



IPS 2024

O&M Practices for Safe, Reliable and Cost-Effective Power Generation
13th to 15th February 2024, Raipur, Chhattisgarh



Commercial Feature

Hon'ble Power Minister Inaugurates NTPC's Indian Power Stations O&M Conference (IPS 2024) at Raipur

Shri R.K. Singh, Hon'ble Minister of Power and New & Renewable Energy, virtually graced the inaugural ceremony of the Indian Power Stations O&M Conference (IPS 2024) hosted by NTPC in Raipur on 13th Feb 2024.

The flagship event commemorates the historic commissioning of the first unit of NTPC at Singrauli in 1982, marking a pivotal moment in the power sector's trajectory, leading to decades of innovation and excellence.

Shri R.K. Singh, while appreciating NTPC's contributions to the power sector said, "NTPC's reputation for efficiency, and reliability has been well established, and I envision the company doubling its capacity from current 73+ GW to 150 GW." He further added, "Today, NTPC has emerged as the one of the best and largest PSUs in India. I envision NTPC to become a global, multi-national entity operating its power plants worldwide."

He also stressed on the importance of timely completion of under-construction projects and reduction of forced outage to meet the rising demand of electricity, highlighting NTPC's pivotal role in driving India's economic growth.

While referring to Energy Transition,



Shri R.K. Singh, Hon'ble Minister of Power and New & Renewable Energy, addressing the inauguration ceremony of Indian Power Stations O&M Conference (IPS 2024) through virtual mode on 13th February, 2024

he said that it should not be worrying as both thermal and renewable shall coexist. The world is not against coal-based power. However, for our current and upcoming coal-based plants, it is the

need of hour to develop mechanism to ensure increasing efficiency while reducing emission.

He further said that the country as big as ours needs more nuclear capacity.

The JV of NTPC and NPCIL must strive to add nuclear capacity as fast as possible, which will pave the way for seamless flexibilisation.

Hon'ble Minister released the IPS 2024 E-Compendium, Steam Turbine E-Learning Module, Boilerpedia and inaugurated Vikalp, a unique ash-brick made from industrial byproducts.

Shri Pankaj Agarwal, Secretary (Power), who also addressed on Virtual mode emphasised on sustainable O&M practices.

Shri Ghanshyam Prasad, Chairperson (CEA), talked about the importance of safety protocols, while adapting to AI-driven applications for cost-effective solutions

in power plants.

Shri Gurdeep Singh, CMD, NTPC said that the first unit at Singrauli which is operating at almost 100% PLF even after 42 years of its synchronization is a testament to NTPC's excellence in O&M practices.

Shri D.K. Patel, Director (HR), Shri Jaikumar Srinivasan, Director (Finance), Shri Shivam Srivastava, Director (Fuel), Shri Vidyadhar Vaishampayan, Independent Director, and Ms. Sangitha Varier, Independent Director, Former Directors, REDs, senior officials were present on the occasion. Shri K.S. Sundaram, Director (Projects and Operations) presented vote-of-thanks.

Under the theme "O&M Practices for Safe, Reliable & Cost-Effective Power Generation," IPS 2024 serves as a platform for industry leaders to engage in collaborative discussions to explore innovative strategies to enhance safety, reliability, and cost-effectiveness in power generation.

The occasion also witnessed presentation of accolades such as the Swarn Shakti Awards (2022-2023) and Business Excellence Awards (2023-2024), recognising the outstanding contributions of NTPC power stations.

NTPC Swarn Shakti Awards (2022-2023)

- ❖ O&M Productivity Award: NTPC Vindhyachal
- ❖ Safety Award- O&M Area: NTPC Solapur
- ❖ Project Management Award: NTPC Barh
- ❖ Protection and Improvement of Environment Award: NTPC Mouda
- ❖ Coal Mining (Operational) Award: NTPC Talaipalli
- ❖ Coal Mining (Developmental) Award: NTPC Pakri-Barwadih
- ❖ RE Project Execution Award: NREL Ettayapuram
- ❖ Human Resource Award: NTPC Talcher Kaniha
- ❖ Rajbhasha Puraskar: NTPC Dadri
- ❖ Over-all Champion (Runner-up) Award: NTPC Vindhyachal
- ❖ Over-all Champion (Winner) Award: NTPC Talcher Kaniha

NTPC BE Awards for the year 2023-2024

- ❖ Jury Recognition for Highest Delta Improvement: NTPC Bongaigaon
- ❖ Jury Recognition for Continuous Improvement: NTPC Kahalgaon
- ❖ Overall Excellence Award: NTPC Talcher-Kaniha
- ❖ Champion and Overall Excellence: NTPC Vindhyachal

NTPC Talcher Kaniha claimed the coveted title of Overall Champion (Winner) of the Swarn Shakti Award, while NTPC Vindhyachal secured the position of Overall Champion (Runner-Up). Additionally, in the Business Excellence Awards category, NTPC Vindhyachal was honoured with the Champion and Overall Excellence Award.



