

# Power Today

₹ 100

*The MegaWHAT of the Power Industry*

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## Interviews

**Siddharth Mehta**, CEO, Essar Power Distribution.  
**VP Raja**, Chairman, MERC  
**Harsh Shah**, MD, Pratt & Whitney Power Systems – India.

## Viewpoints

**Ramesh Kymal**, Gamesa • **Ajay Mathur**, BEE  
**Deepak Takkar**, Emerson Climate Tech  
**Sanjeev Ranjan**, International Copper Promotion Council  
**Umesh Agrawal**, PwC • **DPK Udas**, Goldstone Infratech  
**Arun K Gupta**, TELK • **Sandeep Arora**, Schneider Electric Infrastructure  
**Adrian D'Souza**, Southern Power Equipment Company  
...and more

## Also

Future power utility business models  
Transformers: On an upswing  
Are insulators poised for progress?  
Drop in solar tariffs in India  
Solar and wind funding  
Equipment industry growth decelerates

## Event

Infrastructure Today Conference at Toronto

# BALANCE OF PLANT

**Weighing the options**



# YOUR PARTNER IN POWER

# TELK

(A Joint Venture of Government of Kerala & NTPC Limited)

## PRODUCT RANGE

Power Transformers up to 400 kV Class from 10 MVA to 315 MVA 3 Phase and 275 MVA Single Phase for 825 MVA Bank.

Current Transformers from 66 kV to 420 kV Class.

Voltage Transformers from 66 kV to 220 kV Class.

Oil Impregnated Condenser Bushing from 72.5 kV to 420 kV Class.

High Current bushing up to 36 kV, 12.5 kA.

On Load and Off Load Tap Changers.

**T**ransforming the Powerscape of the nation for over four decades.

Unmatched expertise and excellent track record in HV & EHV Power Transformers and Instrument Transformers in the range of 66 kV to 400 kV.

**E**stablished in 1963 as a Kerala State Government Public Sector Enterprise under technical and financial collaboration with M/s. Hitachi Limited, Japan.

Awarded for Outstanding Achievements in Enterprise Performance for the year 2009.

**L**eading Exporter of Transformers.

NABL accredited lab.

**K**EMA, Netherlands Certificate of Short Circuit test Performance for 315 MVA Transformer.

## Milestones

First 400 kV power transformer manufacturer in India.

400 kV Power Transformers and CTs in 1975 for BBMB.

600 MVA 220 kV Generator Transformer in 1982 for TATA 500 MW Plant.

Sub-divided 190 MVA 3 Phase Transformer in 1998 for APSEB.

First 210 MVA Single Phase Generator Transformer to Tarapur Atomic Power Plant in 2003.

Established technology supremacy and quality manufacturing by successfully conducting the Short Circuit Test of 315 MVA, 400 kV Auto Transformer at KEMA, Netherland in 2009.



315MVA, 400KV TRANSFORMER-SHORT CIRCUIT TESTED AT KEMA, NETHERLAND



## TRANSFORMERS AND ELECTRICALS KERALA LIMITED

(A Joint Venture of Government of Kerala & NTPC Limited)

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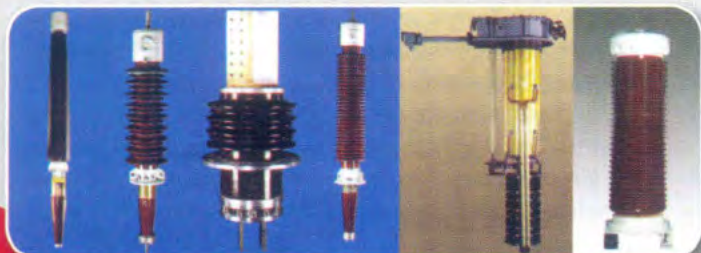
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OIL IMPREGNATED CONDENSER BUSHINGS

ON LOAD TAP CHANGER

245KV VOLTAGE TRANSFORMER

(ISO 9001:2008 Certified Company)



# Transforming India

Transformers and Electricals Kerala Limited has provided ground-breaking innovations for the transmission market for over 45 years, says its **MD Arun Kumar Gupta**.

The company was incorporated in 1963 for manufacturing, marketing and servicing transformers, on-load tap changers and bushings for public and private sector utility companies. "In India, our transformers are called 'failure-proof'," said AK Gupta, MD, Transformers and Electricals Kerala Limited (TELK). The company provides its services to almost every part of India. The company also serves customers in Nepal, Oman, Indonesia, Malaysia, Tanzania and Nigeria. He said, "For the last two years our main export market has been Oman – we have over 300 transformers there alone."

## COMPANY MILESTONES

TELK set its first benchmark in the early 1970s upon the completion of the country's first largest 400 kV sub-station in Hyderabad by supplying the single-largest auto transformer, which was built for PowerGrid.

In 1977, India's first 400 kV transformer was supplied to Bhakra Beas Management Board. Then in 1980 India's first 500 MW thermal unit was implemented by Tata at Trombay and the entire plant was imported, except for the generator transformers which were sourced from TELK and even 30 years later they are still in successful operation. The company entered a new era in 2007 when NTPC acquired a 44.6 per cent stake in the business.

## UNCOMPROMISING QUALITY

The company provides transformers ranging from 10 to 600 MVA. "In terms of MVA, our total output is around 6,000 MVA per year," he said.

To ensure product quality, the company has developed an in-house laboratory facility, ISO and National Accreditation Board for Testing and Calibrating Laboratories certified for HV testing of transformers, bushing and on-load tap changers that conform to IEC standards. "Every part is checked for quality before going to the next stage in the



production line and TELK also invites independent quality audits," he said. One of the company's main attributes is its uncompromising stand when sourcing raw materials. The company carries a longstanding tradition of innovation and he regards it as a key strength as it strives to increase quality with creative ideas. "This is what has led us to be known for our failure-proof transformers," he said.

About the low attrition rate, he said, "We are able to sustain a quality workforce for a good length of time." In terms of competency building, it has made it obligatory for all 800 staff members to undergo at least seven days of training per year – in technical as well as managerial aspects.

## EXPANSION AND INNOVATION

The company will enter a new era of production in FY 2012-13 as its current expansion project draws to a close. TELK has seen an extension of its factory floor with an added capacity of 1,500 MVA. "We are trying to reduce design cycle time," he said. The company is continually searching for new innovations and its R&D department is working on a project to revolutionise the installation of transformers in heavily built-up areas.

About the future, he said, "The last five years have seen growth but productivity also tripled, resulting in some over-capacity. But this will be short-lived, as the government begins its six-year plan to add one lakh MW of capacity, with an investment of \$400 billion. India is about to graduate from a 400 kV to 765-1,000 kV network so TELK is preparing to catapult into this space as utility companies begin to augment their capacities. The company is also seeking to expand its export operations."

In conclusion, he said that one of his company's greatest strengths is the constant dialogue between its employees.

