<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Speaker</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:00</td>
<td>Welcome &amp; Opening Remarks</td>
<td>Marvin L. Zimmerman</td>
<td>Auditorium</td>
</tr>
<tr>
<td>08:10</td>
<td>Trends in Energy &amp; Electrical Power Worldwide &amp; Impact on Development of T&amp;D Systems</td>
<td>Alessandro Clerici</td>
<td>Auditorium</td>
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<tr>
<td>08:35</td>
<td>Leveraging Technology to Drive the Future of Surge Arresters &amp; Insulators</td>
<td>Peter Swales</td>
<td>Auditorium</td>
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<tr>
<td>09:00</td>
<td>Role of Composite Insulators in Innovative Tower Solutions, Line Uprating &amp; Upgrading</td>
<td>Konstantin Papailiou</td>
<td>Auditorium</td>
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<tr>
<td>09:20</td>
<td>Silicones Accompany Economic &amp; Social Megatrends</td>
<td>Andrei Szabo</td>
<td>Auditorium</td>
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<tr>
<td>09:40</td>
<td>Impact of Environmental Constraints on Electrical System Development &amp; Insulation</td>
<td>Michele de Nigris</td>
<td>Auditorium</td>
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<tr>
<td>10:00</td>
<td>Coffee Break &amp; Visit to Exhibition</td>
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<td>Auditorium</td>
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<tr>
<td>10:50</td>
<td>Polymer Insulation for Today’s Network Requirements</td>
<td>Frank Schmuck</td>
<td>Auditorium</td>
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<tr>
<td>11:00</td>
<td>Insulator Materials Toward Development of Insulators of the Future</td>
<td>Stanislaw Gubanski</td>
<td>Auditorium</td>
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<tr>
<td>11:10</td>
<td>Necessary Check Points &amp; Testing for Quality Screening of Insulators</td>
<td>Jean-Marie George</td>
<td>Auditorium</td>
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<tr>
<td>11:50</td>
<td>Key Issues for Development of Composite Insulators</td>
<td>Liang Xidong</td>
<td>Auditorium</td>
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<tr>
<td>12:00</td>
<td>Key Technologies for Preventing Major Pollution Flashovers: Experience in China</td>
<td>Su Zhiyi</td>
<td>Auditorium</td>
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<tr>
<td>12:50</td>
<td>Summary of Morning Session/Questions</td>
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<td>Auditorium</td>
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<tr>
<td>13:00</td>
<td>Lunch</td>
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<td>Auditorium</td>
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<tr>
<td>14:00</td>
<td>Totally Insulated Framing Designs</td>
<td>Tony Carreira</td>
<td>Auditorium</td>
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<tr>
<td>14:25</td>
<td>Using E-Field Modeling to Improve Performance of Transmission Lines</td>
<td>Jonathan Whitmore</td>
<td>Auditorium</td>
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<tr>
<td>14:50</td>
<td>Focus on Manufacturers: Delivering Optimal Product Quality Under Cost Pressures</td>
<td>Bas Verhoeven</td>
<td>Auditorium</td>
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<tr>
<td>15:15</td>
<td>Coffee Break &amp; Visit to Exhibition</td>
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<td>Auditorium</td>
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<tr>
<td>16:00</td>
<td>Optimizing RTV Silicone Application Techniques in Harsh Service Conditions</td>
<td>Raouf Znaid</td>
<td>Auditorium</td>
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<tr>
<td>16:50</td>
<td>Practical Experience with State-of-the-Art Surge Arrester Monitoring Devices</td>
<td>Philipp Raschke</td>
<td>Auditorium</td>
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<tr>
<td>17:15</td>
<td>EasyQuench Technology, 20 Years of Innovation in Lightning Protection for Lines</td>
<td>Jens Bøthe</td>
<td>Auditorium</td>
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<tr>
<td>17:40</td>
<td>Trends &amp; Demands from TSOs Driving New Investment in High Voltage Laboratories</td>
<td>Dan Windmar</td>
<td>Auditorium</td>
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<tr>
<td>18:05</td>
<td>Reviewing 25 Years Development of the World Insulator Industry</td>
<td>Marvin Zimmerman</td>
<td>Auditorium</td>
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<tr>
<td>18:25</td>
<td>Summary of Afternoon Session</td>
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<td>Auditorium</td>
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<tr>
<td>18:30</td>
<td>Special Reception in Exhibition Area (until 20:30)</td>
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<td>Auditorium</td>
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</tbody>
</table>
Tuesday, Nov. 7, 2017
PLENARY MORNING SESSION
Utility Engineers Report on Service Experience

Auditorium
Chairman: Marvin L. Zimmerman
INMR, Canada

08:00
Resolving Problems With Insulation in High Pollution Service Environments
Daniel Blanco
RED Electrica de España, Spain

