

International Conference on
Development of 1200 kV National Test Station

29th & 30th September 2010
Hotel Hyatt Regency, New Delhi, India



Organised by



International Council on Large Electric Systems (CIGRE)- INDIA
and
Central Board of Irrigation & Power

In association with



पावरग्रिड
**Power Grid Corporation
of India Limited**



**Indian Electrical & Electronics
Manufacturers' Association**

THE NEED FOR UHV AC TECHNOLOGY

Indian power system with present installed capacity of about 160,000 MW, is growing at an accelerated pace. Peak demand is expected to increase to more than 500,000 MW by 2027 for which installed capacity of about 700,000 MW is required. To meet the long-term power transfer requirement, a large transmission network is being planned in India interconnecting all the pocketed generating resources in Eastern, North-eastern Regions with bulk load centers. Development of large transmission network for transfer of bulk power poses challenges like Right-of-Way (ROW), and Environmental aspects etc. All these challenges with manifold increase of power transfer requirement necessitate quantum jump in transmission voltage level. The existing 400 kV line can transfer about 600 MW power whereas 800 kV line has loading capacity of 1200 MW-2400 MW. The transmission capacity of 1200 kV is between 6000 MW to 8000 MW and hence a much needed solution for meeting above challenges.

DEVELOPMENT OF UHV AC (1000/1100/1200 KV CLASS) TECHNOLOGY WORLDWIDE

In January 2009, 1100 kV transmission project was constructed in China. Three (03) Numbers 1100kV Transmission Stations have been constructed and are in operation almost for a year, further additional 1100 kV Transmission project are under planning and design stage in China for bulk transfer of power. Japan has also developed a 1000 kV Test Station in 1993. In India, 1200 kV National Test Station is being set up at Bina in Madhya Pradesh. Other countries like USA and Brazil are also considering development of UHV AC transmission system in their network.

DEVELOPMENT OF 1200 KV TECHNOLOGY IN INDIA

POWERGRID along with Indian manufacturers, most of who are IEEMA members is establishing a National 1200 kV Test Station at Bina, (Madhya Pradesh). 1200 KV test line is being constructed along with two nos. 1200 kV test bays in which the leading manufacturers are providing main equipment like Transformers, Surge Arresters, Circuit Breakers, Instrument Transformers and Transmission Line hardware & accessories. These test bays and test line shall be used for various field tests/ trials so that the results and feedback can be used for developing field proven equipment as well as to gain initial operational experience. POWERGRID is likely to construct 1200 kV Transmission Lines between Wardha & Aurangabad to usher in 1200 kV era in the country.

AIM OF THE CONFERENCE

The Committee for CIGRE India, an affiliate of CBIP and National Committee to the International Council on Large Electric System with the aim to share the knowledge gained through developmental efforts on 1200 kV Technology with Power System Professionals from India and abroad is organizing an International Conference on Development of 1200 kV UHV AC Technology in India from 29-30 September 2010 at Hotel Hyatt Regency, Ring Road, New Delhi

OBJECTIVE OF THE CONFERENCE

1200 kV UHV transmission technology is being developed for the first time in India. Insulation Co-ordination was the biggest challenge for selection of technical parameters of various equipments like Surge Arresters, Transformers, Circuit Breakers, and Instrument Transformers etc. In this conference various issues related to insulation coordination, selection of technical parameters, development of various equipments by manufacturers, testing at labs & field etc shall be discussed /deliberated. Renowned Experts from world over are expected to share critical aspects of designing of UHV technology. While designing, construction and operating a station at higher voltage, field test is crucial. Field handover test, commissioning test and preventive tests are to be given special considerations.

