



Conference on

Air Quality Control Systems in Thermal Power Plants

Reducing SO_x, NO_x and PM Emissions, New Technologies and Best Practices

May 13-14, 2019, Le Meridien, New Delhi

Organisers:

POWERLINE

**Indian
Infrastructure**

Lead sponsor so far*:



"Early Bird" discount ends on April 24, 2019

Register Now and save 20 per cent

*Lead and Co-sponsorship slots are available

Air Quality Control Systems in Thermal Power Plants

Mission

- By 2030, India intends to reduce the emission intensity of its GDP by 30-35 per cent from the 2005 level.
- In this context, the Ministry of Environment, Forest and Climate Change, issued new environmental norms in December 2015 aimed at reducing emissions from coal-based power plants, which are responsible for a significant share of emissions from the industrial sector. These regulations mandate coal-based thermal power plants (TPPs) to install pollution control equipment, and plants with control equipment to improve their performance from January 2017 onwards.
- Broadly, sulphur oxide (SO_x), nitrogen oxide (NO_x), suspended particulate matter (SPM) and mercury are the major pollutants emitted from coal-based TPPs. A variety of air quality control systems (AQCS) are available for different plant configurations to effectively control these emissions, and many technologies can reduce more than one type of emissions.
- AQCS is one of the key solutions that can effectively capture the air pollutants. These technologies include FGD systems (wet, dry, ammonia-based, seawater, etc.) for controlling SO_x emissions, de-NO_x systems such as SCR, SNCR, hybrids, electrostatic precipitators (ESPs) and fabric filters for controlling particulate matter (PM) emissions.
- In the Indian context, around 161 GW of capacity is non-compliant with SO_x norms. The plants have submitted plans for installing FGD technologies. Further, 64 GW of TPPs, which are non-compliant with PM emissions, have submitted plans for installing ESPs.
- With a significant number of technology providers and manufacturers present in the market, access to these technologies is not a concern. However, as with all retrofits and new technologies, there are challenges in the deployment of AQCS technologies as well. These include limited proven experience in Indian conditions (using high ash Indian coal), space constraints, additional capex requirements, stringent timelines, concerns related to raw material quality and disposal of by-products.
- **The mission of this conference is to provide a platform to discuss the needs, benefits, drivers and challenges associated with AQCS technologies for TPPs. It will also showcase the latest innovations and the most promising and relevant technologies.**

Target Audience

The event is expected to draw participation from executives, managers and decision-makers from:

- Power plants
- Pollution control boards
- FGD Technology providers
- State gencos
- Government and regulatory agencies
- Consultancy organisations
- Other industrial plants
- Research and development organisations
- Environmental firms
- Etc.

