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Distinguish participants and guests, welcome to Bali, welcome to Indonesia and welcome to The International Conference on High Voltage Engineering and Power System 2017 (ICHVEPS 2017). The conference will be held in Inna Grand Bali Beach Hotel Sanur Bali, Indonesia on 2-5 October 2017. The ICHVEPS 2017 is a biannual conference organized by the School of Electrical Engineering and Informatics, Institut Teknologi Bandung (ITB), Indonesia with support of PT. PLN (Persero) and technically sponsored by IEEE Indonesia Section , Power and Energy Society Indonesia Chapter and Indonesia Inter-University Forum on High Voltage Engineering. The conference is designed to be an international forum for exchange ideas, discussion and dissemination of research results and technologies in the field of High Voltage Engineering and Power System from power utilities, universities, research institutes as well as industries. The conference received a large number of abstracts/papers submission. After review, finally 126 papers from 12 countries (Indonesia, Malaysia, India, Australia, China, Japan, Taiwan, Brunei Darussalam, France, Sweden, USA and Nigeria) were accepted. The papers will be presented in 2 invited plenary sessions and 16 technical sessions. All accepted papers will be sent to IEEE Explorer (and Scopus) and selected papers will be published in International Journal on Electrical Engineering and Informatics and Journal of Engineering and Technological Sciences.

I hope ICHVEPS 2017 will provide all of you a fruitful meeting, memorable experience and pleasant stay in Bali

I am looking forward to welcoming you in Bali, Indonesia.

A handwritten signature in black ink, appearing to read 'Suwarno', written in a cursive style.

Prof. Dr. Ir. Suwarno,
General Chairman of ICHVEPS 2017

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ABOUT BALI

Indonesia is one of the very few nations on earth to span such a broad spectrum of world history and human civilizations from its ancient Hindu-Javanese temples to Bali's modern luxury resorts, and from the stone-age lifestyle in West Papua to immense metropolis that is Jakarta. The population of nearly 234 million people is derived from 300 ethnic groups people who speak over 250 distinct languages. The common element is the national language of Bahasa Indonesia



Situated almost smack in the middle of the Indonesian archipelago, Bali is approximately 5,620 sq km (2,170 sq miles) in size with a population of almost 3 million. As one of the eight regencies, Badung is the

urban and commercial center. Here, most tourists spend their holidays at the beach, playing and partying, most often in the tourist enclaves of Nusa Dua, Sanur or Kuta/Legian. But even here, despite blatant commercialism, traditional undercurrents remain.

Bali lies between the islands of Java and Lombok and is one of more than 17,000 islands that makes up the Indonesian Archipelago. Bali is small, stretching approximately 140 km from east to west and 80 km from north to south. Slightly off centre, and running east to west, are a string of volcanic mountains. Lying just 8° south of the Equator, Bali boasts a tropical climate with just two seasons, wet and dry, a year and an average annual temperature of around 28° C. The rich volcanic soil and healthy monsoon season make this island extremely fertile and a range of crops are grown here. The wide and gently sloping southern regions play host to Bali's famed rice terraces, among some of the most spectacular in the world. In the hill, northern coastal regions, mainly coffee, copra, spices, vegetables, cattles and rice are produced.

The Balinese people have strong spiritual roots and despite the large influx of tourists over the years, their culture is still very much alive. Naturally creative, the Balinese have traditionally used their talents for religious purposes and most of the beautiful works to be seen here, have been inspired by stories from the Ramayana and other Hindu epics. With a reputation as being one of the most beautiful and diverse tourist spots in Asia, Bali attracts almost 1,000,000 visitors a year, from all around the world.

GENERAL INFORMATION

Indonesia Government had granted visa on arrival favor to 52 countries to be able to purchase the visa on arrival facility upon their arrival in Indonesia's designed "International Gateway" at 15 airports and 21 seaports.

BUSINESS HOURS

Government offices open at 8 am every day except Sunday, Monday to Thursday they are open to around 3 pm. Fridays to 11.30 and Saturday to 2 pm. Shops in Denpasar and other towns close in the afternoon for a siesta (usually 1 pm to 6 pm) and re-open in the evening until 9 pm.

CLIMATE

The average temperature in Bali in December is between 28^oC (82.4) - 30^oC (86) and the relative humidity is about 88%. There is comparatively little difference between the daytime and night time temperatures.

