



2nd Annual Conference on

FUTURE OF COAL-BASED POWER GENERATION IN INDIA

Role, Market Outlook, Stressed Assets and Emission Control

January 15-16, 2019, The Lalit, New Delhi

Organisers:

POWERLINE

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FUTURE OF COAL-BASED POWER GENERATION IN INDIA

Mission

- The coal-based power generation segment continued to remain under pressure during the past year. Capacity additions slowed down with only 8 GW being added in the last fiscal vis-à-vis record additions until 2015-16. At the same time, the rapid increase in renewables led to the share of coal-based power coming down to 57 per cent (August 2018) in the fuel mix from 59 per cent a year ago.
- Coal-based PLFs remained low, although they showed signs of firming up. The national PLFs inched up marginally to 60.52 per cent in 2017-18 and 60.5 per cent in the first five months of the current fiscal. However, the PLFs for private IPPs remained depressed at sub-55 per cent levels. The segment is still awaiting workable solutions for addressing the issue of stressed assets, estimated at nearly 40 GW of existing and under-construction capacity.
- A number of policy and regulatory interventions have been made in the past one to two years to provide some relief to the segment. A high-level committee has recently been set up to address the issues of stressed assets. A warehousing framework for stranded assets (Pariwartan) is also in the works. Meanwhile, the amendment of concluded PPAs for imported coal-based projects is on the cards.
- A pilot scheme was introduced last year for centralised procurement of coal-based capacity and selling to states through the competitive bidding process. This gave some relief to the commissioned plants that have not been able to despatch power due to the non-availability of PPAs.
- Further, the uncertainties associated with the recovery of huge investments in emission control systems have now been addressed with the government notifying that the additional cost will be allowed as pass-through to the off-takers under change in law. Even though compliances are still at an early stage, emission control equipment installation is expected to pick up pace with many utilities awarding bids or issuing tenders for FGDs. So far, three FGD units have been commissioned for 1.8 GW of capacity vis-à-vis a target of 160 GW by 2022.
- Earlier in 2018, coal supplies to winners under the first round of auction under the SHAKTI mechanism began. However, despite the increase in coal supplies to the sector, shortages continued to grow. At the end of the second quarter of 2018-19, coal inventory at power plants stood at only seven days. Coupled with higher energy demand, domestic coal availability constraints led to a sharp increase in spot power market rates. The shortages have been acknowledged by the government and the states have been asked to import coal to tide over the shortage.
- Amidst these challenges, thermal power plants are responding to a changing market through flexibilisation and digitalisation strategies in order to transform operational risks to competitive advantages. Improved O&M practices that incorporate real-time asset monitoring along with data and predictive analytics are also being adopted by plant owners to ensure higher efficiency and cost savings.
- **The mission of this conference is to provide a platform to stakeholders to discuss the key challenges facing the coal-based power generation segment as well as highlight the solutions and strategies needed to address them. The conference will also examine key recent developments, the challenges in meeting emission norms, the impact of flexibilisation, and the coal supply outlook, besides focusing on operational issues such as O&M, energy efficiency, and coal washing. It will also provide a platform to showcase best practices, emerging technologies and solutions in the coal-based power generation segment.**

