The Indian transmission sector is poised to enter an accelerated growth phase. The National Infrastructure Pipeline estimates a capital investment of Rs 3,040 billion in transmission till 2025. This growth will be mainly driven by the country’s shift away from conventional energy to green energy sources and cross-border integration initiatives. In addition to building greenfield transmission lines and towers, the future focus will be on the augmentation and strengthening of transmission infrastructure to seamlessly and reliably transmit green power to any corner of the country.

These initiatives will lead to a significant uptick in demand for towers, cables and conductors, as well as provide opportunities to developers, equipment manufacturers and EPC players in this space. Transcos across the central, state and private sectors are expected to deploy advanced conductor technologies such as HTLS conductors, superconductors and HVDC cables, as well as adopt modern tower designs such as monopoles, multi-circuit, narrow-based and ERS towers to transmit a greater quantum of power and tide over RoW issues.

Technologies such as LiDAR and use of drones that help fast-track surveying and monitoring of transmission lines and towers will become more ubiquitous in the coming years as they offer unparalleled accuracy, speed and reliability. In addition, the increase in the incidence of extreme weather events such as cyclones and floods would necessitate the setting up of climate resilient transmission infrastructure and adoption of emergency restoration systems for the grid.

The mission of this one-day virtual conference is to highlight the latest technologies and solutions for the design, erection, commissioning and O&M of transmission lines and towers. It will also provide a platform for showcasing successful projects and best practices in the segment.

AGENDA/STRUCTURE

**KEY TRENDS AND OUTLOOK**
- How has the transmission network grown over the years?
- What are the key demand drivers for the sector going forward?
- What are the unaddressed issues and challenges?

**UTILITY AND DEVELOPER EXPERIENCE**
- What are the capex and transmission capacity addition plans of leading transmission utilities?
- What are some of the key issues in project implementation? How are RoW issues addressed?
- What are the main technology focus areas for the next few years?

**EPC VIEWPOINT**
- How have EPC practices for transmission projects evolved in recent years?
- What are the key challenges in project execution and how are they resolved?
- What are the latest designs and innovations in the EPC space for transmission projects?

**TRANSMISSION LINE DESIGN, CONSTRUCTION AND STRINGING**
- What have been the recent innovations and advancements in transmission line design?
- What are the new solutions and techniques for the construction and stringing of transmission lines?
- What has been the utility experience in the adoption of technologies? What are the key challenges?

**EVOLUTION OF TOWER AND FOUNDATION DESIGNS**
- How have tower designs evolved to optimise RoW?
- What advances have taken place in the laying of tower foundations?
- What are some of the climate resilient tower designs and emergency restoration techniques?
- What are the bottlenecks in the implementation of advanced tower structures?

**ADVANCED CONDUCTOR TECHNOLOGIES**
- What is the status of adoption of new conductor technologies by Indian utilities?
- What are the key technology trends in HTLS, superconductors, XLPE cables and GILs?
- How are advanced conductor technologies poised to grow in the coming years?

**RECONDUCTORING AND UPRATING OF LINES**
- Why are utilities focusing on reconductoring and uprating of transmission lines and what solutions are being adopted?
- What are the key techno-economic criteria for selecting optimal conductors in this regard?
- What are some of the issues and challenges faced by developers during the process?

**TRANSMISSION LINE ASSET MANAGEMENT**
- What are the new technologies adopted for condition-based monitoring systems?
- What are the measures adopted for extreme event mitigation?
- What are the innovative techniques and solutions for effective asset management?

**APPLICATION OF NON-DESTRUCTIVE EVALUATION, ROBOTICS AND AERIAL TECHNOLOGIES**
- What are the latest technologies for monitoring and surveillance of transmission lines and towers?
- What are the key advantages of these technologies vis-à-vis conventional methods?
- What are the key regulatory bottlenecks in the adoption of these technologies by utilities?

**PROJECT SHOWCASE**
- What are the salient features of the project (in terms of equipment, technology, design, commissioning, costs, etc.)?
- What were the issues and challenges faced and how were they overcome?
- What are the key learnings from the project?
The mission of this one-day virtual conference is to highlight the latest technologies and solutions for the design, installation and O&M of high voltage substations, switchgear and substations. It will also provide a platform for showcasing the successful projects and best practices in the segment.

AGENDA/STRUCTURE

KEY TRENDS AND OUTLOOK
- How has the country's substation capacity grown over the years?
- What are the latest technology trends and developments in substations?
- What are the issues and challenges?

