

# The Institution of Engineers (India)

*94 years of Relentless Journey towards  
Engineering Advancement for Nation Building*

## **Thirtieth National Convention of Electrical Engineers & National Seminar on “Development of Smart Grid in India”**

*November, 07 & 08, 2014*



**Organised by**



**The Meghalaya State Centre**

**Under the aegis of Electrical Engineering Division**

**Venue**

***NORTH EASTERN HILL UNIVERSITY***

***Shillong, Meghalaya***

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

The Institution of Engineers (India) is the largest professional body in the World with almost 5 lakhs corporate and Non-corporate members spread over the length and breadth of the country. With 104 State and Local centres with the Corporate Headquarters at Kolkata, it caters to the needs of the Engineering community in India and abroad. It was registered under Indian Companies Act 1913 in the City of Madras on 13<sup>th</sup> September 1920. The Coveted Royal Charter was granted to the Institution on 13<sup>th</sup> August 1935 by His Majesty, Emperor George V. Since then the Institution had its steady growth in terms of activities and affiliations to carve a niche with the Indian engineering community. It has 15 engineering divisions which in turn organize their own activities with the basic objective of advancing the knowledge, practice and applications of engineering for the greatest benefit of the people. The Institution has gained special status in many a world for a like the World Energy Council (WEC), World Federation of Engineering Organisation (WFEO), Commonwealth Engineer's Council (CEC), International Federation of Prestressed Concrete (fib), World Mining Congress (WMC), World Mobility Forum (WMF) and many other International bodies of repute. With about 16 countries it regularly fosters close relations and collaborative programmes.

### **Meghalaya State Centre**

In post independence India, undivided Assam also joined the rest of the country in its journey towards a modern and Technological India, Shillong then was the capital of Assam and the headquarter of Assam State Centre of The Institution of Engineers (India) started functioning at Shillong as an outcome of the 409<sup>th</sup> Council Meeting held at Shillong on 28<sup>th</sup> November 1958. In the mid 1966 the headquarter of Assam State Centre shifted from Shillong to a newly constructed building at Panbazar, Guwahati, Assam. Since then Shillong Sub-Centre was borne at Shillong under Assam State Centre in a rented room of PWD of Public Works Department (PWD) with a handful of engineers from government departments. In 1985 Shillong was re-named as Shillong Local Centre of under Assam State Centre. At that time membership was given on yearly subscription bodies so some members did not switch over to Life time Composite block so as a result we lost some members. Meghalaya State Centre was then carved out from Assam State Centre and came into existence in April 2010.

#### **Theme & Dates:**

**“Development of Smart Grid in India.”**

*November 07 & 08, 2014*

#### **About the theme**

Smart grid is an evolving concept in India to empower the consumer to manage his load and optimize his energy uses. This will allow distribution utilities to content the load demand in the system and improve the grid reliability. This will also permit integration of renewable energy into the grid. In the country like India where there is power shortage and deficiency in the peak demand and therefore there is absolute necessity to content the load demand through proper control load system. The national Solar Mission which give priority green environmentally friendly power which include, solar, wind, bio-mass etc, which needs to be

integrated to the grid the formation of the National grid integrating all the regions of the country and metering grid reliability is yet another challenge. A solution to all the challenges would be to give intelligence to power grid by adding communication and information technology to meet the requirement. Metering technology is evolve over years from simple mechanical meters to static meters. Presently smart meter are being introduced which are capable of allowing reading of the data remotely and indicate real time value to the customers.

The objective of the convention is to familiarize the participant with the evolving technologies in the Indian context as the smart grid may mean differently in the International arena.

### **Sub-theme**

1. Challengers in Indian Power Sector and the drivers to Smart Power Grid
2. Smart Grid in Transmission.
3. Transmission Management System.
4. Smart metering technology.
5. Communication Technology for smart Grid.
6. Demand side Management.
7. Renewable Energy Integration.
8. Smart Distribution.
9. Regulatory issues.
10. Smart grid architectures and models
11. Power quality issues in smart grid
12. Communication technologies for smart grid
13. Smart grid pilot project-case study
14. Role of micro grid in smart grid
15. Role of protective relaying in the smart grid.
16. Distribution network automation-SCADA system

### **Call for papers**

Papers for presentation in different technical sessions of the convention on the theme and sub-themes as mentioned above are invited from Engineers, Scientists, Academicians, Construction Agencies, NGOS, Professionals and Representatives of National and International Organizations and Agencies.