Previous Participants

The participating organisations in our previous conferences on "Coal-based Power Generation" include ABB, ABG Shipyard, ACB, ACC, Adani, Adani Ports, Adhunik Power, Aditya Birla, Amtek Auto, APCPL-NTPC, APGENCO, Archean Group, Asset Reconstruction Company (India), Atlas Copco, Atlas Logistics, Auma, Avantha Power, Axis Bank, Badrinarain Alloys & Steel, Bajaj Engineering, BALCO, Bank of Baroda, Banyan Tree Advisors, Bharat Forge, Bharat NRE Coke, Bharat Oman Refinery, Bhartiya Rail Bijlee, BHEL, BirlaTyres, Black & Veatch, BlueStar, Brookings India, Bygging India, C&S Electric, Canara Bank, Carborundum Universal, CERC, Cethar Vessels, CLP India, Clyde Pumps, CMPDI, Coal India, Coal Mint, Coastal Energen, Coastal Gujarat, CRISIL, Dalmia Cement, Damodar Valley Corporation, Deloitte Touche Tohmatsu, Development Consultant, Doosan Power, DVC, E&Y, Eagle Burgmann, EICS Group, EIL, Elecon, ELP, Emerson Automation Solutions, Emerson Network Power, Energy Infratech, Epiroc Mining India, EPSA, Essar Projects, Essel Mining, Evonik, Exxon Mobil, Ferro Tech, Fichtner Consulting, FLSmidth, Gandhinagar University, GE, GE India Industrial, GEMCO, Getzner India, Glencore India, GMR, GRIDCO, GSECL, GVK Power, Haryana Power Generation Corporation, HCC, Heavy Water Plant, Hilti, Hindalco Industries, Hindustan Zinc, Honeywell Automation, HPERC, ICF International, ICICI Bank, IDBI, IDFC, IIFCL, ILFS energy, IMFA, IMI CCI-Control Component India, IMI Critical Engineering India, India Uniper Power Services, ISGEC, IEX, Indus Law, Innovima Technologies, J Power, JBIC, Jhajar Power, Jindal India Thermal, Jindal Power, JK Cement, JM Financial, Jubilant Life Sciences, JSPL, Karam Chand Thapar & Bros, Kennametal, Kepco Plant Service & Engineering Co., KW IPEX Bank, Korus Energy, KPMG Advisory Services, KraftPowercon, L&T Finance, L&T Infra Finance, L&T Power, L&T-MHPS Turbine Generators, L&T-Sargent & Lundy, Lahmeyer, Lanco Infratech, Larsen & Toubro Limited, Leighton Contractors, Link Legal India Law Services, Lodge Cottrell, M3Investments, Macawber Beekay, Mahagenco, Mahavir Multitrade, Maithon Power, Marsh India, Mascot Dynamics, MB Power, McNally Bharat, MEIL, Mitsubishi, Mitsui, Monnet Ispat, Ministry of Power, Moser Baer, Multi-Act Equity Consultancy, Nabha Power Limited, NALCO, New Technical Water Proofing Service and Rehabilitation, North Karnataka Power, Northern Coalfields, NSPCL, NTPC, OERC, OPG Power, Oriental Rubber Industries, Peabody Energy, PFC, Power Machines, Princeton University, Proteck Circuits, PTC India, PTC India Financial Services Limited, PWC, RECPDCL, Reliance Infrastructure, Religare Capital Markets, Rolux Rockwool, Rosa Power, Saffire Capital, ROTODYNE Engineering Services, Saigal Sea Trade, SBI Capital Markets, SCCL Mines, Schede Lagertechnik, SDG, SEW Infrastructure, Shanghai Electric India, Shapoorji & Pallonji, Shree Renuka Energy, Siemens, Siemens Power Engineering, Sindya Power Generating Company, SN Power, South Eastern Coalfields, SRF, Statkraft Energi, Sumitomo Corporation India, Supreme Nonwoven Industries, Surya Roshni, Takraf, Tata Power, Tata Projects, Technofab Engineering, Tecpro Systems, Telangana Power Generation, THDC, The Singareni Collieries Company, The West Bengal Power Development Corporation Limited, Thermax, Thermodyne Technology, ThermoFisher Scientific, Thriveni, ThyssenKrupp, Torishima Pumps, Torrent Power, Toshiba JSW Power Systems, TRF, Trident Group, VE Commercial Vehicles, Vedanta, Voith Turbo, Walchandnagar Industries, Wartsila, Welspun Energy, Western Coalfield, Wipro, WymanGordon, YES Bank, Zuari Cement, JSW Energy, JSW Power Trading, Volvo, etc.

AGENDA/STRUCTURE

KEY TRENDS AND OUTLOOK

- ❖ What have been the key trends in the coal-based power generation segment?
- ❖ What have been the recent developments?
- ❖ What are the key issues and concerns? What is the outlook for the segment?

GOVERNMENT PERSPECTIVE

- ❖ What is the government's perspective on coal-based power generation?
- ❖ What are the key issues and concerns?
- ❖ What is the government's outlook for the segment?

NTPC'S PERSPECTIVE

- ❖ What is NTPC's perspective on the coal-based power generation segment?
- ❖ What are the key issues being faced for its coal-based power projects? How are these being resolved?
- ❖ What is the future outlook for the segment?

CIL'S PERSPECTIVE

- ❖ What have been the trends in domestic coal supply and prices for coal supplied to TPPs?
- ❖ What are the steps being taken to enhance coal availability for power consumers?
- ❖ What are CIL's plans with regard to the next rounds of auctions under the SHAKTI mechanism?
- ❖ What are the key issues and concerns? What is the supply outlook?

PRIVATE GENCO PERSPECTIVE

- ❖ What is the perspective of private developers on the current state of the segment?
- ❖ What are the major issues and concerns?
- ❖ What is the future outlook?

