





Best Practices Second Study Tour Cum Training and Capacity Building Program for South Asian Region Power Sector Professionals

# RE Evacuation and Data Communication Infrastructure

8th - 10th March 2018

Supported by









#### Introduction

The Indo-German Energy Forum (IGEF) and the Central Board of Irrigation and Power (CBIP) had taken up a joint initiative of organizing a special study tour cum Training and Capacity building programme on RE Evacuation and data communication infrastructure from the 9<sup>th</sup> May until the 12<sup>th</sup> of May 2017. The programme was highly successful and was attended by 50 participants drawn from State Transmission Utilities, (STUs), State and Regional Load Dispatch Centers, POWERGRID, POSOCO, State Renewable Energy Departments, State Electricity Regulators and other relevant stakeholders. There was a massive response from the utilities but all the participants could not be accommodated on account of limited seats. Buoyed by the success and on demand by relevant stakeholders, the second study tour is being organised from 8th March to 10 March 2018 for Indian stakeholders and the South Asian Region Power Sector Professionals. This time we expect the participation of delegates from neighbouring countries like Bangladesh, Sri Lanka and Nepal..

The Government of India (GoI) has set an ambitious plan of achieving 175 GW Renewable Energy (RE) by 2022 and policies are being developed and implemented for achieving the target . India being a geographically diverse country, the RE sources are not equally well distributed. For example, India has wind energy potential in only six states i.e. Tamil Nadu, Karnataka, Maharashtra, Gujarat, Rajasthan and Andhra Pradesh. Solar capacity addition target of 100 GW includes setting up of 51 solar parks in 21 States, with a capacity of 500 to 1000 MW each (as ultra-mega solar power projects) along with several distributed sources of energy.

While increase in transmission capacities are one of the most important enablers, the power generation from wind and solar varies with wind speed, direction of wind and atmospheric temperature and solar insolation. This variability affects the operation of power systems with high penetrations of RE sources. The numerous challenges that system operators face due to increasing RE generation are data sharing by RE generators, Grid connectivity codes (LVRT, FRT compliance), implementation of forecasting and ancillary service regulations etc.

#### **Objectives**

The objectives of the Three-day study tour scheduled from the 8th March to 10 March 2018 are to:

- Provide the STUs and other stakeholders an opportunity to share their experiences / success stories and also learn from the experiences of other STUs
- Discuss the important issues faced by the grid operators at the working level and Watch live demonstration of SCADA systems and power flows at STUs
- Discuss the challenges of data sharing by RE generators, Grid connectivity codes (LVRT, FRT compliance), implementation of forecasting and ancillary service regulations
- Provide a platform to showcase the latest technologies
- Create a network of professionals working in the "integration of renewable energy in the grid" domain





# PROGRAMME SCHEDULE

Date: 8 March 2018

Day: Thursday

Venue: Madurai

Timing	Program
19:00	Reporting of participants at the hotel in Madurai
20:00-21:00	Networking Dinner

Date: 9th March 2018

Day: Friday

Venue: Visit to 648 MW Solar Power Plant of Adani Greens @Ramnathpuram, Tamil

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07:00 - 07:30	Breakfast at Madurai hotel			
07:30 - 09:30	Travel to Ramanathpuram, Tamil Nadu			
09:30-09:45	High Tea			
09:45 - 12:30	Work shop and visit of Adani Solar Power Plant			
12:30 - 14:00	Visit to Switchyard and Transmission Substation of TANTRANSCO			
14:00- 15:00	Networking Lunch			
15:00 – onwards	Travel to Hotel at Kanyakumari via Rameshwaram (Networking dinner at Rameshwaram)			

Date: 10th March 2018

Day : Saturday

Venue : Vellapaneri

07:00 -08:00	Breakfast at Kanya kumari Hotel
08:00 - 10:00	Travel to Vellapaneri for visit of Wind power plant of Suzlon Limited
10:00 - 10:15	High Tea
10:15 - 13:00	Exposure Visit to Suzlon Wind power station including presentations
13:00 - 14:00	Networking Lunch
14:00 - 16:00	Presentations at Suzlon Wind Power Station





16:00 - 19:00	Travel back from Suzlon Wind power station to Hotel at Madurai		
19:00 – 20:00	Wrap up session including feedback from all the participants and way forward and recommendations		
20:00	Networking Dinner		
onwards	Night stay in Hotel at Madurai		
Date: 11 <sup>th</sup> March, 2018  Day: Sunday			
Venue : Madurai			
07:00- 08:00	Breakfast at hotel		
08:00 onwards	Checkout from the Hotel		

# The delegation package includes:

- Hotels Accommodation on single occupancy basis—3 star
- Briefing of delegation prior to travel
- Full boarding and lodging for only three nights (8 March afternoon till -11 March 2018 forenoon)
- Official tour for all transfers mentioned in the agenda
- Professional guided tours through wind and solar power plants and green corridor transmission facilities
- Technical field visits to Adani solar power and Suzlon Wind Power Station
- All printed materials and background information
- Accompanied by professional coordinators and technical experts

# The delegation package DOES NOT include:

- Transfers to and from the hotel in Madurai Airport or Railway Station -- on the first and last day 8<sup>th</sup> March to 10<sup>th</sup> March)
- Flights
- Cost for additional nights before 8<sup>th</sup> March and after 10<sup>th</sup> March
- Other expenses (e.g. additional meals, private consumption at the hotel, phone calls, laundry service, personal shopping, others etc.)





# **REGISTRATION FORM**

# Best Practice Study Tour cum Training and Capacity Building Program for State Utilities and other stakeholders on RE Evacuation and Data Communication Infrastructure

We are proud to offer a complete special delegation package for your participation in the technical workshops study tour to Tamil Nadu. Please complete the following registration form to guarantee participation.

Data of participant			
Name			
Designation			
Organisation			
Address			
Address			
Address			
Telephone			
Mobile			
E-Mail			
Website			
Date of Birth			
Company	Public Ltd	GoI 🗌	Other
Working area of orga	anisation		
What are your expec	tations and special intere	est in this study tou	?
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Package option
Delegation package $\  \  \  \  \  \  \  \  \  \  \  \  \ $

# Payment options:

#### **Cheque / DD in favour of:**

"Central Board of Irrigation and Power" New Delhi

Send to:- Central Board of Irrigation and Power, Plot No-4, Malcha Marg, Chanakyapuri,

New Delhi 110 021

# Or Via Bank Transfer to:

Account holder name - Central Board of Irrigation and Power

Bank name - HDFC Bank

Branch & Address - 209-214, Kailash Building, K.G. Marg, New Delhi 110001

 Saving Bank Account No
 00031110004411

 Branch/RTG/NEFTIFSC
 HDFC 0000003

 MICR Code
 110240001

 Swift Code
 HDFCINBBDEL

**Cancellation policy:** Understand that in case I cancel my participation after, the entire delegate fees will be non-refundable.

Any further clarifications please feel free to contact:

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