



Best Practices Study Tour Cum Training and Capacity Building Program

# RE Evacuation and Data Communication Infrastructure

9th - 12th May, 2017 in Bengaluru, Kaithar and Ramanthapuram

Supported by

**KFW**

**giz** Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH

## Introduction

The Indo-German Energy Forum (IGEF) and the Central Board of Irrigation and Power (CBIP) have taken up a joint initiative of organizing a special study tour cum Training and Capacity building programme from the 9<sup>th</sup> May until the 12<sup>th</sup> of May 2017. The programme is aimed at participants drawn from the staff from STUs, State and Regional Load Dispatch Centers, POWERGRID, POSOCO, State Renewable Energy Departments, State Electricity Regulators and other relevant stakeholders.

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 same. 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 four-day study tour scheduled from the 9<sup>th</sup> May – 12<sup>th</sup> May 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

### Monday, 8<sup>th</sup> May 2017, Bengaluru

Until 07:00 pm	Arrival of participants at hotel (Hotel reservation made by CBIP)	
08:00 pm	Networking Dinner and briefing by IGEF at Restaurant of hotel	

### Tuesday, 9<sup>th</sup> May 2017, Bengaluru

09:00 am	Meeting at the hotel lobby and transfer to KPTCL	
10:00 am – 04:00 pm –	One day training at KPTCL - RE Forecasting technologies, DSM and other regulations implementation, REMC structure by GIZ/PGCIL, KFW Green Energy Corridors Loan Scheme, data infrastructure requirements, private sector technology developers and live demonstration of wind and solar feed in on SCADA systems	
09:00 pm	Network dinner at Restaurant	

### Wednesday, 10<sup>th</sup> May 2017, Madurai

08:00 am	Arrival at the Madurai hotel lobby and transfer to NIWE Centre, Kaithar	
10:00 am – 05:00 pm	Visit to NIWE Kaithar Centre and training Workshop on Wind forecasting, scheduling and evacuation processes and exposure visit to the Turbine Test Station and other associated facilities	
07:30 pm	Network dinner at Hotel in Madurai	

### Thursday, 11<sup>th</sup> May 2017, Madurai

07:00 am	Meeting at hotel lobby and transfer to Ramanthapuram	
09:30 am – 03:30 pm	Arrival in Ramanathapuram and visit to the world's largest solar plant - Adani Green Energy Ltd 648 MW Solar plant and TANTRANSCO transmission facility of RE-Evacuation	
06:00 pm – 08:00 pm	Wrap up session including feedback from all the participants and way forward to be agreed on at hotel in Madurai	
08:00 pm	Network dinner	

### Friday, 12<sup>th</sup> May 2017, Madurai

08:00 am	Check out	
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**Note:** Check out will be at 8:00 am however the participants interested to take forward journey from Bengaluru can take the advantage of Bus which will depart at 8:00 am from the hotel.

**The delegation package includes:**

- Hotels Accommodation—3 star
- Briefing of delegation prior to travel
- Full boarding and lodging for only four nights (8<sup>th</sup> of May evening to 12<sup>th</sup> of May forenoon)
- Official tour for all transfers mentioned in the agenda
- Professional guided tours through wind and solar power plants and transmission facilities
- Technical field visits to Load Despatch Centre SCADA and forecasting facilities
- 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 Bengaluru — Airport or Railway Station -- on the first and last day (8<sup>th</sup> and 12<sup>th</sup> of May 2017)
- Flights
- Cost for additional nights before 8<sup>th</sup> May 2017 or after 11<sup>th</sup> May 2017
- 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 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 Karnataka and 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 <input type="checkbox"/>	GoI <input type="checkbox"/>	Other <input type="checkbox"/>
Working area of organisation			

What are your expectations and special interest in this study tour?

Package option	
Delegation package	<input type="checkbox"/> INR 20.000/- Plus 15% tax

Payment options :	
<b>Cheque / DD in favour of:</b> "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	
<b>Or Via Bank Transfer to:</b>	
<b>Account holder name</b>	- Central Board of Irrigation and Power
<b>Bank name</b>	- HDFC Bank
<b>Branch &amp; Address</b>	- 209-214, Kailash Building, K.G. Marg, New Delhi 110001
<b>Saving Bank Account No</b>	- 00031110004411
<b>Branch/RTG/NEFTIFSC</b>	- HDFC 0000003
<b>MICR Code</b>	- 110240001
<b>Swift Code</b>	- HDFCINBBDEL
<b>Cancellation policy:</b> Understand that in case I cancel my participation after 5 <sup>th</sup> May 2017, the entire delegate fees will be non-refundable.	

**Any further clarifications please feel free to contact :**

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