CURRENCY

Only Rupiah (Indonesian currency) is acceptable at regular stores and restaurants. Certain foreign currencies and major credit cards are accepted by most hotels. Restaurants and souvenirs shops. The exchange rates 1 US\$ is about Rp. 13,300,-

TRAVELERS CHECK AND CREDIT CARDS

Travelers checks are accepted by leading banks and hotels in principals cities. The use of travelers checks in Indonesia is as popular as in any other countries. Dinners Club and American Express, Visa and Master Card are widely accepted at hotel, department stores, shops, restaurants and night clubs. According to the Indonesian banking regulations, payment of credit card should be charged in local currency.

ELECTRICITY

The electricity used in Indonesia is 220 Volt at 50 cycle.

DANCE AND DRAMA

Performance form an important part of nearly every ritual on Bali. Ubud offers classical dances (Joged Kecak Pendet, Topeng, Gabor, etc) held in princely mansion and neighborhood halls. The Art Centre shows at 6 pm daily in Denpasar are the best for Kecak. The venues at Singapadu and Batubulan are excellent for Barong and Keris.

IDD (INTERNATIONAL DIRECT DIALING)

Country Code = Indonesia :+62

City Code = Bali :+62-361

For further information please contact ICHVEPS secretariat office.

REGISTRATION

Registration Fee

The registration fee includes conference kit, conference proceedings, admission to all sessions, welcoming reception, banquet, lunches, and coffee breaks.

CONFERENCE PROGRAM :

IEEE Member	USD 300
Non IEEE Member	USD 350
Overseas Student	USD 250
Local Academia (Lecturer/Student)	IDR 2,500,000

WORKSHOP PROGRAM :

Overseas Participant	USD 125
Domestic Participant	IDR 1,500,000

CONFERENCE VENUE

Conference venue of ICHVEPS 2017 is Inna Grand Bali Beach Hotel, Sanur. It is [located](#) on a wide stretch and white sand of Sanur beach, the most complete and competitive resort in Bali, in over 40 hectares, with extensive landscaped gardens around mature trees.

There are some international direct flights to Denpasar – Bali from several countries such as Singapura, China, Japan, Europe, etc.

From Ngurah Rai International Airport to Conference Venue or Inna Grand Beach Bali Hotel, delegates may use taxi (price to Sanur about IDR 150,000), it will take about 24 minutes. The hotel is only 10 minutes to the traditional art market with a range of recreational facilities.

Sanur, Bali's original seaside, has long been known for its world class facilities and atmosphere of comfort and privacy. This oasis of luxury offers a wide range of dining and leisure opportunities.



WORKSHOP PROGRAM

Date : **Monday, Oct 2nd, 2017.**

Time : 09.00 – 16.00

Room : Bali Hai (10th Floor, Inna Grand Bali Beach Hotel)

**Open Registration : 07.30 – 09.00*

Rundown :

- 1 09.00 – 09.05
Opening Speech by ICHVEPS2017 General Chair
- 2  09.05 – 09.50
Prof. Masayuki Hikita
(Kyushu Institute of Technology, Japan).
"Fundamental technology of GIS and its diagnostics"
- 3  09.50 – 10.35
Prof. Mohammad A.S. Masoum
(Curtin University, Australia)
"Conventional And New Techniques To Improve Quality Of Electric Power System"
- 4  10.35 – 11.20
Prof. Ja-Yoon Koo
(Hanyang University, South Korea)
"Beyond Smart Grid - Energy Digitalization Strategy of KEPCO"
- 5  11.20 – 12.05
Dr. Karl Haubner
(Doble International)
"Failures of High Voltage Equipments"

6



12.05 – 12.35

Dr. Nanang Hariyanto

(Bandung Institute of Technology, Indonesia)

“Indonesian Power System Future Challenges”

7

12.35 – 14.00

Lunch Break

8



14.00 – 14.30

Prof. Suwarno

(Bandung Institute of Technology, Indonesia)

“Aging and lifetime of HV transformers”

9



14.30 – 15.15

Prof. Guan-Jun Zhang

(Xi'an Jiaotong University, China)

“Insulation Diagnosis of HV Transformers”

10



15.15 – 16.15

Prof. Ahmed Abu Siada

(Curtin University, Australia)

