



# **Indian Energy Exchange (IEX)** &

**Indian Institute of Technology Kanpur (IITK)** 

Jointly present A Three-day Residential Course on

February 29-2 March, 2016 IIT Kanpur



# POWER MARKET IN INDIA WAY FORWARD

#### **Course Overview:**

Indian Energy Exchange (IEX) and Indian Institute of Technology Kanpur (IITK) are organizing a 3-day residential Leadership course on "Power Market in India - Way Forward" from 29 February to 2 March, 2016. The program would be hosted at IIT Kanpur campus.

### **Course Objectives:**

This course aims to provide insights into the development of electricity markets in India and provide a platform for discussing the challenges and way ahead. The program would:

- Enable participants grasp the fundamentals of electricity markets.
- Develop insights into the functioning and regulation of power markets.
- Discuss challenges to the proposed separation of carriage and content towards introducing retail competition
- · Provide hands-on experience of the working of power exchanges.

#### **Who Should Attend:**

The training course has been specifically designed for senior to middle level professionals from industry and practitioners from the entire power sector spectrum including:

- Generation, Transmission and Distribution companies
- Bulk Supply / Trading companies of state utilities
- Traders
- · Financial Institutions and Banks
- Open Access Customers
- Consultants
- Academicians
- Officers of regulatory commissions

# **Our Value Proposition:**

The pedagogy of the course aims to synergize theory and practice. The course contents, to be delivered by power sector experts and academicians, are supported by insights based on IEX's years of successful energy trading experience and thought leadership from IITK. IEX and IITK plan to adopt interactive methodology for this program to ensure knowledge advancement and intellectual progression for the participants. The program also includes visit around IIT campus including the Solar Energy Research Enclave (SERE).





# **Course Agenda**

# 29 February – 2 March 2016

Day 1 Monday, 29 Feb	oruary, 2016			
0830 Hrs. 0900 Hrs.	Registration			
0900 Hrs. 0915 Hrs.	Inaugural and Overview			
0915 Hrs. 1045 Hrs.	Power Sector Reform, A reflection on Electricity Amendment Bill, 2014  Speaker: Mr. V.J. Talwar, Member (Retd.) APTEL			
1045 Hrs. 1115 Hrs.	Tea / Coffee Break			
1115 Hrs. 1300 Hrs.	Economics of Power Markets  Speaker: Dr. Anoop Singh, IIT Kanpur			
1300 Hrs. 1400 Hrs.	Lunch Break			
1400 Hrs. 1530 Hrs.	Power Procurement: Planning, Regulation and Practices (long-, medium- and short-term) <b>Speaker:</b> Mr. Sanjeev Mehra, MD, Tata Power Trading Company Ltd.			
1530 Hrs. 1600 Hrs.	Tea / Coffee Break			
1600 Hrs. 1730 Hrs.	Functioning of Power Exchanges: Regulation, Development and Products <b>Speaker:</b> Mr. Akhilesh Awasthy, Director (M.O. & I.T.), IEX			
1730 Hrs. 1745 Hrs.	Recap/Assignment			
Day 2 Tuesday, 1 March, 2016				
0900 Hrs. 1030 Hrs.	Deployment of Solar & Other Distributed Energy Resources  Speaker: Mr. Vishal Pandya, Director, RE Connect Energy			
1030 Hrs. 1100 Hrs.	Tea / Coffee Break			
1100 Hrs. 1230 Hrs.	Market for Ancillary Services <b>Speaker:</b> Prof. S. N. Singh, IIT Kanpur			
1300 Hrs. 1400 Hrs.	Lunch Break			
1400 Hrs. 1530 Hrs.	Trading on a Power Exchange: India Energy Exchange <b>Speaker:</b> Mr. Prasanna Rao, VP, IEX			
1530 Hrs. 1600 Hrs.	Tea / Coffee Break			
1600 Hrs. 1730 Hrs.	Hands-on with Trading Operations			
1730 Hrs. 1745 Hrs.	Recap/Assignment			
Day 3 Wednesday, 2 l	March, 2016			
0900 Hrs. 1030 Hrs.	Rationalizing Open Access: Procedure & Cross Subsidy Charges  Speaker: Mr. Rohit Bajaj, VP, IEX			
1030 Hrs. 1100 Hrs.	Tea / Coffee Break			
1100 Hrs. 1230 Hrs.	Bidding Strategy in Power Markets <b>Speaker:</b> Mr. Shubranshu Patnaik, Senior Director, Deloitte *			
1230 Hrs. 1400 Hrs.	Lunch Break			
1400 Hrs. 1530 Hrs.	Futures for Electricity Markets in India: Timing, Challenges and Way Forward  Speaker: Dr. Anoop Singh, IIT Kanpur			
1530 Hrs. 1600 Hrs.	Tea / Coffee Break			
1600 Hrs. 1730 Hrs.	Evaluation Test and Feedback			
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1730 Hrs. 1800 Hrs.	Valedictory Session			

<sup>\*</sup> Confirmation Awaited

# **Distinguished Faculty:**



Dr. Anoop Singh

Dr. Anoop Singh is Associate Professor at Dept. of IME, Indian Institute of Technology Kanpur. He has over 14 years' experience in academics and industry. His areas of interest include infrastructure regulation & policy, power sector regulation, energy/electricity pricing, renewable energy, energy efficiency, energy economics, climate change, project financing and cross-border energy co-operation. He has a number of research papers and three books to his credit. Prior to joining IIT Kanpur, he worked with Haryana Electricity Regulatory Commission.