08:25
Real World Utility Experience with Compact Designs
Dimitri Georgopoulos
AltaLink, Canada

08:50
Testing & Service Experience with Insulators on GCCIA Network
Ahmad Al-Thagafi
Gulf Cooperation Council Interconnection Authority (GCCIA), Saudi Arabia

09:15
Experience with Design & Erection of Insulated Cross-Arms During the Stevin Project
Jean-François Goffinet
Elia Engineering, Belgium

09:40
CompactLine Project to Develop & Implement a Highly Compact Double System 400 kV Line
Wilhelm Kiewitt
50Hz Transmission, Germany

08:25
Case Study for Using & Monitoring Composite Insulators on Overhead Lines Under Natural Pollution
Alberto Rodrigues de Sousa
TAESA, Brazil

11:25
Line & Station Insulators in Transmission Systems: A Question of Confidence
Massimo Marzinotto
Terna, Italy

11:50
Electrical Design of New ±525 kV Line & Other Experience in Western Corridor Project
Kjell Halsan & Bjarni Heigi Thorsteinsson
Statnett Norway

12:15
Overhead Line Inspection at Energias de Portugal (EDP)
Rui Manual Martins
EDP Labelec, Portugal

12:40
Utility Perspective on Insulator Standards & Documentation Required to Assure Compliance
Dimitri Georgopoulos
AltaLink, Canada

13:00
Lunch

Tuesday, Nov. 7, 2017
BREAKOUT SESSION
Insulator Technologies

Auditorium
Chairman: Igor Gutman
STRI, Sweden

14:00
EPRI R&D on Insulators & Arresters
Chris Englebrecht
EPRI, The Netherlands

14:40
Combined Loading Guide for Composite Line Post Insulators
Tony Baker
K-Line Insulators, United States

15:00
DC Pollution Performance: Current Approximations & Future Needs
Jean-Marie George
Sediver, France

15:20
Coffee Break & Visit to Exhibition Area

16:00
Biological Growths on Composite Insulators
Igor Gutman
STRI, Sweden

16:20
RTV Silicone-Coated Glass Insulators: Test Station Experience
Hector de Santos
La Granja Insulators

16:40
Line Post Loading Considerations in Braced & Unbraced Applications
Jeffrey Butler
Hubbell Power Systems, United States

17:00
Shielding Electrodes for HVDC
Alberto Pigini
Consultant, Italy

17:20
Round Robin Dielectric Type Testing of 400 kV Insulator Set
Jan Lachman
EUGI HV Laboratory, Czech Republic

17:40
Development of Nanostructured Ceramic Insulators
Jose Contreras
GE Prolec & Celeco, Mexico

18:00
Innovative Test Techniques to Verify Corona, Pollution & Ice/Snow Performance of Insulation Structures
Igor Gutman
STRI, Sweden

18:20
Session Summary/Questions

18:30
Refreshments in Exhibition Area (open until 19:30)
Tuesday, Nov. 7, 2017
BREAKOUT SESSION
Bushings & Substation Insulators

Garbi Conference Room
Chairman: Lars Jonsson
ABB, Sweden

14:00
Changes to IEC 60137 & CIGRÉ Study on Transformer Reliability
Lars Jonsson
ABB, Sweden

14:20
Transformer Bushing Reliability Survey by ASEAN Utilities & Risk Mitigation Measures
Gobi Kannan
Tenaga Nasional Berhad, Malaysia

14:40
Development of UHV Bushings for Extreme Seismic Conditions
Paolo Cardano
GE Grid Solutions, Italy

15:10
Coffee Break & Visit to Exhibition Area

16:00
Detecting On-Line Partial Discharge in OIP Bushings & Oil-Filled CTs
Brian Sparling
Dynamic Ratings, Canada

16:20
Technical Design Requirements for Composite Hollow Core Insulators Regarding Pollution Performance Under AC & DC
Eric Moal
Reinhauenen Power Composites, Germany

16:40
Innovations, Developments & Remaining Challenges for UHV Insulator Design
Dong Wu
ABB, Sweden

17:00
Design & Testing Station Insulators from Icing Point of View
Eros Stella
GE Grid Solutions, Italy

17:20
Key Challenges of HVDC Insulation Systems
Fabrice Perrot
GE Energy Grid Solutions, United Kingdom

17:40
Application of Advanced Methods to Enhance Safety of Personnel & Increase Plant Reliability
Jakob Emmel
ABB, Switzerland

18:00
High-Voltage Shunt Reactor Switching: Abundant Source of Overvoltages to be Assessed by Testing
Rene Smeets
DNV GL KEMA Laboratories
The Netherlands

18:20
Session Summary/Questions

18:30
Refreshments in Exhibition Area (open until 19:30)