UTILITY AND DEVELOPER EXPERIENCE
- What are the investment and substation capacity addition plans of leading transmission utilities?
- How has been the utility experience with advanced substation technologies?
- What are the most pressing concerns of utilities in substation project execution?

EPC PLAYERS’ VIEWPOINT
- How have EPC practices for substations projects evolved in recent years?
- What are the latest designs and innovations in the EPC space for substations projects?
- What are the issues and challenges? How can they be addressed?

MODERN SUBSTATION TECHNOLOGIES
- What are some of the promising substation technologies (digital, smart, energy efficient, remote monitoring, etc.)?
- How have modern substation technologies benefitted utilities?
- What has been the utility experience in the adoption of technologies? What are the key challenges?

SUBSTATION AUTOMATION
- What has been utility experience with the adoption of substation automation technologies?
- What has been the impact of new-age protection & control systems on utility operations?
- What steps are being taken to address interoperability issues associated with substation automation?

FOCUS ON DIGITAL SUBSTATIONS
- What are the key features and growth drivers of digital substations?
- What are the potential benefits of digital substations vis-à-vis conventional ones?
- What is the update on standards and regulations for digital substations in the Indian context?

ADVANCED TRANSFORMERS AND SWITCHGEAR TECHNOLOGIES
- What are some of the upcoming transformer and switchgear technologies?
- What are the key features and benefits of new generation transformers?
- How has been the experience of utilities in adopting these advanced technologies?

ASSET MANAGEMENT STRATEGIES
- What are the integrated asset management strategies for substations?
- What have been the recent advancements in O&M practices for modern substations?
- What are some of the advantages of AR/VR and digital twin technologies in substation maintenance?

ADDRESSING POWER QUALITY ISSUES
- What are the common power quality issues faced by transmission utilities/grid operators?
- How can grid operators ensure superior power quality especially with the increase in renewable energy?
- What are the best strategies for reactive power compensation?

PROJECT SHOWCASE
- What are the key features of the substation project (in terms of equipment, technology, design, etc.)?
- What were the issues and challenges faced and how were they addressed?
- What are the key lessons learnt from the project?
Target Audience

- The conference is targeted at:
  - Transmission companies
  - Interstate transmission operators
  - Technology providers
  - Transmission structure manufacturers (towers and substations)
  - Conductor manufacturers
  - Transmission line manufacturers
  - State electricity boards
  - Private developers
  - Foundation and piling companies
  - Private utilities
  - Design and consulting organisations
  - Steel companies, etc.

PREVIOUS SPEAKERS (in alphabetical order):

Ravindra Chavan
Director Projects, Maharashtra State Electricity Transmission Company Limited

Sourov Chakraborty
Senior General Manager, Power Grid Corporation of India

Ishwar Kailashnath Dubey
Associate Vice President – Projects, Engineering, Adani Transmission

I K Dubey
Head of Engg, Adani Transmission Ltd.

Adish Kumar Gupta
Senior General Manager, Power Grid

Maneesh Jain
Principal Engineer, GE

V.K. Khare
Director (P.M. & A.), Uttar Pradesh Power Transmission Corporation Limited (UPPTCL)

Abhay Kumar
General Manager, Power Grid Corporation of India Limited

Pradeep Kumar
General Manager & BU Head EPC TLT, Bajaj Electricals

Surendra Kumar
General Manager, Power Grid Corporation of India

Krishna Kumar
Vice President and Head of Sales, Siemens

Rajesh Narayan
General Manager & Head Transmission Line BU, Power Transmission & Distribution, L&T

Rajesh Narayan
Head, Transmission Lines, Power Transmission & Distribution, L&T Construction

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E.V. Rao
Vice President, KEC International

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Rajil Srivastava
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Dayanand Swamy K.
Vice President (Engineering & Business Development), Skipper

C. Taneja
Chief General Manager, Power Grid Corporation of India

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Associate General Manager, Motwane Manufacturing Company