“Condition Monitoring of High Voltage Transformer”

11

16.15 – 16.20

Closing Speech by ICHVEPS2017 General Chair

CONFERENCE PROGRAM OUTLINE

Date : **Tuesday, October 3rd, 2017**

Time	Program	Venue
Start from 07.30	Registration	Agung Room (1 st Floor)
08.30 – 09.00	Opening Ceremony	Agung Room
09.00 – 10.15	Plenary Invited Lectures I	Agung Room
10.15 – 10.45	<i>Break and Photo Session</i>	Pendawa Stage
10.45 – 12.45	Plenary Invited Lectures II	Agung Room
12.45 – 14.00	<i>Lunch Break</i>	
14.00 – 16.00	Parallel Technical Session I	<i>*See details in each session</i>
16.00 – 16.30	<i>Coffee Break</i>	
16.30 – 18.30	Parallel Technical Session II	<i>*See details in each session</i>
18.30 – 19.00	<i>Break</i>	
19.00 – 22.00	Gala Dinner (Banquet)	Pendawa Stage

Date : **Wednesday, October 4th, 2017**

Time	Program	Venue
Start from 08.00	Registration	Agung Room (1 st Floor)
08.30 – 10.00	Plenary Invited Lectures III	Agung Room
10.00 – 10.15	<i>Coffee Break</i>	
10.15 – 12.30	Plenary Invited Lectures IV	Agung Room
12.30 – 14.00	<i>Lunch Break</i>	
14.00 – 16.00	Parallel Technical Session III	<i>*See details in each session</i>
16.00 – 16.30	<i>Coffee Break</i>	
16.30 – 18.00	Parallel Technical Session IV	<i>*See details in each session</i>
18.00 – 18.30	Closing Ceremony	Baris Room

PLENARY INVITED LECTURES

Date : **Tuesday, October 3rd, 2017**
Venue : Agung Room (1st Floor, Inna Grand Bali Beach Hotel)
Moderator : Dr. Ir. Umar Khayam (ITB, Indonesia)

IN-1



09.00 – 09.30

Ir. Amir Rosidin, MM.

PT. PLN (Persero)

"High Voltage Engineering and Power Systems
Challenge in Indonesia Power Network"

IN-2



09.30 – 10.15

Prof. Masayuki Hikita

Kyushu Institute of Technology, Japan

"High Voltage Electrical Insulation in Next
Generation Power Module"

IN-3



10.45 – 11.30

Dr. Nurhidajat Sisworahardjo

University of Tennessee at Chattanooga, USA

"Data Analytics-Based Anomaly Detection in
Smart Distribution Network"

IN-4



11.30 – 12.00

Mr. Kazuhiro Akima

PT. Honda R&D Indonesia

Honda Electric Vehicle Technology

IN-5



12.00 – 12.45

Prof. Ahmed Abu Siada

Curtin University, Australia

"Review of Flexible AC Transmission Systems;
Enabling Technologies for Future Smart Grids"

Date : **Wednesday, October 4th, 2017**
Venue : Agung Room (1st Floor, Inna Grand Bali Beach Hotel)
Moderator : Dr. Ir. Sigit Puji Santosa, MSME (ITB, Indonesia)

IN-6



08.30 – 09.15

Dr. Muhammad Aziz

Tokyo Institute of Technology, Japan

"Extended Utilization of Electric Vehicles in Electrical Grid Services"

IN-7



09.15 – 10.00

Prof. Mohammad Masoum

Curtin University, Australia

"Coordination of Plug-In Electric Vehicle Charging in Smart Grid: Challenges and Opportunities"

IN-8



10.15 – 11.00

Prof. Guan-Jun Zhang

Xi'an Jiaotong University, China

"Separation of Multiple Partial Discharge Sources in Power Transformer"

IN-9



11.00 – 11.45

Prof. Yanuarsyah Haroen

Bandung Institute of Technology, Indonesia

"Past, present and future in Indonesian Public Mass Transportation. Perspective - Traction Control Systems"

IN-10



11.45 – 12.30

Dr. Robert Saers

ABB Corporate Research, Sweden

"Digitalization of Electric Power System"