Wednesday, Nov. 8, 2017
BREAKOUT SESSION
Surge Arresters:

Auditorium
Chairman: Jonathan Woodworth
Arrester Works, United States

08:00
Mitigating Ground Potential Rise on Towers Using Line Arresters
Frédéric Maciela
EDF, France

08:20
30 Year Performance Overview of Arrester Housing Materials
Larry Vogt
Consultant to FPL, United States

08:40
10 Years of Field Experience with EGLA Type Line Arresters at the Comisión Federal de Electricidad (CFE)
Gerardo Montoya-Tena
Instituto Nacional de Electricidad y Energías Limpia, Mexico

09:00
Arrester Technology Improves Transmission Line Performance: Experience in Malaysia
Iryani Mohamed Rawi
Tenaga Nasional Berhad, Malaysia

09:20
Electro-Thermally Coupled FEM Simulations of HV Station Arresters, With & Without Grading
Moritz Glessel
TU Darmstadt, Germany

09:40
Most Effective Lightning Protection of Lines with Diverse Modifications of LLPD
Katerina Koreneva
Streamer, Russia

10:00
Coffee Break & Visit to Exhibition

10:30
Lightning Interactions & Damage to Wind Turbines
Joan Montanyá Puig
Polytechnic University of Catalonia, Spain

10:50
Development & Applications of Surge Arresters with High Gradient & Low Residual Voltage
He Jianling
Tsinghua University, China

11:10
Distance Arrester Protection of Cables, O/H Lines & Transformers
Manu Haddad
University of Cardiff, Wales, United Kingdom

11:30
Performance & Revenue Enhancements Utilizing Transmission Line Arresters
Ryan Freeman
Hubbell Power Systems, United States

11:50
Mitigating Switching Surges Using Surge Arresters & Point On Wave Controllers
Jorge Hollmann
BC Hydro, Canada
Achieving Long Service Life from Transmission Line Arresters
William Chisholm
Consultant, Canada

Applying Transmission Line Arresters to Mitigate Lightning Induced Damage to Co-Located Pipelines
Jonathan Woodworth
ArresterWorks, United States

Impact of Superimposed Direct & 50 Hz Alternating HV Stress on Current & Voltage Distribution Along Surge Arresters
Christoph Hippler
Tridelta Meidensha, Germany

Lunch

Discharge Detection Threshold for Corona Cameras
Riaan Rossouw
UVirco Technologies, South Africa

Achieving Proper Adhesion Between Silicone Elastomers & Various Substrates
Andreas Bacher
Wacker Chemie, Germany

Interface Resistivity – A New Method to Evaluate FRP Rod-to-Housing Interfacial Performance in Composite Insulators
Liang Xidong
Tsinghua University, China

Power System Applications of High Temperature Vulcanized & Addition Type LSR
Lee Yanmin
Shenzhen Square Silicone, China

Coffee Break & Visit to Exhibition

Review of 20 Years of Silicone Coated Insulators in the Field
Fabien Virlogeux
Sediver, France

Modern Process Control & Automation of Silicone Components for Power Systems
Rainer Bantle
DESMAG, Germany

Using Satellite Maps of Pollution Flux for Improved Insulator Selection & Operation
William Chisholm
Consultant, Canada

Excellent Performance in Insulators: Type Tests & Sample Tests Requirements
Laura Vegazo Juzgado
La Granja Insulators, Spain

Developments in Moulding Machines for Insulation Components
Nancy Liu
Yizumi Rubber Machinery, China

Self-Driving Drones for Power Line Inspection
Ike van Cruyningen
LineSpect, Canada

Classification of Infrared, Corona & Visual Patrol Anomalies
Derrick Brydges
Linewise Aerial, Canada

Power System Applications of High Temperature Vulcanized & Addition Type LSR
Lee Yanmin
Shenzhen Square Silicone, China

Overview of Silicone Elastomers, Gels & Auxiliary Materials for Cable Accessory Applications
Jens Lambrecht
Wacker Chemie, Germany

Experience in Assessment of High Voltage Terminations
Jan Debus
Brugg Cable, Switzerland

New Design Concept for Polymeric HVDC Cable Joints
Hansjoerg Gramespacher
ec4ac, Switzerland

Coffee Break & Visit to Exhibition

Ins & Outs of Testing 320 kV DC Cable
Hong He
DNV GL KEMA Laboratories The Netherlands

Specific Requirements & Techniques for Designing Dry Type Cable Terminations
Thomas Klein
Strescon, Germany

Safety Aspects of MV/ HV Underground Cables & Accessories in Urban Areas
Pierpaolo Tucci & Uberto Vercelotti
CESI, Italy

Technology Trends in Cable & Connector Design & Impact on Accessories
Klaus-Dieter Haim
Zittau-Görlitz University of Applied Sciences, Germany

Session Summary/Questions