

10th Annual STEAG Seminar

All India RES Installed Capacity- As on 31.08.2017

RES	Installed Capacity(MW)
Wind Energy	32634
Solar-PV on ground	13840
Solar-PV roof top	762
Small Hydro	4390
Biomass	8191
Waste to power	114
Total	59931



International Seminar

On

“Energy Storage Options for Renewable Energy Integration”

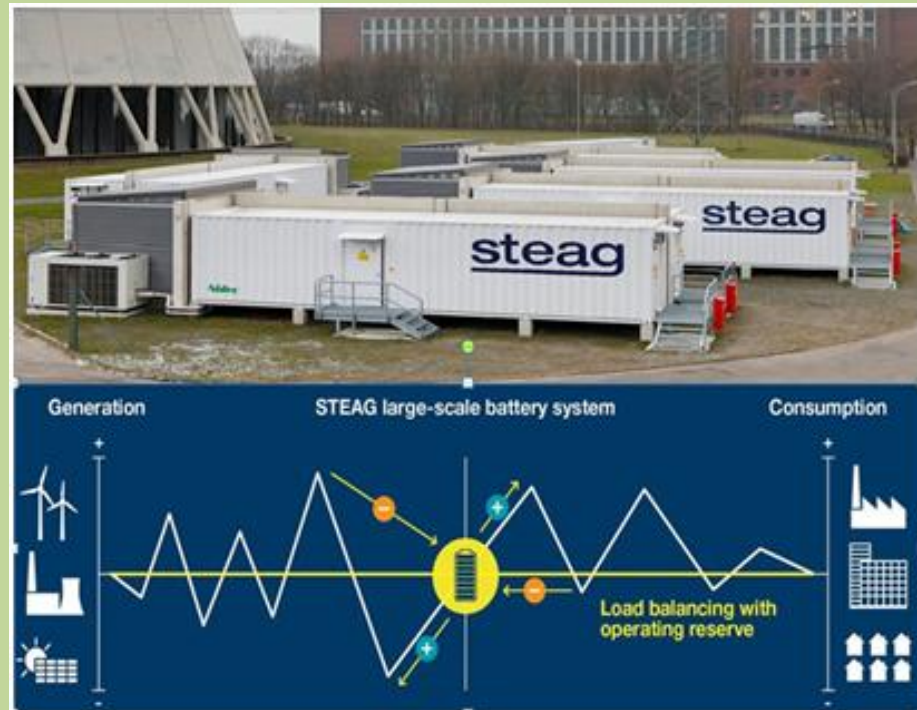
29th January, 2018

giz

steag



Venue: Silver Oak Hall, India Habitat Centre, Lodhi Road, New Delhi



Organized by

STEAG Energy Services (India) Pvt. Ltd

In association with

CEA, Ministry of Power and GIZ

BACKGROUND

Renewable Energy (RE) is expected to rapidly scale-up due to its environmental benefits, ability to meet growing energy needs, economic and social benefits of distributed generation and likely cost parity with fossil fuel power in the near term. Out of total all India installed capacity of about 329 GW, the RES contributes nearly 60 GW. The Ministry of New and Renewable Energy (MNRE) has set an aggressive renewable energy capacity target of 175 GW by 2022.

However, the variable nature of renewable energy sources makes it difficult to control generation to match demand and integration of large-scale variable renewable energy into the grid poses challenges and can lead to its instability. One of the key strategies for addressing the variability of renewable energy technologies is through the use of efficient energy storage technologies. Energy storage technologies provide several benefits such as 'time shift', 'grid stabilization', 'peak shaving of demand', 'improved generation efficiency' and 'improved transmission capacity utilization', etc. Given the value addition and the benefits that efficient energy storage technologies offer and the expected drop in prices in the near future, energy storage has the potential to become highly attractive for both grid-connected and off-grid renewable energy applications.

To meet above challenges it is imperative to deliberate on all aspects of energy storage methods based on international experiences in the area and available technological options for meeting the requirement in India. STEAG is the fifth biggest electricity producer in Germany having the total installed capacity of around 10,150 MW worldwide and more than 200 distributed facilities to generate power from renewable energy sources (over 800 MW). STEAG is a pioneer in efficient technologies for hard-coal-based power production and its technologies are distinguished by high degree of flexibility it has introduced while operating in the German Grid. **STEAG Germany has experience of installing and operating six large-scale battery systems with total capacity of 90 MW to control frequency fluctuations in the electricity grid in Germany.**

STEAG Energy Services, India, a wholly owned subsidiary of Steag Energy Services GmbH, Germany, in association with CEA, GIZ, NTPC Ltd. and TERI are organizing an International Seminar on **"Energy Storage Options for Renewable Energy Integration" on 29.01.2018 at India Habitat Centre, New Delhi.**

The seminar is aimed at sharing knowledge and experiences at International and National level in all aspects of Energy Storage and RE Integration amongst various stakeholders – Policy makers, Regulators, Thermal Power Generating Companies, Management and Consultancy organizations, Technological solution providers and Financial Institutions involved in financing energy storage solutions.

FOCUS AREAS

The focus areas of the seminar are:

- **Role of Energy Storage in Electric Supply Network**
- **Technological Developments in Energy Storage**
- **Regulatory & Financing issues associated with Energy Storage**

SPEAKERS

The lead speaker will be Prof. Dr. Wolfgang Benesch, Director (Energy Technologies), STEAG Energy Services, Germany. Following dignitaries have been requested to give their addresses at the inaugural session:

1. **Secretary, Ministry of Power** (requested)
2. **Secretary, MNRE** (requested)
3. **Chairperson, CEA**
4. **Chairman/Member (CERC)**
5. **CMD, NTPC Ltd.**
6. **Director General, TERI**
7. **CEO, STEAG Energy Services, Germany**

Other eminent speakers from; CEA, POSOCO, NTPC, TATA Power, STEAG–Germany; DlgSILENT, Germany; CERC, NREL, USA; TEPCO Japan, IESA India; ESA, USA; India Smart Grid Forum and Indian Utilities will participate in the technical sessions.

WHO SHOULD ATTEND:

Top Management, Engineers and Experts from RE Generators, Grid Operators, Thermal Generating Plants, Power Plant Manufacturers, Engineering Companies, Regulatory Commissions, Consulting Organizations, Financial Institutions etc.

DELEGATE FEE:

Rupees 12,000/- per delegate to be paid through Demand Draft/ Bank Draft in the name of "STEAG Energy Services (India) Pvt. Ltd. payable at New Delhi/ Noida. Delegate fees as well as registration form may be sent to:

Ms. Monika Patra, Manager (Training & Advisory Services)
STEAG Energy Services (India) Pvt. Ltd.
A-30, Sector -16, Noida - 201301, Uttar Pradesh
Email : m.patra@steag.in

Delegate Fee may also be paid online as per following details:

Account Name - STEAG Energy Services (India) Pvt. Ltd.
Account Number - 13512320000815
Bank Name and address - HDFC Bank Ltd., B 222-223, Sector 16, NOIDA – 201 301, U.P.
IFSC/RTGS code - HDFC0001351

Concessional delegation fee of Rs. 1000.00 per delegate would be charged from organizations nominating upto 5 delegates and Rs. 8,000.00 per delegate from organizations nominating 6 or more delegates.

"Two nominees each of State the Utilities -GENCOs & TRANSCO's and Electricity Regulators may participate without paying delegate fee"