TECHNICAL SESSIONS

ORAL SESSION TS-1	: <i>Insulation Material and Diagnostics</i>
Date & Time	: Tuesday, October 3 rd , 2017, 14.00 – 16.00
Venue	: Agung Room-1 (1 st Floor)
Chair	: <i>Dayu Giriantari (UNUD – Indonesia)</i>
Co-chair	: <i>Ahmed Abu Siada (Curtin Univ. – Australia)</i>

No.	Paper Submission No.	Title & Authors
1	23	Understanding the surface discharge activity with the nanofluid impregnated paper insulating Material <i>Kumari Swati¹, Kartik S Sharma² and R. Sarathi^{1*}</i> ¹ <i>Indian Institute of Technology Madras, India</i> ² <i>Manipal Institute of Technology, India</i>
2	124	Comparison of Different PD Detection Methods on Power Transformer <i>Xian-Jun Shao^{1*}, Jiang-Yang Zhan¹, Wen-Lin He¹, Ding-Ge Chang², Yu-Hang Fan², Yan-Bo Wang², Guan-Jun Zhang²</i> ¹ <i>State Grid Zhejiang Electric Power Research Institute, China</i> ² <i>Xi'an Jiaotong University, China</i>
3	49	PD Pattern of Various Defects measured by TEV sensor <i>Hikmah Prasetia^{1*}, Umar Khayam², Suwarno², Akihiko Itose³, Masahiro Kozako³, and Masayuki Hikita³</i> ¹ <i>PT PLN (Persero), Indonesia</i> ² <i>Institut Teknologi Bandung, Indonesia</i> ³ <i>Kyushu Institute of Technology, Japan</i>
4	68	Dissolved Gas Analysis (DGA) of Vegetable Oils under Electrical Stress <i>M.H.A Hamid¹, M.T Ishak^{1*}, M.M Arifin¹, N.I.A Katim¹, N.A.M Amin¹ and N.Azis²</i> ¹ <i>Universiti Pertahanan Nasional Malaysia, Malaysia</i> ² <i>University Putra Malaysia, Malaysia</i>
5	165	Noise Measurement in High Voltage Laboratory by using High Frequency Current Transformer and Loop Antenna <i>Jean Pierre Uwiringiyimana* and Umar Khayam</i> <i>Institut Teknologi Bandung, Indonesia</i>

No.	Paper Submission No.	Title & Authors
6	15	Correlation of Transformer Paper Deterioration to Oil Characteristics and Dissolved Gases <i>Rahman Azis Prasajo^{1*}, Karunika Diwyacitta¹, Suwarno¹ and Harry Gumilang²</i> ¹ Institut Teknologi Bandung, Indonesia ² PT. PLN (Persero), Indonesia
7	73	Investigation of Water Tree Characteristic in XLPE Nanocomposites for Medium Voltage Cable Application <i>J. A. Wahab^{1*}, Noor Syazwani Mansor¹, D. Ishak¹, M. Mariatti¹, M. Kamarol¹, A. B. A. Ghan², and H. S. Halim²</i> ¹ Universiti Sains Malaysia, Malaysia ² TNB Research, Malaysia
8	12	Performances of Long-term Coastal Field Aged Silicone-coated Ceramic Insulators under Clean and Salt Fog Conditions <i>Dini Fauziah*, Heldi Alfiadi, Rachmawati and Suwarno</i> Institut Teknologi Bandung, Indonesia

ORAL SESSION TS-2 : *Power System Operation*

Date & Time : Tuesday, October 3rd, 2017, 14.00 – 16.00

Venue : Agung Room-2 (1st Floor)

Chair : *Eko Yudo Pramono (PT. PLN (Persero) – Indonesia)*

Co-chair : *Muhammad Nurdin (ITB – Indonesia)*

No.	Paper Submission No.	Title & Authors
1	114	Methods of Operating Mechanisms of High Voltage Circuit Breakers -An Overview <i>V. Indragandhi¹ and Ashok Kumar L.^{2*}</i> ¹ VIT University, India ² PSG College of Technology, India
2	155	Comparison of Fuel Consumption Efficiency of Technology Rejuvenation from Diesel Power into PLTDG In the Work Unit Pesanggaran PT. Indonesia Power UP BALI <i>Deni Tri Laksono¹, M. SeptianAlamsyah Putra^{1*}, Ngapuli I. Sinisuka¹, IGN Putra Subawa², Arry Pribadi², NGR Wiadnyana², and IGN Mahendra²</i> ¹ Institut Teknologi Bandung, Indonesia ² PT. Indonesia Power UP Bali, Indonesia

