Information Bulletin

# National Conference on Maladies in Distribution Sector and its Remedies

# 29 - 30 August 2019 SCOPE Complex, Lodhi Road, New Delhi



# Organised by



Central Board of Irrigation & Power





# Knowledge Partner



# BACKGROUND

Government has an ambitious program to create a reliable distribution mechanism to provide affordable and consistent electricity supply to all the citizens including the key sectors like agriculture, manufacturing and services to ensure healthy and continued economic growth.

Weakest link in the power system value chain is distribution sector. DISCOMs (power distribution companies) have accumulated operational losses. High AT&C losses continue to remain the key factor for their weak financial position. Despite concerted efforts, trajectory of AT&C loss reduction has been gradual. DISCOMs continue to incur losses on each unit of power sold and resort to load shedding to manage demand and minimize losses resulting in suppressed demand. Due to legacy issues, they are trapped in a vicious cycle of debt trap. While technical losses can be minimized by using upgraded technology but reducing commercial losses would need adoption of multipronged strategy particularly in view of fact that there is lot of theft of power in the system.

Financially strained DISCOM's failure to supply adequate power at affordable rates hampers the quality of life and country's overall economic growth and development. Thus schemes aiming at reliable 24x7 power supply and quality power etc. can only fructify with financial strengthening of the DISCOMs.

Changes that are taking place aiming at improving the financial viability of distribution sector include regular tariff revisions, financial restructuring etc.

Emerging requirements like changing generation mix including renewable generation, net metering, and new types of loads, customer service needs will be the drivers of business transformation in the distribution segment. Utilities need to adapt to business processes and technology to meet these requirements with greater focus on building robust energy accounting systems and automating metering, billing & collection.

Load forecasting is an emerging and important tool for demand management and calls for using advanced analytics to evaluate network and consumer data and also undertaking demand-side management measures such as time of day (TOD) metering for smoothening demand curve by DISCOMs.

With ageing network and equipment, condition monitoring and diagnostics will play a key role in reducing failure rate of key equipment like distribution transformers to ensure uninterrupted power supply.

Power procurement costs are the biggest proportion of the costs of DISCOMs, which are increasing due to increased cost of generation. Existing Power Purchase Agreements (PPA) have no exit Clause and DISCOMs are concerned about possible renegotiations of tariff escalation in the existing PPA's.

There is other very serious issues relating to safety of public in general and workman particular, the maintenance of distribution system and accident prevention therefore needs serious attention. The skilling of workers and adequate focus by management on the subject is a must.

Besides above the areas like Grid discipline and effective energy management, Reforms in Distribution sector including deployment of smart metering etc. needs to paid adequate attention to avoid maladies in this sector

The aim of this conference is to make the participants aware of various ailments in Distribution sector and to discuss the solutions/remedies.

# **TOPICS TO BE COVERED**

Papers are invited on any topic pertaining to the aim and scope of the conference that includes, but not limited to the following:

- Planning, Erection and Commissioning
  - Planning of Distribution systems
  - Compact / Underground sub-stations / GIS
  - Quality assurance and quality of erection of distribution assets etc.
  - Decision Modern Construction technology, Special type of construction in Disaster prone areas
  - □ Earthing and Grounding
  - □ Right of way issues including encroachment under sub-transmission lines

# Best O&M Practices including safety

- Segregation of feeders
- □ Failure of Distribution Transformers it's prevention and repair
- □ Failure of Underground/ ABC cables Causes and remedies
- Minimizing fault restoration time
- Condition monitoring to minimize damage of equipments
- Safety and Accident prevention

#### Power Quality and Reliability

- Power Quality Impact of non-linear loads and DERs
- □ Reliability Issues Measurement and improving reliability
- Managing Voltage Quality and Current distortion
- D Mitigation including harmonics etc.
- Grid discipline and Effective Energy Management
  - Load forecasting techniques
  - DSM/Demand Response as a resource of DISCOMs
  - Effect of Unpredictable demand

