CIGRE Study Committee (SC) B1 Meeting and International Colloquium on

H.V. Insulated Cables
(Under the aegis of CIGRE SC B1 on HV Insulated Cables)

09th - 14th October 2017
Venue: Hotel VIVANTA by Taj, Dwarka, Sector 21, New Delhi (India)
CIGRE and the Committee for CIGRE-India

The International Council on Large Electric Systems (CIGRE), with its Headquarters at Paris deals in the field of Transmission and Generation. It functions through 16 Study Committees formed for various disciplines of Power Systems. Each Study Committee comprises about 24 experts drawn from various countries. In addition, some more experts are members of the Working Groups/Task Forces formed by these Study Committees. It is a matter of pride that India is represented in all the 16 CIGRE Study Committees as regular/observer member.

CIGRE (Paris) has about 10000 members from ninety countries. Wherever there are more than 40 equivalent members in any country a National Committee is formed with the following aims:

- To disseminate the technical information to the members of the national committee.
- To propose papers for presentation at CIGRE sessions
- To encourage membership of CIGRE
- To organize representation in CIGRE session / symposia.
- From India there were 600 equivalent members for CIGRE in the year 2016.

CIGRE (India) is an affiliate of Central Board of Irrigation and Power. It is the Indian National Committee of CIGRE and is a registered society. It co-ordinates the activities of CIGRE in India, through a number of National Study Committees and disseminates the information about the activities of the CIGRE Study Committees and Working Groups to various organization in India.

About CIGRE SC B1

The activities of CIGRE Study Committee B1 concern all types of AC and DC insulated cable systems for land and submarine connections and are focused mainly on high voltage applications. Whenever appropriate, however, lower voltage applications are also considered.

Within this field, the scope of work of the Study Committee covers design, manufacture, installation, service, quality assurance, tests and testing technology, behaviour in and interaction with the network, reliability, asset management, maintenance and diagnostic techniques in service.

The objective of CIGRE SC B1 is to facilitate and promote the progress of engineering and the international exchange of information and knowledge in the field of insulated cables. To add value to this information and knowledge by means of synthesizing state-of-the-art practices and developing recommendations.

About the Tutorial & Colloquium

CIGRE India is honored to host the meeting of CIGRE Study Committee B1 and its Working Groups in India on 9, 10 & 11 October 2017.

To take advantage of the presence of international experts, associated with CIGRE Study Committee B1, in India, CIGRE-India and Central Board of Irrigation and Power, in conjunction with the meeting of CIGRE Study Committee B1 and its working groups, are organizing International Tutorials and Colloquium on HV Insulated Cables on 12, 13 & 14 October, 2017 at Hotel VIVANTA by Taj, Dwarka Sector 21, New Delhi (India).

Attraction for Participants in the Tutorials & Colloquium

- Opportunity to interact with renowned experts from participating countries including Chairman & Members of CIGRE SC B1 & its working Group from various countries.
- Tutorials by Senior Experts on the Subject
- Views by International experts as Chairman of various sessions
- Quality presentations by National & International experts during the Colloquium.
## Programme

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Dates</th>
<th>Activities</th>
<th>Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>09-10-2017 (Mon.)</td>
<td>Meeting of CIGRE Working Groups of SC B1</td>
<td>Participation restricted to members of Working Groups only</td>
</tr>
<tr>
<td>2</td>
<td>10-10-2017 (Tue.)</td>
<td>CIGRE Study Committee Meeting (2 Days)</td>
<td>Participation restricted to members of Study Committee only</td>
</tr>
<tr>
<td>3</td>
<td>11-10-2017 (Wed.)</td>
<td>TUTORIALS</td>
<td>Participation Open for Registered Delegate.</td>
</tr>
<tr>
<td>4</td>
<td>12-10-2017 (Thurs.)</td>
<td>Intl. Colloquium on HV Insulated Cables and Technical Visit</td>
<td>CIGRE Study Committee B1 and Working Group members &amp; their companion are invities and are exempted from Registration Fee.</td>
</tr>
<tr>
<td>5</td>
<td>13-10-2017 (Friday)</td>
<td>Intl. Colloquium on HV Insulated Cables</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>14-10-2017 (Sat.)</td>
<td>Intl. Colloquium on HV Insulated Cables</td>
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### Excursion / Field Visit (Optional) on 14-10-2017 (Sat.)

