – 1630 hrs.		Tea	
1630-1815	Session -7 Turbine & Aux. Systems	Session-8 Digital Initiatives/AI/ML for Power Plants	Session-9 Hydro and Gas-based Power Plants
	Load Restrictions on account of very high TG Bearing temperatures due to slope/catenary abnormalities in 800MW TeSTPP units after initial operations, NTPC Telangana	Unit Controls Performance Monitoring Dashboard for Steam Parameter analysis, NTPC CC OS	Hydel Turbine Restoration – Experience & Learning, NTPC Koldam
	Dry Cooling System in thermal Power Plants – Need of the hour, challenges and Way forward, NTPC PE	Implementation of Artificial Intelligence for Identification of Weld Joint defects during Overhauling & Boiler Tube Failures, NTPC Darlipalli	CFD Study of Water Conductor System along with under water parts of 4X50 MW Kopili Power Station KHEP, NEEPCO
	Addressing Steam Turbine Maintenance Challenges under Flexible Operation, NTPC CC OS	Building Machine Learning-Based Model for Large Induction Motor based Drives in a Typical Thermal Power Plant, NTPC Dadri	From obstacles to Opportunities: small hydro's path to optimized performance, NTPC Vindhyachal
	A Case Study on Failure of Stellite-6 Coating on Turbine Valve Plugs after Short-Term Operation, NTPC Khargone	Digital Initiatives for Plant Load Adjustment in auto to minimize the impact of DSM Regulations, L&T Nabha Power	Innovative Maintenance Practices using latest Technology and leveraging AI, NTPC Dadri Gas & RGPPL
	NTECL U#1 Turbogenerator Revival Case Study, NTECL Vallur	AI based Wireless condition monitoring System for Take up pulleys of CHP conveyors, NTPC Talcher Kaniha	Future of Gas based Generation in India, NTPC CC OS
	Flexible Operation & Reliability Challenges for LP Turbines, EPRI USA	IoT & AI for efficient and flexible operation of thermal power plant for energy transition, Jcoai Japan	Gas Based Power Plant - Cyclic & Flexible Operations -Present & Future, GSECL

Day 2: 14th February 2025			
0930-1115	Session – 10 Flexibilization in Thermal Power Plants	Session – 11 Generator & Electrical Systems	Session – 12 Power Plant Chemistry
	Methodology for Prioritizing Investments in Flexible operation of coal Plants for Sustainable Grid Operations, CEA	Implementation of Remote Racking of MV Breakers by Integrated Motorized Mechanism, NTPC PE	A Novel Approach to Managing Air Cooled Condenser Corrosion and Enhancing Reliability - EPRI USA
	Operational Flexibility of Thermal Power Plants: Insights from Ramagundam Unit 7 Low Load Tests, Danish Energy Agency, Denmark	Strategies To Achieve Zero Forced Outage of Kudgi Thermal Units Due To Electrical System, NTPC Kudgi	Reverse Osmosis – A Proven Technology in Water Treatment yet intricacies in its operation - Learnings of revival of RO Plant, NTPC Telangana
	From Stability to Flexibility- Thermal Power Plant Adaptations for Renewable Integration, CII Hyderabad	Rectification of High Temperature Issue in Segmented Isolated Phase Bus Ducts – A Case Study of 2 X 800 MW Ultra Super Critical Thermal Power Plant, Adani Power	Chemistry Management in Ultra Supercritical Boiler, Adani Power
	Boiler Flame Failures in Flexible Operating Regime – Operational optimisation, NTPC CC OS	Generator Performance Under Flexibilization: Challenges and Mitigation Approaches, NTPC Vindhyachal	Strategies to Maintain the Integrity of Boilers and Turbines by Preventing Corrosion and Deposition in Current Operational Scenarios, NTPC CC OS