Previous Participants

Some of the organisations that have attended our related conference include: ADJ Engineering Pvt Ltd, Aerzen Machines India, AkzoNobel India Ltd, Amines & Plasticizers, Arudra Engineers, Atha Group, Balkrishna Industries, Banyan Tree Advisors Pvt. Ltd, Beijing SPC Environment, Bharat Heavy Electricals, BHEL, BMW Steels Ltd., Bray Controls, BTL EPC, Busch Vacuum, Bygging India, Centre for Fly Ash Research & Management, Central Electricity Authority, Chemical Process Equipments, Chemical Process Piping, Chhattisgarh State Power Generation Company, CLP India, Coastal Gujarat Power, Cottagon S.A., CP Piping, CPPE, CSRI NEERI, Damodar Valley Corporation, DB Power, Demech Chemical Products, EagleBurgmann India, Edelweiss Asset Reconstruction Company, Edwards India Pvt Ltd, Elara Capital, Emerson, Environnement SA India Pvt. Ltd, Ferbeck International, FLSmidth Pvt Ltd, Forbes Marshall, Furnace Fabrica (India), GE Power India Limited, GE South Asia, Greatall Dynamic Co Ltd, GSECL, GSK Powertel Pvt Ltd, H2L-Vedanta, Haryana Power Generation Corporation, HEG, Hindustan Petroleum Corporation, Hindustan Zinc, HPGCL, ICRA, India Unjper Power Services, Indiana Conveyers, Indus Energy Consultants, International College of Financial Planning, IOCL, ION Exchange (India) Ltd, J.K. White Cement Works Division, Jalprakash Associates, Jalprakash Power Ventures, Jay Pee Power Projects (Jai Prakash Power Ventures), Jaypee Bina Thermal Power Plant, Jindal Power, JK Cement, Kepco Plant Service & Engg, KSB Pumps, Lanco Anpara Power Limited, Lanco Power, Lubrizol Advanced Materials, Maco Corporation, Maharashtra State Power Generation Co. Ltd, Malithon Power, Mascot Capital & Marketing, MEG, Ministry of Power, MSEB Holding Company, Multi-Act Equity Consultancy, Munters India, Nabha Power Limited, National Fertilizers, Nevco Engineers, NLC India Limited, NTPC Limited, Odisha Electricity Regulatory Commission, Organo Corporation, Oriental Nicco Projects Pvt Ltd, Outokumpu, Paramount, Praj Industries, PTSP, RattanIndia Power, Reliance Jamnagar, RRWNL, Rudis LLC Trbovje, Sangir Plastics, Securities Investment Mgt Pvt Ltd, Sick India, Siemens, Simona India, SKI Carbon Black (India) Private, SPC Environment Protection Tech, SRF, Stalwart Advisors, Sulzer Pumps India, Sunrise Industries (India) Ltd, Sunrise Polymers, Takalkar Powe Engineers & Consultants Pvt Ltd, TANGEDCO, Tata Consulting Engineers, Tata Steel, Technical Drying Services (Asia), Technofab Systems, Tenova Delkor, TERI, The Tata Power Company, Thermo Fisher Scientific, TMEIC Industrial Systems, Torrent Power, Toshiba, Toyo Engineering, U.P. Rajya Vidyut Utpadan Nigam Ltd, UPRVUNL, Weir Minerals, West Bengal Power Development Corporation, Yantra Harvest etc.

AGENDA/STRUCTURE

KEY TRENDS AND OUTLOOK

- ❖ What have been the key trends in the coal-based power generation segment?
- ❖ What has been the trend in emissions from thermal power plants?
- ❖ What are the key issues and concerns? What is the outlook for the segment?

GENCO PERSPECTIVE

- ❖ What are the gencos' plans with regard to compliance with the environment norms?
- ❖ What are the issues and challenges in meeting the norms?
- ❖ What has been the progress with regard to FGD?
- ❖ What are the expectations of gencos from technology providers and suppliers?

UPDATE ON EMISSION NORMS COMPLIANCE

- ❖ What are the stipulated norms for air pollutants as per the revised regulations?
- ❖ What has been the progress so far in meeting the emission standards? What are the timelines and targets for FGD and ESP installations?
- ❖ What have been the recent developments? What are the key issues and concerns?

MANUFACTURERS' PERSPECTIVE

- ❖ What are the various technologies being deployed to reduce air pollutants?
- ❖ What has been the trend in ordering for equipment such as FGDs?
- ❖ What are the market opportunities? What are the new and promising solutions?

FGD OPTIONS (WET, DSI, AMMONIA, SEAWATER)

- ❖ What are the various technology options for SO_x emission control?
- ❖ What are the efficiencies of these options (wet, dry, seawater, etc.)?
- ❖ What are the new trends and advancements?

FOCUS ON WET FGD TECHNOLOGY

- ❖ What are the efficiencies associated with wet FGD systems?
- ❖ What has been the experience so far?
- ❖ What are the issues and concerns? What are the new trends and advancements?

SECONDARY NO_x CONTROL TECHNOLOGIES - SCR, SNCR AND HYBRIDS

- ❖ What are the efficiencies associated with secondary NO_x control methods?
- ❖ What are their costs and benefits?
- ❖ What has been the experience so far? What are the issues and concerns?

PRIMARY TECHNOLOGY OPTIONS FOR NO_x CONTROL

- ❖ What are the various primary NO_x control technology methods (OFA, low NO_x burners, etc.)?
- ❖ What has been the experience in deploying these solutions?
- ❖ What are the key issues and concerns?