- Full day Technical cum Excursion trip to Agra - Taj Mahal (Trip starts at 630 hrs. in the morning and return at about 2000 hrs at Delhi in the late evening on same day)
- CIGRE Study Committee B1 and Working Group members & their companion on No Charges basis
- Other International Participants on Chargable basis @ US $ 200 per participant, which includes to & fro journey by bus, entry ticket, lunch etc. during the trip.

### Programme for Tutorials on 12 Oct. 2017

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>0830 - 0930</td>
<td>Registrations</td>
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<tr>
<td>0930 -1000</td>
<td>Opening Session</td>
</tr>
<tr>
<td>1000 -1030</td>
<td>Tea Break</td>
</tr>
<tr>
<td>1030 -1130</td>
<td>Tutorial 1 - Fault Location / WG B1-52</td>
</tr>
<tr>
<td>1130 -1230</td>
<td>Tutorial 2 - Guide for Rating Calculations</td>
</tr>
<tr>
<td>1230 -1330</td>
<td>Lunch Break</td>
</tr>
<tr>
<td>1330 - 1430</td>
<td>Tutorial 3 - Maintenance of HVAC Cable System/Accessories</td>
</tr>
<tr>
<td>1430 -1530</td>
<td>Tutorial 4 - Implementation of Long Lengths HV &amp; EHV Cable Systems.</td>
</tr>
<tr>
<td>1530 -1600</td>
<td>Tea Break</td>
</tr>
<tr>
<td>1600 -1700</td>
<td>Tutorial 5 - Impact of EMF on Power Cable System</td>
</tr>
</tbody>
</table>

### Presentors for Tutorials

**Mr. Willem Boone** (Netherlands) has more than 40 years of experience with KEMA, now DNV GL, in the field of underground Electrical Power Transmission and Distribution. He contributed significantly to the development of testing methods and related international standards for the electrical cable industry. He is recognized as an international expert and is active in CIGRE and IEEE/ICC.

**Mr. Ken Barber** (Australia) has more than 55 years of experience in the field and has worked in UK, India, Malaysia and Australia. Mr. Ken has been the Chairman of the Australia Standards committee for Insulated cables, He was Convenor of WG B 1.47 which developed the Technical Brochure on the “Implementation Issues relative to Long Length AC cable systems”

**Mr. Harry Orton** (Canada), has over 20 years of experience as a specialist in the field of underground and submarine power transmission and distribution cables and accessories, later becoming section supervisor in charge of insulation studies and manager of technical activities. Harry is active in the IEEE ICC and the ICPADM as well as a member of CIGRE and the Jicable Scientific and Technical Committee located in Paris.

**Mr. Robert Donaghy** (Ireland) has more than 25 years of experience in ESB International; he has held various positions in the transmission and asset management areas and has been responsible for many major transmission cable projects both in Ireland and internationally. He is currently the convenor of Working Group B1.52 (Fault Location on Land and Submarine Links (AC & DC).

**Mr. De Wild** (Netherlands) is an international recognized expert on AC and DC land and submarine power cables has working experience of 19 years. His current position in DNV GL (formerly known as KEMA) is principal consultant in which he and his team deliver consultancy services to power cable projects worldwide. He convened the CIGRE working group on current ratings which lead to TB 640, and to the currently ongoing work regarding cable rating verification in WG B1.56.
Scope of the Colloquium

The Colloquium is the biennial Technical Discussion Forum of the Study Committee for members, associates and experts of the discipline from the host country (i.e., India in this case). The Preferential Subjects which are going to be discussed are within the following scope:

**PS1 : Feedback from Newly Installed or Up graded Cable Systems**
- Design, installation, operation and techniques to improve safety from induced voltages and currents.
- Advances in testing and relevant experience.
- Lessons learnt from permitting, consent and implementation of mitigation measures.

**PS2 : Best Use of Existing Cable Systems**
- Condition assessment, diagnostic testing and monitoring of cable systems and accessories.
- Upgrading methodologies and related experience.
- Trends in maintenance strategies, remaining life assessment and asset management.

**PS3 : Insulated Cables in the Power System of the Future**
- New functionalities, innovative cable designs, accessories and systems.
- Advances in modelling.
- Environmental challenges for future cable systems.
- Longer lengths and higher voltage levels for AC and DC Cables.