	Complete Cycle Solution, ARNOLD Germany	From Vibration Anomalies to Generator Integrity: A Methodical Approach to Troubleshooting, BHEL	A New Acid Cleaning Method for removal of Hard Silicate Scale deposit in Condenser tubes of U#2 of Dhariwal Infrastructure limited 2x300 MW plant, Dhariwal Infra
1115 -1130 hrs.		Tea	
1130-1300	Session – 13 Control & Automation in Power Plants	Session – 14 Fuel Management	Session – 15 Energy Transition
	Dry Ash Evacuation Process Improvement- "Advance Pulse Jet Timer System (A-PJT)" [In-House designed and Developed], NTPC Singrauli	Operation and Control Philosophy of Rapid Loading System in NTPC Pakri Barwadih Coal Mines, NTPC Coal Mining	Sustainable Biomass Supply Network Model: A Pathway to Efficient Energy Transition, CPRI
	Advanced Process Control Deployment with No Black Box Solution, NTPC PE	Challenges attributable to high Demurrage on account of underutilization of Wagon Tippler#1, NTPC Mouda	Municipal Solid Waste Co-firing in a Pulverized Fuel-fired Boiler, NTPC CC OS
	Reduction in Rake Detention Time through Automation Control Techniques, L&T Nabha Power	Effective Coal Stockyard Management to meet challenge of handling multiple quality coal, GMR	Nuclear for Viksit Bharat @2047, NTPC Nuclear Cell
	Advanced Slurry density measurement: Technology and Techniques for Industrial applications, NTPC Nabinagar	Best practices of CHP Maintenance to avert Monsoon challenges in the year 2024, NTPC Ramagundam	Enabling a Reliable, Decarbonized Future in a Variable Renewable Energy World, EPRI USA
Upgradation Of OWS/Servers /NAS -Performance and availability by replacement of HDD With SSD, NTPC PE	Reliability Centred Maintenance of Wagon Tippler System for enhanced availability of coal unloading System, NTPC Kudgi	Optimizing Coal Fleet Performance to Accelerate the Energy Transition, EPRI USA	
1300 -1400 hrs.		Lunch	
1400-1530	Session – 16 Climate Change & Environment Management	Session – 17 Ash Handling & Utilization	Session – 18 Renewable Energy & Energy Storage
	Climate Change and Environment Management, OPGC	Optimizing Ash Handling Plant Operation from Ash Characteristics Measurable at Power Plant, Thapar Institute of Technology	Performance Ratio Improvement of Solar Power Plant Using Re-Binning Technique, NTPC NGEL
	Ensuring a Sustainable Coal Mining and Supply for Thermal Power Plants: Beyond Environmental Compliance, NTPC Badam	A Novel Approach in Operation and Maintenance Practices Ash Handling Plant (AHP), JPL	Transforming India's Energy landscape: Role of Energy Storage in Renewable Energy Integration, NTPC REL
	Exploring Business Opportunities in Biomass & MSW Torrefied Pellets in NCR, NTPC Biomass	Rare earth and critical elements in coal ash from various Indian power plants, CSIR - CIMFR	Las Vegas to Leh – A holistic development approach of Ladakh through Renewable Energy, Agrivoltaic, Green Hydrogen & Energy Storage, BHEL
	Strategies for Smooth Commissioning and Stabilization of FGD Systems, NTPC CC OS	Digital Transformation in Logistics Management for Ash Disposal in Coal Based Thermal Power Plant, L&T	Methanol Firing in Gas Turbines: A Sustainable Pathway for Renewable Energy Integration and Utilization of Gas Asset, NTPC Energy Transition & Policy
Achieving Net Zero Certification in NTPC Townships: An IGBC Perspective, CII	Strengthening Ash Dyke top road using Geosynthetic materials for enhancing Ash Utilization, NTPC Station Engineering	Zerowatt Energy Intelligence system – An IoT & AI solution for increasing energy efficiency, reducing Auxiliary Energy Consumption, increasing profitability, and a sustainable future, Alphageek Enterprises	
Virtual Session			