TOPICS

- Ongoing UHV AC (1000/1100/1200 kV) Technology development worldwide –experiences
- Insulation Coordination
- 1200 kV Substation – Field Test Technology
- 1200 kV Class Surge Arrestors
- 1200 kV Power Transformers
- 1200 kV Circuit Breakers
- 1200 kV Instrument Transformers – Conventional & Non-Conventional (Optical)
- 1200 kV Transmission Line-Design consideration-Hardware and Accessories
- 1200 kV Substation Layout considerations
- Control & Protection

DATE

29th & 30th September, 2010

VENUE

Hyatt Regency, Bhikaiji Cama Place, Ring Road, New Delhi, India 110067

Tel: +91 11 2679 1234 Fax: +91 11 2679 1122

Email: delhi.regency@hyatt.com

PROGRAMME (TENTATIVE)

29th September 2010	30th September 2010
0900 – 1000 Registration	1000 - 1100 Session B3 Substations
1000 - 1100 Inaugural Session	1100 – 1130 Tea/ Coffe Break
1100 – 1130 Tea/Coffe Break	1130 – 1300 Technical Session
1130 – 1300 Technical Session	1300 – 1400 Lunch Break
1300 – 1400 Lunch Break	1400 – 1530 Technical Session
1400 – 1530 Technical Session	1530 – 1630 Panel Discussion/Concluding Session
1530 – 1600 Tea/ Coffe Break	1630 – 1730 Tea/ Coffe
1630 – 1800 Technical Session	

REGISTRATION

The registration fee payable by the delegates for participation in the conference is Rs. 12,000/-. Participation Fee for CBIP, CIGRE and IEEMA members is Rs. 10,000/-.

The registration fee includes registration kit, one copy of proceedings (CD), working lunch and tea in between the Conference. The delegates shall have to make their own arrangements for boarding, lodging and transport. Spot registration facility to a limited extent will be available.

SPONSORSHIP OPPORTUNITY

The conference provides an opportunity for sponsoring companies to promote their products/services to a focused audience, besides networking with utility engineers 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 session. Sponsors will also have the privilege of sending delegates exempted from payment of registration fee as indicated hereunder:

Category	Fee in Rs.	Privileges
Co-organiser	3,00,000	<ul style="list-style-type: none"> • Display of Logo & organization's name in conference main banner • 2 pages editorial & 1 page Advertisement in the proceeding • 7 delegates exempted from Registration fee. • Table space for display of product and for distribution of Material/ brochures etc to the delegates
Sponsor	2,00,000	<ul style="list-style-type: none"> • Display of Logo & organization's name in conference main banner • 1 pages editorial & 1 page Advertisement in the proceeding • 5 delegates exempted from Registration fee. • Table space for display of product and for distribution of Material/ brochures etc. to the delegates.
Co-sponsor	1,00,000	<ul style="list-style-type: none"> • Display of Logo & organization's name in conference main banner • 2 delegates exempted from Registration fee.

PAYMENT & CORRESPONDENCE

All payments for the conference i.,e., for registration fee, sponsorship and advertisements etc. may be made through Demand Draft in favour of "CIGRE India", payable at New Delhi or amount transferred/ deposited to CIGRE Account No. 034601001054, (MICR No.110229052) ICICI Bank Limited, Bank Address: 16/48, Chanakyapuri, Malcha Marg Shopping Center, New Delhi 110 021, India. Name of the event Name should be mentioned under subject in all correspondence related to this session.

OFFICIAL LANGUAGE

The official language of the conference is English.

CONTACT ADDRESS

V.K. Kanjlia

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Secretary, Central Board of Irrigation & Power
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E-mail : cbip@cbip.org; Website: www.cbip.org

REGISTRATION FORM

Name : _____
Designation : _____
Address : _____
Phone : _____
Fax : _____
Email : _____
Date : _____ Signature: _____

LIKELY SPEAKERS

International Speakers

- Members of CIGRE Working Group B 3.29 – "Field Tests Technology on UHV Substations during Construction & Operation".

National Speakers

- Experts from organisation like CEA, POWERGRID, BHEL, NTPC, CGL, Siemens, Areva, ABB, Vijaya Electricals, Transformers & Rectifiers, Hivelm, WSI and other leading manufacturers participating in 1200 kV National Test Station.