FOCUS ON ESP

- ❖ What are the PM emission control technologies?
- ❖ What are the advantages that ESPs offer as compared to other PM emission control methods?
- ❖ What has been the experience so far?
- ❖ What are the key issues and concerns?

FABRIC FILTERS

- ❖ What is the efficiency of fabric filters in capturing PM emissions?
- ❖ What has been the experience so far?
- ❖ What are the issues and concerns?

MERCURY CONTROL METHODS

- ❖ What are the key available technologies and solutions for achieving mercury emission control?
- ❖ What are their efficiencies?
- ❖ What has been the experience so far? What are the new trends and advancements in this area?

FGD WASTEWATER TREATMENT SYSTEMS

- ❖ What are the key issues regarding FGD wastewater treatment?
- ❖ What are the technologies and solutions available?
- ❖ What has been the experience so far? What are the new trends and advancements in this area?

MULTI-POLLUTANT CONTROL SOLUTIONS

- ❖ What are the multi-pollutant control technology options available?
- ❖ What has been the experience so far?
- ❖ What are the key issues and concerns?

Organisers

The conference is being organised by **India Infrastructure Publishing**, the leading provider of information on the infrastructure sectors through magazines, newsletters, reports and conferences. The company publishes **Indian Infrastructure** and **Power Line** magazines. It also publishes a series of reports on the infrastructure/energy sector, including *Coal in India*, *Coal-based Power Generation*, *Mining Equipment Market*, *Mining in India*, and *captive Power in India*. It also publishes the *Power Line Directory and Yearbook*.

Conference on

AIR QUALITY CONTROL SYSTEMS IN THERMAL POWER PLANTS

Reducing SOx, NOx and PM Emissions, New Technologies and Best Practices

May 13-14, 2019, Le Meridien, New Delhi

Registration Form

I would like to register for the conference. I am enclosing Rs _____ vide cheque/demand draft no. _____ drawn on _____ dated _____ Company GST No. _____ in favour of **India Infrastructure Publishing Pvt. Ltd.** payable at New Delhi.

Please send wire transfer payments to:

Beneficiary India Infrastructure Publishing Private Limited
Bank Name The Hongkong and Shanghai Banking Corporation Ltd
Bank Address R-47, Greater Kailash-1, New Delhi-110048, India

Bank Account No. 094179587002
Swift Code HSBCINBB
IFSC Code HSBC0110006
GSTIN 07AAACI5880R1ZV

Sponsorship
opportunities are
available

Name(s)/Designation _____

(IN BLOCK LETTERS)

Company _____

Mailing Address _____

Phone _____

Mobile _____

Fax _____

E-mail _____

Registration Fee

Delegates	Discounted fee (before April 24, 2019)				Fee without discount (after April 24, 2019)			
	INR	GST @ 18%	Total INR	Total USD	INR	GST @ 18%	Total INR	Total USD
One delegate	18,000	3,240	21,240	354	22,500	4,050	26,550	443
Two delegates	30,000	5,400	35,400	590	37,500	6,750	44,250	738
Three delegates	42,000	7,560	49,560	826	52,500	9,450	61,950	1,033
Four delegates	54,000	9,720	63,720	1,062	67,500	12,150	79,650	1,328

- There is a 20 per cent "early bird" discount for those registering before April 24, 2019
- GST @18 per cent is applicable on the registration fee.
- There is a special low fee of Rs 7,000 per participant for delegates from state-owned power generation companies.
- Registration will be confirmed on receipt of the payment.
- To register online, please log on to <http://indiainfrastructure.com/conf.html>

Payment Policy:

- Full payment must be received prior to the conference.
- Conference fee includes lunch, tea/coffee and conference material.
- Payments for "early bird" registrations should come in before the last date of discount. Discount offers cannot be combined with any other offer.
- Conference fees cannot be substituted for any other product or service being extended by India Infrastructure Publishing Pvt. Ltd.

Contact: Megha Shukla, Conference Cell, India Infrastructure Publishing Pvt. Ltd.

B-17, Outab Institutional Area, New Delhi 110016.

Tel: +91-11-46078359, 41034615, 9999411008 | E-mail: conferencecell@indiainfrastructure.com