R.K. Tyagi
Chief General Manager (AM), Power Grid Corporation of India

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Previous Participants

Some of the participants in our previous transmission conferences were AMAT; Accenture; ACME; Adani Transmission; Adani Electricity; Adhunik Power; Aditya Birla Insulators; AES; AIC Steel; Airbus Group; Altair; Altec Worldwide; Amara Raja; Angelique International; Apar Industries; Apto Services; Arcturus Business Solutions LLP; Arrezo Solutions; Assam Electricity Grid Corporation; Asbestos; Associated Power Structures; Asteria Aerospace; AVEVA Information Technology; Bain & Company; Bajaj Electricals; Barclays; Bechtel; Bekart; Bentley Systems; BGR Energy; Bhakra Beas Management Board; Bharat Heavy Electricals; Bhardwaj Services; Bihar State Power Transmission; Bihar State Power Transmission Company; BNC Power Projects; Bothe Windfarm Development; Brugg Cables; Burns McDonnell; Cabcon; Cargill; CESC; Chloride Power Systems; CLP; Connectwell Industries; CRISIL; Crompton Greaves; CTC Global; Customized Energy Solutions; Damodar Valley Corp; Delhi Transco; DNV-GL; Easun -MR Tap Changers; EDAC Engineering; Electrotherm; Elecgrow Technology; Elite Powertech; EMC; Entegra; EPCO; ERA T&D; ERDA; Eros Group; Essar Power; Exide Industries; FLIR; Fluke Technologies; Focal Energy; Fugro; Galaxy Transmission; Garware -Wall Ropes; GE T&D; GIZ; Godrej & Boyce Mfg. Co.; Good Luck Steel; Gujarat Energy Transmission Corporation; Gupta Power; Haldia Energy Limited; Himalayan Heli Services; Hind Aluminium; Hitachi ABB; HPERC; HVPNL; Hyosung Heavy Industries Co; Hyosung T&D; iEngineering; IFC; IL&FS Energy Development; Inabensa; India Power; Indian Railways; Indo-German Energy Forum; International Energy Resources; Isolux Corsan; IVRCL TLT; Jagdamba International; Jaigad Power Transco; JBS Enterprises; Jindal Steel & Power; J-Power Systems; JSDK industries; JSW Power Trading; Jyoti Structures; Kalpataru Power Transmission; Karamtara; Karnataka Power Transmission; KEC International; KEI Industries; Kloechner DESMA Machinery; KSB; Kudgi Transmission Limited; L&T (Kudgi Transmission); L&T Infrastructure Development Projects; L&T Sargent & Lundy; Lara Global; Larsen & Toubro Limited; M&I Materials; M.P. Power Transmission; MacLean Power; Madhav Engineers; Madhya Pradesh Power Transmission Co.; Mahan Transco; Maharashtra Eastern Grid Power Transmission Company; MAN Structurals; MAP Power LLP; Mitsui & India; MMC UAV; Modern Insulators; Monnet Ispat & Energy MP Power Transmission Company; Motilal Oswal Financial Services Limited; MP Power Transmission Co.; MTEK PRO; Nandan Steels & Power; NLC; NTPC; Odisha Power Transmission Corporation; Orange Renewable Power; Paras Aerospace Solutions; Parbati Koldam Transmission; PFC; POSOCO; Power Grid; Power Transmission Corporation of Uttarakhand; Powerlinks; Pradman Engineering Services; Primagx; PTC India Financial Services; Punj Lloyd; Punjab State Transmission Corporation; Purulia & Kharagpur Transmission; PwC; Quality Austria Central Asia; R.S. Infraprojects; Rabobank; Ramelex; REC Transmission; Reliance Infrastructure; Rites; RRVPNLL; SAIL; Sanjaylaj Infrastructure; Satpura Transco; SBI; SBI Capital Markets; Shenzhen Micromulticopter Aero Technology; Shyam Indus Power; Sicame; Siddhartha Engineering; Siemens; SJVN; Skipper; Sleepwalkers- Creative & Consultants; SMEC; State Grid Corporation Of China; Sterling and Wilson; Sterlite Power Grid; Supreme & Co; Suzlon Energy Tag Corporation; Tamil Nadu Transmission Corporation; Tata Power; Tata Projects; Taurus Powertronic; TBEA; TESMEC; The Motwane Manufacturing Company; The Tata Power Company; Tokyo Rope International Inc.; Torrent Power; Transmission Corporation of Andhra Pradesh; Transrail Lighting; Trimble; TS Transco; TSE International; UbiFrance; UP Power Transmission Corporation; Uttkarsh Tubes & Pipes; Valmont Structures; Vikram Engineering & Exim; Voltamp Transformers; Virtuous Energy; West Bengal State Transmission Corporation; Wipro; Yes Bank; ZTT Cable, etc.

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. It publishes Power Line (the premier magazine for the Indian power sector), Indian Infrastructure and Renewable Watch magazines. It also publishes a series of reports on the energy sector including Power Transmission In India, and T&D Equipment Market In India. The company also publishes Power News (a weekly newsletter) and the Power Line Directory and Yearbook.

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☐ I would like to register for both the conferences

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