No.	Paper Submission No.	Title & Authors
3	150	Generator Shedding For Maintaining Power System Stability in Cibatu34-Mandirancan Subsystem <i>Yenni Tarid*</i> , <i>Innik Kusmarini</i> and <i>Adi Purwanto</i> <i>PT. PLN (Persero) P2B, Indonesia</i>
4	82	Study on Reactive Power Optimization of ACDC Hybrid Distribution Network with Electric Vehicles <i>Hucheng Li¹</i> , <i>Liang Chen¹</i> , <i>Xiaodong Yuan¹</i> , <i>Haomin Guo^{2*}</i> , <i>Hangwei Ji²</i> , and <i>Wei Guo³</i> ¹ <i>State Grid Jiangsu Electric Power Research Institute, China</i> ² <i>Southeast University, China</i> ³ <i>Wiscom System Co., Ltd., China</i>
5	40	Sub Nominal Voltage Operation as a Strategy to avoid over voltage and under excitation problems in small isolated grid with long transmission network <i>Muchamad Chaliq Fadli*</i> and <i>Ahmad Edy Syukral Siregar</i> <i>PT. PLN (Persero), Indonesia</i>
6	157	Calculation of Impact Turning Gear Operation from Gas Turbines in Gilimanuk Bali <i>Naufalarizqa Ramadha Meisa Putra^{1*}</i> , <i>Krismanto Eka Widodo Nababan¹</i> , <i>Ngapuli I. Sinisuka¹</i> , <i>IGN Putra Subawa²</i> , <i>Arry Pribadi²</i> , <i>Purwakanta²</i> , and <i>IGN Mahendra²</i> ¹ <i>Institut Teknologi Bandung, Indonesia</i> ² <i>PT. Indonesia Power UP Bali, Indonesia</i>
7	32	Modelling of High Voltage AC Circuit Breaker Based on Circuit Breaker's Technical Data (Using Schwarz Black Box Arc Model) <i>Ibrahim Pramudya^{1*}</i> , <i>Muhammad Wardi Hadi¹</i> , <i>Umer Amir Khan²</i> , <i>Ja Yoon Koo³</i> , <i>B.W. Lee³</i> , and <i>Suwarno⁴</i> ¹ <i>PT. PLN (Persero), Indonesia</i> ² <i>Capital University of Science and Technology (CUST), Pakistan</i> ³ <i>Hanyang University, South Korea</i> ⁴ <i>Institut Teknologi Bandung, Indonesia</i>
8	156	The Study of Air Pollution and Waste Generation due to Rejuvenation in the Pesanggaran, Bali <i>Muhammad Sulthon^{1*}</i> , <i>Dedi Tri Laksono¹</i> , <i>Fauzi Abdillah¹</i> , <i>Ngapuli I. Sinisuka¹</i> , <i>IGN Putra Subawa²</i> , <i>Arry Pribadi²</i> , <i>NGR Wiadnyana²</i> , and <i>IGN Mahendra²</i> ¹ <i>Institut Teknologi Bandung, Indonesia</i> ² <i>PT. Indonesia Power UPJP Bali, Indonesia</i>

ORAL SESSION TS-3	: <i>Asset and Business Management</i>
Date & Time	: Tuesday, October 3 rd , 2017, 14.00 – 16.00
Venue	: Legong – Pendet Room (2 nd Floor)
Chair	: <i>Iwa Garniwa (UI – Indonesia)</i>
Co-chair	: <i>Sumaryadi (PT. PLN (Persero) – Indonesia)</i>