# • Reforms in Distribution Sector including Deployment of Smart Metering

- Poor Financial health of DISCOMs
- □ Revenue Management and Loss reduction techniques Need for energy audit
- Deting SOP Norms / Key performance indicators for DISCOMs Assessment and Evaluation
- □ Innovations in Customer Management and Value-Added Services by DISCOMs
- Revitalising Ageing infrastructure
- □ Issues in implementing Central schemes Franchisee and outsourcing
- Den access including Short Term Open Access in Distribution Impact and remedies
- Distribution automation including AMI
- Regulatory issues and Challenges in Distribution sector
- Renewable Integration & Distributed Energy Resources (DERs)
  - Roof top Solar Generation- issues and challenges
  - □ Thrust on Renewable Energy and Need for balancing power required at Distribution level
  - Deployment of Distributed Energy Resources as a tool for energy access to masses
  - □ Impact of EV and its charging network on Distribution Grid
  - □ EV (Electric vehicle) charging infrastructure Issues of Standards
- Micro grid and Smart Grid in Distribution Systems
  - D Micro grid and Smart grid and it's adoption in distribution sector
  - □ IT application/SCADA Reliability of SCADA System
- Skilling of Manpower
  - Shortage of trained staff / Ageing workforce
  - D Capacity building/ Training / Re-skilling of staff

# SUBMISSION OF TECHNICAL PAPERS

Experts who desire to submit case studies or present paper on above topics or any other related topic vital to distribution sector's sustainability are welcome to submit the same by 14<sup>th</sup> August 2019.

# **DATES AND VENUE**

The Conference will be held on 29-30 August 2019 (Thursday, Friday) at Auditorium of SCOPE Convention Centre, SCOPE Complex, Lodhi Road, New Delhi - 110003. The Conference timings will be 10.00 AM to 5.30 PM. The registration will start at 9.00 AM on 29th August 2019.

# WHO SHOULD ATTEND?

The Conference will be of special interest to the Professionals and Stakeholders from Central Govt. / State Govt. / SEBs, Power Utilities/Corporations, Regulators, Researchers/Academicians, Manufacturers, Planners, Operators, Consultants, Electrical Contractors, etc.

# **REGISTRATION FEE**

Registration fee for the delegates is as follows:

(i) Rs. 12,000/- per participant.

(ii) Discounted Fee for the CBIP and CIGRE members will be Rs. 10,000/- per participant.

#### GST @ 18% shall be charged extra. GST No. 07AAAJC0237F1ZU

The Registration fee covers the registration kit, tea/coffee/lunch during the conference. The Conference is nonresidential. Participants will have to make their own arrangement for travel, boarding and lodging, etc. All payments be made through DD/ cheque at par in favour of 'Central Board of Irrigation & Power', payable at Delhi or amount deposited/ transferred to CBIP A/c no.00031110004411, MICR No. 110240001, HDFC Bank, Swift Code: HDFCINBBDEL, IFSC: HDFC 0000003, Address: 209-214, Kailash Building, 26 Kasturba Gandhi Marg, New Delhi

# **SPONSORSHIP OPPORTUNITY**

The Conference provides an effective opportunity for sponsoring companies to promote their products/services to a focused audience, besides networking with engineers of utility, manufacturers and academic institutions during tea/coffee and lunch intervals.

Sponsors are assured of full visibility with printing of their names on proceedings, banners and other publicity material related to Conference and will have the privilege of distribution of their product's pamphlets/catalogues during the conference. Sponsors will also have the privilege of sending delegates exempted from payment of registration fee as indicated hereunder:

Category of Sponsorship	Fee in Rs.	Privileges
Platinum Sponsor	3,00,000	<ul> <li>Display of Logo on Main banner &amp; other publicity material</li> <li>Free Delegates in the Conference (10 Nos.)</li> <li>Free editorial in the proceedings (2 pages)</li> <li>Advertisement in Proceedings</li> <li>Table space for display of services at the venue</li> </ul>
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Silver Sponsor	1,00,000	<ul> <li>Display of Logo on Main banner &amp; other publicity material</li> <li>Free Delegates in the Conference (03 Nos.)</li> <li>Advertisement in-side Proceedings</li> </ul>

For further details, please contact the Conference Secretariat.

# **CONFERENCE SECRETARIAT**

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