

**Thirty third National Convention of Electrical Engineers 2017 and National Seminar on  
“Hybrid AC/DC Power Systems for Effective Utilization of Renewable Energy”  
during 24-25 Nov. 2017 at NIT, Tiruchirappalli.**

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**Important dates**

We have received requests asking us to extend the full paper submission date. Hence, the last date for paper submission has been extended to 31<sup>st</sup> August 2017 for accommodating the prospective authors who are still working on their papers. Revised dates are

Submission of full length paper	:	<del>21<sup>st</sup> August 2017</del> 31 <sup>st</sup> August 2017
Communication of acceptance of paper	:	15 <sup>th</sup> September 2017
Final submission of camera-ready paper	:	15 <sup>th</sup> October 2017
NCEE 2017 dates	:	24-25, November 2017

First Information Brochure

# The Institution of Engineers (India)

97 years of Relentless Journey towards  
Engineering Advancement for Nation Building

Thirty-third National Convention of Electrical Engineers 2017  
(NCEE 2017)

and National Seminar on

‘Hybrid AC/DC Power Systems for Effective Utilization of Renewable Energy’

November 24-25, 2017

Organised by



The Institution of Engineers (India)  
Tiruchirappalli Local Centre

Under the Aegis of  
Electrical Engineering Division, IEI

In association with

Bharat Heavy Electricals Limited, Tiruchirappalli



National Institute of Technology, Tiruchirappalli



VENUE

National Institute of Technology, Tiruchirappalli  
TamilNadu, India

[www.nitt.edu](http://www.nitt.edu)



## **The Institution of Engineers (India)**

The Institution of Engineers (India) or IEI is the largest multidisciplinary professional body that encompasses 15 engineering disciplines and gives engineers a global platform from which to share professional interest. IEI has membership strength of over 0.8 million. Established in 1920, with its headquarters at 8 Gokhale Road, Kolkata - 700020, IEI has served the engineering fraternity for over nine decades. In this period of time it has been inextricably linked with the history of modern-day engineering. In 1935, IEI was incorporated by Royal Charter and remains the only professional body in India to be accorded this honour. Today, its quest for professional excellence has given it a place of pride in almost every prestigious and relevant organization across the globe. IEI functions among professional engineers, academicians and researchers. It provides a vast array of technical, professional and supporting services to the Government, Industries, Academia and the Engineering fraternity, operating from 120 Centres located across the country. The Institution has established R&D centres at various locations in the country and also provides grant-in-aid to its members to conduct research and development on engineering subjects.

IEI conducts Section A & B Examinations in different Engineering disciplines, the successful completion of which is recognized as equivalent to Degree in appropriate field of Engineering of recognized Universities of India by the Ministry of Human Resources Development, Govt. of India. Every year as many as 90000 candidates appear for these exams. For details, please see: [www.ieindia.org](http://www.ieindia.org)

## **Tiruchirappalli Local Centre of The Institution of Engineers (India)**

Tiruchirappalli Local Centre of The Institution of Engineers (India) located in BHEL Campus, Tiruchirappalli was inaugurated in the year 1973. Technical lectures are being conducted every week covering all branches of engineering. The Local Centre has close liaison with leading engineering organizations, professional Institutions in and around Tiruchirappalli in the conduct of Technical activities. The centre has a building with an air-conditioned lecture hall, office, library, and an auditorium with a seating capacity of 300 people. For details, please see: [www.ieitiruchi.org](http://www.ieitiruchi.org)

## **Bharat Heavy Electricals Limited, Tiruchirappalli**

Forging ahead on a sturdy foundation of over five decades of engineering excellence and embracing the glorious next phase of its growth, BHEL is an integrated power plant equipment manufacturer and one of the largest engineering and manufacturing companies of its kind in India engaged in the design, engineering, manufacture, construction, testing, commissioning and servicing of a wide range of products and services for core sectors of the economy, viz. Power, Transmission, Industry, Transportation (Railways), Renewable Energy, Oil & Gas, Water and Defence with over 180 products offerings to meet the needs of these sectors. BHEL has been the bedrock of India's Heavy Electrical Equipment industry since its incorporation in 1964. BHEL's growth has been synchronous with achieving self-sufficiency in the indigenous manufacturing of heavy electrical equipment. Out of the available 35,000 MW per annum capacity for power plant equipment manufacturing in the country, BHEL alone constitutes a mammoth 20,000 MW per annum capacity. Out of the 17 manufacturing units, one of the largest units is located at Tiruchirappalli. For details, please see: [www.bheltyco.in](http://www.bheltyco.in)