All papers that are within the scope will be accepted, and authors should be prepared to present a summary of their papers and to answer questions from the audience in the colloquium. The Technical committee however reserves the right to identify papers that are not directly within the discussion stream and to publish these without presentation or discussion.

**Submission of Synopsis**

Experts wishing to present papers are invited to submit their synopsis (approximately 500 words) before 15.05.2017 to the contact address given below:

Mr. V.K. Kanjlia, Secretary & Treasurer, CIGRE-India – vishandutt@cbip.org; vishan.dutt.cbip@gmail.com

Each synopsis must indicate the topic that will be addressed. The name, Title, Company, Affiliation, Email and full address of the author shall also be given.

**Deadlines**

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submission of Synopsis</td>
<td>31-05-2017</td>
</tr>
<tr>
<td>Authors informed of synopsis acceptance</td>
<td>30-06-2017</td>
</tr>
<tr>
<td>Submission of papers</td>
<td>31-08-2017</td>
</tr>
<tr>
<td>Preparation of Special Report</td>
<td>30-09-2017</td>
</tr>
<tr>
<td>Submission of presentations</td>
<td>30-09-2017</td>
</tr>
</tbody>
</table>

**Language**

The papers must be written in English.

**Participation**

Participation in the Study Committee/Working Groups Meetings is restricted to its members only.

The colloquium participants will include top experts in the field of HV Insulated Cables. The colloquium will be informative and beneficial for generating companies, transmission system planners, designers, operators, asset owners and managers, manufacturers, research institutions and universities and policy makers and regulators.

Participation in the Tutorials and Colloquium is open on payment of registration fee.

**CIGRE SC B1 Regular members & Observer members and Working Group conveners are invited to participate in the Tutorials & Colloquium without payment of registration fee.**

**Registration**

The registration fee payable by the delegates, including authors of papers, for participation in the Tutorial and Colloquium is as follows:
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Event</th>
<th>Fee payable by SAARC countries in Rs.</th>
<th>Others in US Dollar</th>
<th>Fee for CIGRE SC B1 Members &amp; Convener of Various WG</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Participants</td>
<td>Companion</td>
<td>Students/Faculty</td>
</tr>
<tr>
<td>1</td>
<td>Tutorial</td>
<td>8000/-</td>
<td>1,500/-</td>
<td>1,500/-</td>
</tr>
<tr>
<td>2</td>
<td>Colloquium</td>
<td>16,000/-</td>
<td>3,000/-</td>
<td>3,000/-</td>
</tr>
<tr>
<td>3</td>
<td>Tutorial &amp; Colloquium</td>
<td>18,000/-</td>
<td>4,000/-</td>
<td>4,000/-</td>
</tr>
</tbody>
</table>

**Important**

- Service Tax will be extra for the payment in INR.
- CIGRE SC B1 Regular members, Observer members and Working Group Members are exempted from payment of Registration fee.
- 10% discount in registration fee to CBIP & CIGRE-India members
- Companions are immediate relative or one normally residing with the participant
- However the spot registration is available to a limited extent, it is advisable to register well in advance.

The registration fee covers the cost of registration kit, Tutorial and Colloquium proceedings, and lunch and tea in-between technical sessions. The participants will have to make their own arrangements for travel, boarding and lodging. The companion registered for the event are entitled to join the participants during Tea/ Coffee and Lunch break.

**Sponsorship Opportunities**

The Colloquium 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. The details of Fee and privileges category wise are indicated hereunder:

<table>
<thead>
<tr>
<th>Category of Sponsorship</th>
<th>Sponsorship Fee in INR</th>
<th>Free Delegates in Tutorial &amp; Colloquium</th>
<th>Privileges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platinum</td>
<td>5,00,000</td>
<td>10</td>
<td>• Logo on main Backdrop as well as on all publicity materials for the event.</td>
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<td></td>
<td>7500</td>
<td></td>
<td>• Speaker slot during the colloquium</td>
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<td></td>
<td></td>
<td>• 10 non residential delegates exempted from Registration fee in Tutorial &amp; Colloquium</td>
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<td></td>
<td>• Full page special Position advertisement in the proceedings</td>
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<td></td>
<td>• Exhibition space for display of product and distribution of brochures</td>
</tr>
<tr>
<td>Gold</td>
<td>3,00,000</td>
<td>5</td>
<td>• Logo on main Backdrop as well as on all publicity materials for the event.</td>
</tr>
<tr>
<td></td>
<td>4500</td>
<td></td>
<td>• Speaker slot during the colloquium</td>
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<td></td>
<td></td>
<td>• 05 non residential delegates exempted from Registration fee in Tutorial &amp; Colloquium.</td>
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<td></td>
<td>• Full page advertisement in the proceedings</td>
</tr>
<tr>
<td>Silver</td>
<td>2,00,000</td>
<td>3</td>
<td>• Logo on Backdrop as well as on all publicity materials for the event.</td>
</tr>
<tr>
<td></td>
<td>3000</td>
<td></td>
<td>• 03 non residential delegates exempted from Registration fee in Tutorial &amp; Colloquium.</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>• Full page advertisement in the proceedings</td>
</tr>
<tr>
<td>Supporter</td>
<td>1,00,000</td>
<td>1</td>
<td>• Display of logo on the banner</td>
</tr>
<tr>
<td></td>
<td>1500</td>
<td></td>
<td>• 01 non residential delegates exempted from Registration fee in Tutorial &amp; Colloquium.</td>
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</table>
Exhibition
An exhibition concurrent to the Technical Session is also being organized. This will provide a Scope to present the new technologies, materials and mechanism including software. Participants will enjoy the opportunity to inspect the exhibition and exhibitors will have an excellent opportunity of accessing a large number of potential buyers / decision makers each day. The space will be allotted on first-cum-first served basis.
Exhibition Charges are Rs. 1.00 lac per stall (size 3 m × 2 m) – 10% Discount to CIGRE Members.
For further details, please contact the Colloquium Secretariat.

Call for Advertisements
A limited space for insertion of advertisements in the Colloquium proceedings is available at the following rates:

<table>
<thead>
<tr>
<th>Position</th>
<th>Charges for Colour Advertisements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SAARC countries (Indian Rs.)</td>
</tr>
<tr>
<td>Special Position</td>
<td>50,000</td>
</tr>
<tr>
<td>Full page</td>
<td>20,000</td>
</tr>
</tbody>
</table>

Payment and Correspondence
The payments for the event (registration fee, sponsorship & Advertisement are to be made to CIGRE India by the following methods:
- Banker’s cheque payable to : Central Board of Irrigation and Power, New Delhi
- Bank transfer: Bank charges if any are to be borne by Participants
Beneficiary Name (Payee Name & address): Central Board of Irrigation & Power, Malcha Marg, Chanakyapuri, New Delhi 110021
PAN No. : AAAJC 0237F ;  Service Tax Numbers: AAAJC 0237F ST001
Complete Bank Details : Bank Name: HDFC Bank ; Saving Bank Account Number : 00031110004411
Branch & Address : 209-214, Kailash Building, 26, Kasturba Gandhi Marg, New Delhi 110001;
Branch /RTG/NEFT IFSC : HDFC0000003;  MICR Code : 110240001;  Swift code : HDFCINBBDEI
All the payments details for the event to be furnished along with the registration form and Name of the event should be mentioned under subject in all the correspondence relating to this event.
Note : No other method of payments is acceptable.

Accommodation
The official venue hotel for the Colloquium is :
Hotel VIVANTA by Taj, Sector 21, Metro Station Complex, Dwarka, New Delhi -110075, India
For the convenience of the participants rooms have been blocked from 09th – 13th October, 2017 at the conference venue at a very special price. To avail the benefit the participants are requested to send their confirmations as early as possible.

<table>
<thead>
<tr>
<th>Hotel Name</th>
<th>Room Category</th>
<th>Location</th>
<th>Distance from Venue</th>
<th>Single/ Double</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotel VIVANTA by Taj</td>
<td>Deluxe</td>
<td>Dwarka, New Delhi</td>
<td>Venue Hotel</td>
<td>INR 6000/100 US$</td>
</tr>
</tbody>
</table>
- The special rate is inclusive of taxes & complimentary buffet breakfast at the coffee shop.
- The check in & checkout time is 1400 Hrs. & 1200 Hrs. Noon respectively
- In case of early check in before 1200 Hrs., please secure reservation from previous night.
- The special tariff is valid only during the event.
The above negotiated rates are offered for booking through CIGRE-India only.
The Participants are advised to make reservation for accommodation well in advance and for assistance they may contact conference secretariat.
General Information

Official Language: The official language of the Colloquium is English.