The authors are requested to submit an abstract for their paper within 300 words preferably through e-mail. The acceptance of the paper will be intimated accordingly and the authors will submit their papers in Camera-ready form. The format for the paper will be intimated in due course of time through email. The authors are requested to mention their address along with email IDs in the abstract. A paper should be limited to a maximum of eight A-4 size papers (including sketch, figures, tables and reference) in 10 point Time New Roman fonts. The papers should be sent by email in PDF format to the Organising Secretary, National Convention of Electrical Engineers 2014, The Institution of Engineers (India), Meghalaya State Centre, Barik Point, Shillong-793001. Email-iemeghalaya@gmail.com

### **Important dates**

|   |                |
|---|----------------|
| The last date for submission of abstract of papers: | 20 June 2014   |
| Communication of acceptance:                        | 30 June 2014   |
| Last date of submission of paper:                   | 31 August 2014 |

### **Accommodation**

Accommodation for ELDB members of IEI and HQ personnel has been arranged at the VENUE. For other participants and young engineer awardees different varieties of Hotels are available in Shillong where Tariff ranges from Rs.2500/- to Rs 15,000/-per day.

Please send all correspondence to:

Shri M K Chetri  
Hony secy,  
30<sup>th</sup> National Convention of Electrical Engineers,  
The Institution of Engineers (India),  
Meghalaya State centre,  
Barik Point, Shillong – 793001, Meghalaya  
Tel: 0364-2503203, Mobile-09436146542  
E-mail: iemeghalaya@gmail.com

### **Publication & Advertisements**

A Souvenir will be brought out on the occasion and the accepted papers will also be printed in the proceeding volume.

Tariff for Advertisements in the Souvenir will be as follows:-

|                   |                |
|-------------------|----------------|
| Back Cover Page:  | Rs.1,00,000.00 |
| Third cover Page: | Rs. 75,000.00  |
| Full Page:        | Rs. 40,000.00  |
| Half Page:        | Rs. 25,000.00  |

### **Registration**

The registration fees for participation in the Convention have been fixed as follows:-

|                                      |             |
|--------------------------------------|-------------|
| Delegates sponsored by Organization: | Rs.2,000.00 |
| Non Members:                         | Rs.1,000.00 |
| Members of IEI:                      | Rs 500.00   |
| Students:                            | FREE        |

Outstation delegates are requested to register their names on or before 15<sup>th</sup> September 2013.

### **Patronage**

The Institution of Engineers (India) being a voluntary professional body, the National Convention has been organized on self-sustaining basis. The organizers request kind patronage from the Government, both State and Central, various organizations companies under private and public sectors, NGOs concerned with the theme, for successful holding of the event.

The contribution thus received would be mainly utilized to conduct the convention, bring out technical proceedings, arrangement of hospitality, providing registration materials to the participants etc.

The financial support provided by various organization would be duly acknowledged and their names would be highlighted by the Institution in all literature published for the Convention.

The co-organizers and co-sponsors would be entitled to nominate free delegates for the Convention, seminar etc. as detailed below:

Sponsor                                  Rs 2,00,000.00 - 8 free delegates

### **Payments**

All payments will have to be made in A/C Payee Demand Draft in favour of “*The Institution of Engineers (India), Meghalaya State Centre*” payable at Shillong. It may be noted that contribution to the Institution of Engineers (India) qualifies for exemption from Income Tax U/S 80G (5) (vi) of Income Tax Act, 1961.

### **About Shillong**

Shillong is the capital of Meghalaya. The “*Abode of Clouds*” is an appropriate name for Meghalaya, a hill state that seems to reach for the low lying clouds. This confused assemblage of hills and narrow valleys, watered by numerous small streams is also called the “*Scotland of the East*”. The nearest Railway station, Guwahati is 100 Km and the nearest Airport, Umroi, is 25 Km from Shillong City and the other one is at Borjhar, Guwahati, 120 Km from Shillong. April onward, it is suitable to visit Shillong to relieve oneself from the scorching heat of the plains. Places worth seeing are Ward’s Lake, Lady Hydari Park, Shillong View Point. 18 Hole Golf Course together with waterfalls like Beadon, Bishop, Elephant and Crinoline. For shopping one can visit Police Bazar, Barabazar and Laitumkhrakh.