## **National Institute of Technology, Tiruchirappalli**

The National Institute of Technology (formerly Regional Engineering College) Tiruchirappalli was established as a joint venture of the Government of India and the Government of Tamil Nadu in 1964 to produce world-class engineers who will cater to the growing technological needs of the nation. The institute was granted Deemed University status with the approval of the UGC / AICTE and Government of India in 2003 and renamed as National Institute of Technology, Tiruchirappalli (NIT-T). NIT-T has been declared as institution of national importance by National Institute of Technology act 2007. NIT-T now offers ten under graduate courses and twenty six postgraduate courses in various disciplines of Science, Engineering and Technology besides Ph.D. programme in all the departments. For details, please see: [www.nitt.edu](http://www.nitt.edu)

## Objective of Convention

The National Convention of Electrical Engineers is the apex technical activity of Electrical Division Board of IET. National Convention aims at mutual interaction on Technical Innovation and Growth of Indian Industry. It also aims at participation of maximum members of IET, to establish liaison between IET, its Members and policy makers. This year, the Convention will be a multifarious activity scheduled on 24th & 25th Nov. 2017 at NIT, Tiruchirappalli.



## Theme of the Convention

It has been over 100 years since Thomas Edison built the first direct current (DC) electricity supply system on 4 September 1882, at Pearl Street in New York City. Thereafter many prominent events occurred in the electricity supply industry. The first one, "the war of currents," started in 1888.

Thomas Edison and his dc distribution system were on one side, and George Westinghouse and Nikola

Tesla with the alternating current (AC) system were on other side. The war "ended" in about 1893 when ac won as the dominant power supply medium. Since the end of the war, ac power systems have been developed and expanded at a tremendous speed from the initial small isolated networks, to its current scale of super interconnected networks each supplying billions of customers over large geographic areas in one or several countries. It is little wonder that the ac power system became the top engineering achievement of the 20th century. Does this mean that dc is gone? The answer is an unambiguous No.

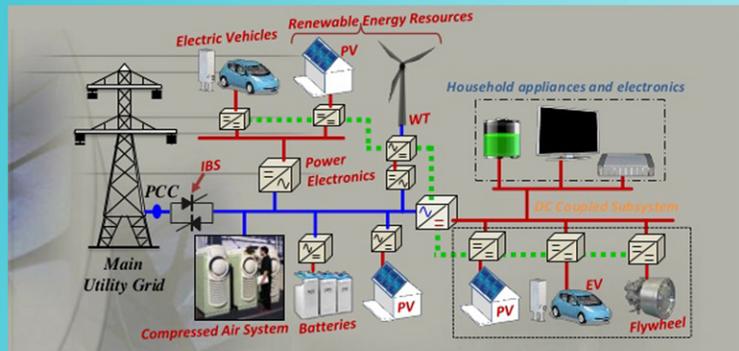
The happenings in the past 50 years, such as applications of advanced control technologies in conventional power system loads, the power electronics based high-voltage dc (HVDC) transmission and the additional renewable power sources in low-voltage distribution system, call for a rethink about dc and ac in electricity supply systems.

Global warming and limited fossil resources have forced people to pay more attention to renewable energy and the efficiency of energy utilization. As electrical engineers, it is also time for us to reexamine the ac power system structure and its efficiency. Many electrical engineers have investigated adding dc micro-grids (MGs) in local distribution systems. A favorable solution is to build a hybrid dc and ac grid at distribution levels, to couple dc sources with dc loads and ac sources with ac loads. Hence the National Seminar is on "Hybrid AC/DC Power Systems for Effective Utilization of Renewable Energy".

## Theme: Hybrid AC/DC Power Systems for Effective Utilization of Renewable

### Subthemes:

- Sustainable Development and Renewable Energy
- Alternative Energy sources
- Smart Grid Technologies
- Hybrid Systems
- Distributed Generation and Power Quality
- HVDC systems and FACTS Controller
- Power electronics in energy systems
- Reactive Power Control and Pricing
- Energy conservation and storage
- Energy management and economics
- Restructuring and Electricity market
- Optimization techniques in power systems
- Electrical engineering education



## Call for papers

Papers based on original work reporting innovations, plans for developments, observations, findings, critical surveys and case studies are invited for discussion in the seminar. The paper should be related to the theme of the seminar but need not be limited to subthemes listed above.