Official Invitation: The invitation contained in this bulletin should generally suffice to plan travel formalities. However, should an official invitation is needed; the same can be sent by the organizers on request.

Visa and Custom Requirement: All visitors to India require a visa, except visitors from Nepal and Bhutan. The best place to get your visa is at Indian Embassy and High Commissions in your country of residence. Please check your nearest Embassy, Consulate or High Commission for all the details for getting visa. Keep your passport with you at all the time.

Travel

Banking and Communication Facilities: Foreign exchange facilities, fax and phone service is available at the venue hotels of the Colloquium.

Climate: The maximum temperature at Delhi in October is around 35°C and Minimum temperator of 18°C.

India - The Host Country

India – The very name conjures images of vibrant colors, mysticism, royalty; an amalgam of religions, a kaleidoscope of art and culture, all of which find expression in the beautiful temples, sculptures and monuments. India’s ancient and diverse culture, sweeping back at least 5000 years, with successive waves of migration absorbed into the fabric of Indian life, has enriched it time and again to make a multi-cultural nation with a rich diversity of languages, customs, cuisines, religions, literature and arts. Within this kaleidoscope of immense variety there is a thread of continuity that has determined Indian civilization and social structure. India, it is often said, is not a country but a continent. From north to south and east to west, the people are different, the languages are different, and the country is different. There are few countries on earth with the enormous variety that India has to offer. India is a land of romance and dreams, of splendor and extravagance, of forts and palaces, beaches and jungles, a kaleidoscope of vibrant colors and rituals. Explore the diversity of Northern India expressed by the mystic ambience in Varanasi, through the architectural magnificence of the Taj Mahal in Agra and the majestic forts and palaces of Gwalior and Rajasthan.

Delhi - The Host City

Delhi is a place which has a high esteem history and culture to boast on, Historical monuments and ancient architecture makes the city a sought after destination for tourists and connoisseurs. The monuments in the city are very well preserved by the Archaeological Survey of India. Among the most popular monuments in Delhi are the Red Fort, Purana Quila, Qutab Minar, India Gate, Humayun’s Tomb, Jantar Mantar and Lotus Temple.

For more details please contact Colloquium Secretariat

Mr. V.K. Kanjlia, Secretary & Treasurer, CIGRE India, C/o Central Board of Irrigation & Power, CBIP Building, Malcha Marg, Chanakyapuri, New Delhi-110021, India

Contact Person - Mr. Vishan Dutt, Chief Manager (Tech.), CIGRE India - (Mobile No. 09811431554)

Phone: +91-11-26115984/1294; Fax: 91 11 26116347; E-mail : vishandutt@cbip.org; cbip@cbip.org;
Website: www.cbip.org
CIGRE Study Committee (SC) B1 Meeting and International Colloquium on

H.V. Insulated Cables
(Under the aegis of CIGRE SC B1 on HV Insulated Cables)

09th - 14th October 2017
Venue: Hotel VIVANTA by Taj, Dwarka, Sector 21, New Delhi (India)

REGISTRATION FORM

(please send this form to CIGRE- India : Email : vishandutt@cbip.org : Fax : 91-11-26116347)

1. Willing to attend Tutorial _______; Colloquium _______; or Both ____________ (Pl. tick )
2. Delegate Name & Designation : .............................................................................................................
3. Organisation: ...........................................................................................................................................
   Address for Correspondence ...........................................................................................................................
   Phone ........................................ Fax ........................................ E-mail : .................................................................
4. Companion Guest if any : ............................................................................................................................
5. Details of Registration fee Paid for Tutorials & Colloquium i.e. (Amount & Mode of Payments etc. (There is no
   registration fee for members of CIGRE SC B1 Chairman and associated Working Group.
   ........................................................................................................................................................................
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For International participants and their companion guest, additional details are required apart from the above information:

1. | Passport No. | Date & Place of Issue | Arrival date, Time & Flight Number | Departure date, Time & Flight Number |
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</table>

2. Accommodation Required in the Venue Hotel: Yes ( ) OR No ( )
3. Period for which Accommodation Required: From ________ to ________.
4. Willing to Participate in Full day Trip to Agra on 14/10/2017 : Yes ( ) OR No ( )