### **NATIONAL ADVISORY COMMITTEE**

|                     |  |
|---------------------|--|
| <b>Chairman:</b>    | Shri A K Basa, FIE, President, IEI             |
| <b>Co-Chairman:</b> | Shri V L Malhotra, FIE, Chairman ELDB, IEI     |
| <b>Convener:</b>    | Shri M K Chetri, FIE, MSC, IEI                 |
| <b>Members:</b>     | Dr T Ananthapadmanabha, FIE, Member, ELDB, IEI |
|                     | Dr S K Calla, FIE, Member, ELDB, IEI           |
|                     | Dr D J Doke, FIE, Member, ELDB, IEI            |
|                     | Shri S B Dubey, FIE, Member, ELDB, IEI         |
|                     | Prof H B Goswami, FIE, Member, ELDB, IEI       |
|                     | Shri U I Mehta, FIE, Member, ELDB, IEI         |
|                     | Shri P Rajamani, FIE, Member, ELDB, IEI        |
|                     | Shri A S Satish, FIE, Member, ELDB, IEI        |
|                     | Shri S S Sharma, FIE, Member, ELDB, IEI        |
|                     | Shri J P Tomar, FIE, Member, ELDB, IEI         |
|                     | Shri Umasanker J, FIE, Member, ELDB, IEI       |
|                     | Prof K K S Gautam, Member ELDB, IEI            |
|                     | Shri Sukhdev Rattan, Member, ELDB, IEI         |

## **ORGANISING COMMITTEE**

**Chairman:** Shri K Marbaniang, FIE, Chairman, IEI, MSC  
**Chairman Organising Committee:** Shri J B Poon, FIE, IEI, MSC  
**Members:** Shri S P Kafle, FIE  
Shri M Marbaniang, FIE  
Shri Timothy Dkhar, FIE  
Shri F E Kharshiing, FIE  
Shri B C Saha, FIE  
Shri R War, MIE  
Shri K Lyngwa, MIE  
Shri Rajib Sutradhar, FIE  
Shri B Sharma, FIE  
Shri A Kharpan, FIE  
Shri A Kharpran, MIE  
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Shri Roland Majaw, FIE  
Shri R Dutta, FIE  
Shri Banlang Sangma, FIE  
Shri Rajat Sharma, FIE  
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Shri W L Kharpuri, FIE  
Shri D Baruah, FIE  
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Shri R Kharwanlang, MIE  
Shri Raju Kharkongor, MIE  
Shri David Lyngdoh, MIE  
Shri Rajat Sharma, FIE  
Shri Biswajit Sharma, FIE  
Shri T J Singh, FIE  
Shri O G Singh, FIE  
Shri U N Madan, FIE  
Smt Freida Cajee, MIE  
Smt L Kharmuid, MIE  
Smt I Lyngdoh, MIE  
Shri R Mudoi, MIE  
Shri G Panda, MIE  
Shri S. Affijulla, MIE  
Maj Rajat Sharma, MIE

**REGISTRATION FORM**  
**The Institution of Engineers (India)**  
**Meghalaya State Centre, Shillong**

organizes  
**30<sup>th</sup> National Convention of Electrical Engineers**  
**at**  
**North Eastern Hill University, Shillong**  
**November 07 & 08, 2014**

Name: \_\_\_\_\_

Designation: \_\_\_\_\_

Organisation: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_ Pin Code \_\_\_\_\_

Phone \_\_\_\_\_ Mobile: \_\_\_\_\_

Email: \_\_\_\_\_

Payment Details: \_\_\_\_\_

No. of Participants: \_\_\_\_\_

Draft/Cheque No.: \_\_\_\_\_

Bank: \_\_\_\_\_

Signature

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The nominations may please be sent to Shri. M.K. Chetri, Hony Secy, The Institution of Engineers (India), Meghalaya State Centre, Barik Point, Shillong-793001, Meghalaya