NTPC Talcher Kaniha bags Overall Champion (Winner) Award at NTPC Swarn Shakti Awards (2022-23)



NTPC Vindhyachal receives Champion and Overall Excellence Award at Business Excellence Awards (2023-24)

@ Ground Zero



E-Compendium, Steam Turbine E-Learning Module, Boilerpedia Released; Ash Brick 'VIKALP' Inaugurated

As the leading forum for knowledge sharing, learning and innovation, the inauguration ceremony of Indian Power Stations O&M Conference (IPS 2024) witnessed the release of e-compendium, a comprehensive compilation of key topics, industry insights, case studies and best practices of 'O&M Practices for Safe, Reliable & Cost-Effective Power Generation'.

The 2024 edition of IPS received a total of 300 technical papers from multinational organizations, CPSEs, academia and power professional across the globe. Out of these, 93 highly acclaimed papers have been published in the compendium,

including 19 international, 27 national and 47 in-house technical papers. The compendium shall serve as a knowledge hub for the power professionals and associates across the power sector.

Hon'ble Minister also inaugurated an Audio-Visual E-learning Module for Diaphragm type Steam Turbine for Super Critical Steam Unit on this occasion. Jointly developed by CC-OS & PMI, the module shall provide a hands-on guide to all operators with vital aspects of turbine assembly structure and details of each component.

The occasion was also used as

an opportunity to release Boilerpedia 2024, a question bank covering boiler and auxiliaries of sub-critical, supercritical, and ultra-supercritical units with an aim to develop competency among the power professionals.

Converting waste into wonder, the occasion marked inauguration of VIKALP, an ash-brick made from industrial byproduct, thus providing an environment friendly Vikalp, i.e., alternative to the conventional bricks used for protecting top soil and conserving river sand. A novel initiative towards sustainable power generation, Vikalp is compliant to Bureau of Indian standards and is 20% cheaper to manufacture.



Voices



Shri R.K. Singh
Hon'ble Minister of Power, New and Renewable Energy

"NTPC's reputation for efficiency and reliability has been well established, and I envision the company doubling its capacity from current 73+ GW to 150 GW. Today, NTPC has emerged as one of the best and largest PSUs in India. I envision NTPC to become a global, multi-national entity operating its power plants worldwide."

It is of imperative to complete the under-construction projects timely and reduce forced outage to meet the rising demand of electricity for India's fast economic growth.

Energy Transition should not be worrying as both thermal and renewable shall coexist. The world is not against coal-based power. However, for our current and upcoming coal-based plants, it is the need of hour to develop mechanism to ensure increasing efficiency while reducing emission."



Shri Pankaj Agarwal
Secretary (Power)

"24*7 electricity is crucial for country's economic progress. What is more important than achieving more capacity is to sustain the capacity, which is possible by adopting top-notch O&M practices. I encourage NTPC's initiative and hope that the discussions during the 3-day conference yield valuable insights and recommendations that benefit the power sector."



Shri Ghanshyam Prasad
Chairperson, Central Electricity Authority (CEA)

"Safety remains paramount in all power plants, and prioritising safety measures is crucial. Innovation, technology, and digitalisation remain key for optimisation of the sector. In the past 3-4 years, the rising electricity demands shows the importance of coal-based power plants. That is why robust O&M and R&M practices are required."



Shri Gurdeep Singh
CMD, NTPC Limited

"Over the past 7 years, we have received invaluable support from the Government of India, which is crucial for achieving our goal of 24*7 power supply while ensuring affordability. With anticipated higher demand this year, we are confident in our readiness to meet peak periods by maximising unit availability. Our first unit at Singrauli which is operating at almost 100% PLF even after 42 years of its synchronization is a testament to NTPC's excellence in O&M practices."



Shri K.S. Sundaram
Director (Projects and Operations), NTPC Ltd.

NTPC is well prepared to meet the continuously increasing demand of electricity in the country

