

Topics for Papers – IPS 2020

THEME –

Optimization of Generation Cost and Integration of Renewables.

Proposed Topics for Discussion:

- Health & Safety Practices
- Safe practices for effective O&M
- O&M Strategies for cost management.
- New Technologies & best practices for improvements in Efficiency and reliability
- Operational issues of solar power generation.
- Flexible Operation
- Grid management and grid integration with renewable energy
- Operation Experience of Super critical Plant
- Strategies for Efficient Operation
- Asset Management and risk analysis
- Post Commissioning & Stabilization issues of new plants
- Plant life Extension Technologies
- R&M approach in Thermal Power Stations
- Challenges in Fuel management and mitigation
- Water Conservation & Management
- Boiler Performance improvement and failure analysis
- O&M best practices
- Environment Challenges & Issues
- Ash Management and Utilization
- Water chemistry management
- Commercial & Operational Challenges
- Innovative tools and techniques and new O&M practices.
- Coal blending strategies and technologies.
- Optimization of fuel resources and combustion.
- Innovative solution for energy storage techniques.
- Repair and maintenance of power plant civil and high rise Structures.
- Waste to energy management.

- Water quality improvement for better condenser and cooling tower performance.
- Performance optimization, up- grading, efficiency & Reliability issues of coal and gas station in the different area / sub system.
- Reduction of water usage during power plant operations
- Maximizing Fly Ash Utilization and Ash Management
- Challenges in Flexible Operation & its Road Map
- Thermal mapping of Boiler Furnace insulation using drones.
- Use of Phased Array Ultrasonic testing for weld joint inspection in the place of Radiography.
- LP Blades(last stage) - Vibration monitoring
- IOT based monitoring Boiler Insulation Temperature and Steam leakage monitoring
- Nitrogen capping of DM Water Storage Tanks
- Adoption of IOT for various functionalities for Power Plant SAFETY and O&M
- Implementation of Advance Pattern Recognition(APR)
- Use of DRONES for other areas in Power Plant operations including Fuel management and Fuel Transportation
- Use advanced techniques for underwater works in CW/CT Systems and other related areas.
- Online Asset Health monitoring of Power Transformers
- Digitization of all critical activities of solar, thermal & wind Power operations
- Latest/modern T&P for quality, safe & quick maintenance
- SMART Maintenance through Digitalisation
- Software based RCA of BTL & Tripping
- Preservation of Super Critical Units
- Any other topic relevant to theme and power industry today and in future