STATE GENCO PERSPECTIVE

- ❖ What is the perspective of gencos on coal-based power generation?
- ❖ What are the key issues and concerns?
- ❖ What is the future outlook for the segment?

STRESSED ASSETS AND FINANCIERS' PERSPECTIVE

- ❖ What are the workable solutions for addressing the stressed assets issue?
- ❖ What has been the experience with resolved cases so far?
- ❖ What are the steps being taken to improve asset quality? What is the outlook of financiers on extending funding for emission control investments?

FUEL SUPPLY, QUALITY AND OUTLOOK

- ❖ What has been the recent trend in coal supply and quality for thermal power plants?
- ❖ What has been the impact of recent coal shortages?
- ❖ What is the outlook for domestic coal supply? What is the forecast for coal imports?

ROLE IN LOAD BALANCING

- ❖ What are the opportunities emanating from the growing renewable energy penetration for the coal-based power segment?
- ❖ How can coal-based power plants help in meeting the load balancing requirements?
- ❖ What are some of the technical and non-technical barriers that need to be addressed for coal-based power plants in this regard?

COSTS AND TARIFFS

- ❖ What has been the trend in generation and fuel costs for coal-based plants?
- ❖ What has been the trend in the issue of fresh PPAs by discoms and the tariffs discovered?
- ❖ What is the outlook for costs and tariffs?

ROLE OF FLEXIBILISATION

- ❖ What are the flexibilisation strategies and solutions for coal-based power plants?
- ❖ What is the impact of cyclic operations on the performance of coal-based power plants?
- ❖ What are the challenges involved in flexibilisation?

DIGITALISATION OF COAL-BASED PLANTS

- ❖ What are the key areas and processes that have potential for digitalisation in coal-based power plants?
- ❖ What are the advantages and outcomes achievable with digitalisation?
- ❖ What has been the experience so far? What are the challenges?

O&M OF COAL-BASED PLANTS

- ❖ What are the major O&M-related challenges for coal-based power plants?
- ❖ What are the technologies, solutions and best practices in this regard?
- ❖ What are the new and emerging requirements?

DISCOMS' POWER PROCUREMENT OUTLOOK

- ❖ What has been the trend in short, medium and long-term power procurement by discoms?
- ❖ What has been the trend in the cost of power procurement from coal-based power vis-a-vis other sources?
- ❖ What is the outlook for power procurement for the next few years?

FOCUS ON COAL TRANSPORTATION

- ❖ What has been the trend in the volumes and prices of coal transportation through the railways?
- ❖ What are some of the key initiatives being taken to improve coal transportation?
- ❖ What are the plans and projects in the pipeline to address logistical bottlenecks in coal supply to TPPs?
- ❖ What is the feasibility of coal transportation through inland waterways?

EMISSION CONTROL: SO_x, NO_x, AQCS AND WATER

- ❖ What are the key environmental norms and timelines for compliance?
- ❖ What are the various FGD options?
- ❖ What are the most promising technologies related to reduction of SO_x and NO_x?
- ❖ What are the strategies and solutions to meet the revised water reduction norms?
- ❖ What are the overall AQCS strategies and solutions being adopted/considered?

Target Audience

- The conference is targeted at:
 - Power plants
 - Renewable energy developers
 - Technology providers (FGD, AQCS and Water)
 - Power trading companies
 - Other industrial plants
 - Financiers and investors
 - BTG manufacturers
 - Legal companies
 - Regulatory agencies
 - Pollution control boards
 - Government and planning agencies
 - Environmental engineering consultants
 - Coal producers and importers
 - EPC contractors
 - FGD technology providers, etc.

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Delegates	Discounted fee (before December 27, 2018)				Fee without discount (after December 27, 2018)			
	INR	GST@18%	Total INR	Total USD	INR	GST@18%	Total INR	Total USD
One delegate	20,000	3,600	23,600	393	25,000	4,500	29,500	492
Two delegates	32,000	5,760	37,760	629	40,000	7,200	47,200	787
Three delegates	44,000	7,920	51,920	865	55,000	9,900	64,900	1,082
Four delegates	56,000	10,080	66,080	1,101	70,000	12,600	82,600	1,377

- There is a 20 per cent "early bird" discount for those registering before December 27, 2018.
- There is a special low fee of Rs 7,000 per participant for delegates from state-owned gencos, regulatory agencies and academic institutions. (GST @ 18% is applicable)
- 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 materials.
- Conference fees cannot be substituted for any other product or service being extended by India Infrastructure Publishing Pvt. Ltd.

Organiser

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