Mr. V.J. Talwar

Mr. V.J. Talwar is an Electrical Engineer with more than 40 years of experience in power sector. He served and handled important assignments in Appellate tribunal for Electricity, Uttarakhand Electricity Regulatory Commission, Delhi Electricity Regulatory Commission, Central Electricity Authority, Northern Regional Electricity Board, Delhi Electricity Supply Undertaking and New Delhi Municipal Committee. Various postings and opportunities have enabled him to acquire wide and varied experience in electricity regulation, planning, design costing of transmission and distribution systems, grid operation, Intra/Inter-regional Exchanges of power.



Mr. Sanjeev Mehra

Mr. Sanjeev Mehra is currently working as Managing Director in Tata Power Trading Company Ltd. He has vast experience of around 32 years in the field of Power Sector. He has completed his B.Tech & P.G. Diploma in Business Management. He has worked in NTPC, thereafter he joined Power Grid Corporation of India Limited. When trading of power was conceived, he joined PTC India Limited where he worked in various functions, and was marketing head of long term and short term trading before joining Tata Power Trading Company Limited in September 2011 as Managing Director.



Mr. Akhilesh Awasthy

Mr. Akhilesh Awasthy is a professional with long qualitative and enriching techno - commercial experience in the power sector. He has led a multi disciplinary team for implementation of India's first Power Exchange, Indian Energy Exchange, and presently he is working as Director (Market Operations & IT). He has devised systems and procedures for operations of the exchange which is catering to more than 3000 grid connected entities, flawlessly. Presently he is working on various solutions to address issues affecting implementation of Open Access, non implementation of which is hampering development of Power Market in the Country. He has done his Master in Electrical Engineering and is a Cost & Management Accountant (CMA).



Prof. S. N. Singh

Prof. S. N. Singh is chair Professor at Dept. of Electrical Engineering, Indian Institute of Technology Kanpur. He has over 18 years' experience in academics and industry across Asia. He has an M.Tech and Ph.D. Electrical (Power Systems) from Indian Institute of Technology, Kanpur. He is a Member, Board of Governors, IIT Kanpur since January 2012.



Mr. Vishal Pandya is an alumnus of IIT Bombay with specialization in power systems & power electronics. He brings good understanding on regulations, power system studies, market models, programming, algorithms and renewable energy. He has worked with IEX (business development) and L&T (power transmission and distribution) and is co-founder of REConnect , India's largest REC Trading Company and also with largest service portfolio in Wind Power Forecasting and Scheduling.

Mr. Vishal Pandya



# INDIAN ENERGY EXCHANGE (IEX)

IEX is India's premier power trading platform. Providing a transparent, neutral, demutualized and automated platform for physical delivery of electricity, IEX enables efficient price discovery and price risk management for participants of the electricity market, including industries eligible for open access.

Today, about 4000 participants across utilities from 29 States,5 Union Territories (UTs),1000 + private generators (both commercial and renewable energy) and more than 3000 open access consumers are leveraging the Exchange platform to manage their power portfolio in the most competitive and reliable way.

Department of Industrial and Management Engineering (IME),

# INDIAN INSTITUTE OF TECHNOLOGY KANPUR

The Dept. of IME aims to provide quality management education through MBA, M.Tech. and Ph.D. programs. Power sector reform and regulation is one of the key research and teaching areas in the department. The department provides regulatory and policy inputs to relevant electricity regulatory commissions and ministries. It also conducts regular program related to power sector regulations, renewable energy and power markets. Details of some the previous courses and publications can be accessed from www.iitk.ac.in/ime/anoops



Solar Energy Research Enclave, IIT Kanpur



Department of IME, IIT Kanpur

# **Registration Form**

Name & Designation:		
Organization/Company:		
Address:		
City:	Pincode:	Country:
Fax:	Mobile:	Phone:
Email:		

## **Details of Delegates**

S.No.	Name	Designation	Email ID	Mobile No.

### **Registration Fees**

Fees	INR
For Delegate	60,000

<sup>\*</sup> Service tax extra (14.5%) on registration fee mentioned above.

Registration would be confirmed on receipt of the payment on first-come-first-serve basis. There are limited seats for the course, therefore it is suggested that you book your seats early.

The Registration Fee includes:

- The participation fees and course material
- 3-Nights single AC accommodation at IIT Kanpur
- 3-Days boarding charges including all meals, tea/coffee break
- · Pick-up and drop from/to airport/railway station in Kanpur or in Lucknow

#### **Payment Details:**

Via Cheque/Demand Draft

Cheque/DO should be drawn in favor of Indian Energy Exchange Limited, par payable at New Delhi.

#### **Transfer Online**

Bank Account Number: 15770340006939

Bank Name: HDFC Bank Limited | Branch: Fort, Mumbai |

(Please email/fax the duly filled in form to: Mr. Manish Arya at training@iexindia.com/+91-11-43004015)

IEX COURSE CO-ORDINATOR =

Mr. Manish Arya

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IITK COURSE CO-ORDINATOR

Dr. Anoop Singh, Associate Professor, Department of Industrial & Management Engineering

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<sup>#</sup> A limited number of academic participants may be given a 20% fee discount on base fee (service tax applicable).