- Author should send the full paper (maximum 5 pages) in IEEE format to reach the centre on E-mail ID, [paperncee2017@ieitiruchi.org](mailto:paperncee2017@ieitiruchi.org) with a copy to [ieincee2017@gmail.com](mailto:ieincee2017@gmail.com)
- The accepted papers must be presented in the seminar by at least one of the authors of the paper duly registered as a delegate. All presented papers will be included in the proceedings of the seminar on a CD.
- This year papers presented in this electrical seminar will be treated as Annual Technical Paper Meet Papers of Electrical Division.
- The presented papers will also be considered by the Screening Committee of ELDB under the Chairmanship of Er. P. Rajamani for printing in the Annual Technical Volume of Electrical Division Board of IEI published from Kolkata.
- The selected papers will also be considered for publication, with due modification, in the B-Section Journal of IEI, published by Springer International, if found suitable.
- The best two papers will be given awards.

### Registration (inclusive of service tax as applicable)

All delegates and authors attending the convention must register by filling registration form available on the website and by paying registration fees as follows:

### Important Dates

Category	EB in Rs.	After 16-10-17 in Rs.
a) Industries & Govt. organisations	2400	3000
b) Academic Institutes	2000	2400
c) Listeners	2000	2400
d) IEI Member	1500	1800
e) Students	1200	1400

Submission of full length paper	: 01st August 2017
Communication of acceptance of paper	: 01st September 2017
Final submission of camera-ready paper	: 01st October 2017
Seminar dates	: 24-25th, November 2017

EB : Early bird registration up-to 15th October 2017.

- Registration fee includes copy of the proceedings on CD, Tea & Lunch during Sessions.
- The registration form along with documents of payment should be submitted to the Hon. Secretary personally or by post/courier on the address:

Hon. Secretary,  
The Institution of Engineers (India),  
Tiruchirappalli Local Centre,  
BHEL Main Office Road,  
Tiruchirappalli 620 014.

### Payment

The payment can be made by

- A crossed DD/ MICR Cheque drawn in favour of "The Institution of Engineers (I) Tiruchirappalli Local Centre " payable at Tiruchirappalli.
- Depositing the Amount in our SB A/c No.10891417887 of The Institution of Engineers (India) Tiruchirappalli. The deposit slip will form the document of payment and will be exchanged with the receipt at the registration counter.

Our PAN No. : AAATT3439Q & TAN No.CALT00825G.

Our Bankers : State Bank of India, Heavy Electricals, Kailasapuram, Tiruchirappalli-620 014. IFS Code: SBIN0001363;

Branch Code : Last six Characters of IFS Code represent Branch Code, MICR Code: 620002004.

## Travel & Accommodation

The delegates will have to make their own arrangement for travel, boarding & lodging. The list of nearby hotels is available on the website. The Centre will assist in booking the accommodation on advance payment. For details visit website [www.ieitiruchi.org](http://www.ieitiruchi.org)

## Sponsorship

Institutional sponsors are invited to support NCEE 2017. The organizers request the kind patronage from the various Governmental Organizations, Industries, Private Sector Companies, Education and R&D Institutions, Consultants, Trading houses – both under private and public sectors for the successful conduct of the event. The names of the sponsoring and cosponsoring organizations will be displayed prominently at the Seminar Venue.

Sponsorship	Amt in Rs.	Privileges
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Co-sponsor	25,000/-	01 Free Delegate, Banner in the Seminar Hall, Full Page Black-White Advertisement in Souvenir
Lunch / Dinner Sponsor	50,000/-	02 Free Delegates, Banner in the Seminar Hall, Full Page Black-White Advertisement in Souvenir

Lunch Sponsor on 24th / 25th Nov. 2017 and Dinner Sponsor on 24th Nov. 2017

## Advertisement

A Souvenir will be published during the Convention. It will consist of information on seminar, programme schedule, abstracts of papers and advertisements. It will be distributed to delegates and all those associated with the seminar.

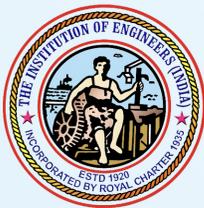
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Note : One Free Registration will be provided for every Advertiser

## Exhibition Stalls :

10 ft. x 10 ft. : Rs.15,000/-

An exhibition is planned to be arranged as part of this seminar for the two days. Stalls of size 10 ft x 10 ft will be provided for display of various products related to the theme of the seminar. One free registration will be provided for the sponsors of each exhibition stall. Additional details will be provided later.



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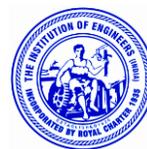
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**Dr.N. Kumaresan**, FIE  
Mob. no.: 09489089101  
Email: nkumar@nitt.edu



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November 24-25, 2017, Tiruchirappalli

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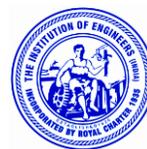
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