

IPS 2024

**VENUE**

Pandit Deendayal Upadhyay Auditorium, Near Science College,  
Great Eastern Rd, Raipur, Chattisgarh 492010



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NTPC O&M CONF App on IOS and Android



**NTPC Limited**

(A Govt. of India Enterprise)

**Leading the Power Sector**



**Indian Power Stations  
O&M Conference  
IPS 2024**

13<sup>th</sup> to 15<sup>th</sup> February 2024

Raipur, Chattisgarh

**Theme**

**O&M PRACTICES FOR  
SAFE, RELIABLE & COST-EFFECTIVE  
POWER GENERATION**



## ABOUT NTPC

NTPC is India's largest integrated power utility, meeting 1/4th of the nation's power requirements with an installed capacity of 74 GW and has additional 20 GW of capacity under different stages of construction. NTPC maintains a diverse range of thermal, hydro, solar, and wind power plants. The company is dedicated to delivering dependable, cost-effective, and sustainable electricity to the country. NTPC remains committed to adopt best practices, driving innovation, and embracing clean energy technologies to pave the way for a more sustainable and environment friendly future. As part of its corporate plan, NTPC aims to increase its capacity to 130 GW by 2032, incorporating a varied fuel mix comprising 60 GW of Renewables.

## THEME

### O&M Practices for Safe, Reliable & Cost-effective Power Generation

A comprehensive approach towards adherence to safety regulations, implementation of latest safety standards not only ensures the well-being of our workforce but also fortifies the reliability of power generation. Safe environment is the foundation for sustained operational excellence.

Quality control and maintenance practices in power generation play a crucial role in maintaining the optimal performance and operational integrity of power generation assets. Robust quality control measures are essential throughout the entire life cycle of project construction, operation, and maintenance of power stations. These measures are vital for ensuring reliability, operational efficiency, and effective risk mitigation. The implementation of modern technologies such as condition-based maintenance, remote monitoring, and predictive analytics enable the operators to optimize maintenance schedules, minimize downtime and improve reliability.

Embracing cost-effective O&M practices is imperative for sustainable operations and efficient resource utilization.

**From energy-efficient technologies to streamlining operation and maintenance workflows, the O&M Conference 2024 will unravel innovative strategies to bolster Safety, Reliability & Cost-effective Power Generation.**

## SALIENT TOPICS

- Health & Safety Practices.
- Safe practices for effective O&M.
- Latest/modern T&P for quality, safe & quick maintenance.
- O&M best practices.
- Post Commissioning & Stabilization issues of new plants.
- O&M Strategies for cost management.
- R&M approach in Thermal Power Stations.
- Strategies for Efficient Operation.

## SALIENT TOPICS

- Commercial & Operational Challenges.
- Ash Management and Utilization.
- Maximizing Fly Ash Utilization and Ash Management.
- Reduction of water usage during power plant operations.
- Waste to energy management.
- Water Conservation & Management.
- Water chemistry management.
- Water quality improvement for better condenser and cooling tower performance.
- Innovative solution for energy storage techniques.
- Plant life Extension Technologies.
- New Technologies & best practices for improvements in Efficiency and reliability.
- Operation Experience of Super critical Plant.
- Boiler Performance improvement and failure analysis.
- Coal blending strategies and technologies.
- Optimization of fuel resources and combustion.
- Operational issues of solar power generation.
- Repair and maintenance of power plant civil and high-rise Structures.
- Performance optimization, up- grading, efficiency & Reliability issues of coal and gas station in the different area / sub system.
- Flexible Operation.
- Challenges in Flexible Operation & its Road Map.
- Preservation of Super Critical Units.
- Grid management and grid integration with renewable energy.
- Asset Management and risk analysis.
- Challenges in Fuel management and mitigation.
- Environment Challenges & Issues.
- Innovative tools and techniques and new O&M practices.
- 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.
- 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.
- SMART Maintenance through Digitalisation.
- Software based RCA of BTL & Tripping.
- Any other topic relevant to theme and power industry today and in future.

## IPS 2024 Schedule

### Tuesday, February 13

- Inaugural Session • Conference Sessions • Exhibition (Techno galaxy)

### Wednesday, February 14

- Conference Sessions • Exhibition (Techno galaxy) • Concluding Session

### Thursday, February 15

- Exhibition (Techno galaxy) • Presentation by Exhibitors

## Hotel Reservation

Raipur offers a variety of options from luxurious hotels to budget ones. The cursory list of hotels has been provided at the conference website <https://indianpowerstations.ntpc.co.in/>.

Delegates are advised to make reservations and settle bills directly with hotels of their choice.

## Registration

Delegates are required to pre-register on IPS website at <https://indianpowerstations.ntpc.co.in> or on IPS App