No.	Paper Submission No.	Title & Authors
1	26	Transmission Asset Lifecycle Management in PLN TJBB <i>Ninil Ukhita Anggra Wardani*</i> , and <i>Sylvina Naswil</i> <i>PT. PLN (Persero), Indonesia</i>
2	112	Analysis and Comparison of Emission Reduction Effect of Real-time Electricity Price Considering Carbon Trading Permits <i>Yizihe Lang*</i> , <i>Shengnan Zhao</i> and <i>Yang Li</i> <i>Southeast University, China</i>
3	35	Implementation of Risk Management in Electricity Transmission to Improve Planning Accuracy <i>Anna Dwita Paulus Sudin*</i> , <i>Jezzy Dwi Puspo</i> and <i>Ivan Taufik</i> <i>PT. PLN (Persero), Indonesia</i>
4	93	Environmental assessment on computer-based of the Jeneponto coal-fired power plant <i>Salama Manjang*</i> , <i>Sri Mawar Said</i> , and <i>Zahir Zainuddin</i> <i>Universitas Hasanuddin, Indonesia</i>
5	33	Planning of Transformer Placement Using Reliability in PLN Transmisi Jawa Bagian Barat <i>Azzahraninna Tryollinna*</i> , <i>Ivan Taufik</i> and <i>Annastasya Bastian</i> <i>PT. PLN (Persero), Indonesia</i>
6	87	Optimal Demand Side Response Considering to the Peak Price in the Peak season <i>Marwan Marwan^{1*}</i> and <i>Syafaruddin²</i> ¹ <i>Politeknik Negeri Ujung Pandang, Indonesia</i> ² <i>Universitas Hasanuddin, Indonesia</i>
7	37	Health and Risk Assesment of Power Transformer in PLN Transmisi Jawa Bagian Barat <i>Annastasya Bastian*</i> , <i>Azzahraninna Tryollinna</i> and <i>Cosa Pamungkas Prabaswara</i> <i>PT. PLN (Persero), Indonesia</i>
8	30	Data Management in PLN TJBB: Initial Business Case <i>Sylvina Naswil*</i> , and <i>Ninil Ukhita Anggra Wardani</i> <i>PT. PLN (Persero), Indonesia</i>

ORAL SESSION TS-4 : *Distributed Generation*Date & Time : Tuesday, October 3rd, 2017, 14.00 – 16.00Venue : Joged – Kecak Room (2nd Floor)Chair : *Robert Saers (ABB – Sweden)*Co-chair : *Qamaruzzaman (UKI – Indonesia)*

No.	Paper Submission No.	Title & Authors
1	42	Investigation for an Isolated Solar Plant Failure in Indonesia <i>Putu Agus Aditya Pramana*</i> , <i>Aristo Adi Kusuma</i> , <i>Nur Widi Priambodo</i> and <i>Buyung Sofiaro Munir</i> <i>PT. PLN (Persero), Indonesia</i>
2	94	The design of alternative electric energy utilizes solar heat in the vehicle cabin with thermoelectric module <i>Aris Sunawar*</i> , <i>Iwa Garniwa</i> and <i>Chairul Hudaya</i> <i>Universitas Indonesia, Indonesia</i>
3	129	Potency of Waste to Energy - Bandung City Case Study <i>Bambang Anggoro</i> , <i>Angga Aprilian*</i> and <i>Burhanuddin Halimi</i> <i>Institut Teknologi Bandung, Indonesia</i>
4	60	Load Sharing Control Between PV Power Plant and Diesel Generator to Mitigate Effect of PV Fluctuation Using PID Algorithm <i>Yuli Astriani¹</i> , <i>Khotimatul Fauziah¹</i> , <i>Hamzah Hilal^{1*}</i> , <i>Riza¹</i> , and <i>Budi Prasetyo²</i> ¹ <i>BPPT, Indonesia</i> ² <i>Independent Consultant in Power Generation, Indonesia</i>
5	101	An Economic Analysis for Grid Connected Residential Photovoltaic System in Malaysia <i>Mohd Khairunaz Mat Desa*</i> , <i>Syafrudin Masri</i> and <i>Levinath Ganesan</i> <i>Universiti Sains Malaysia, Malaysia</i>
6	139	Online power flow management based on GIS for active distribution network management <i>Indri Suryawati*</i> , <i>Ontoseno Penangsang</i> and <i>Suyanto</i> <i>Institut Teknologi Sepuluh Nopember, Indonesia</i>

No.	Paper Submission No.	Title & Authors
7	56	Renewable Energy Penetration in Belitung Power System <i>Brigitta Wendha*</i> , Rizky Rahmani, Muhammad Nurdin and Nanang Hariyanto <i>Institut Teknologi Bandung, Indonesia</i>
8	95	A Design of Palm Oil and Diesel Oil Fuel Mixture Heater System for Small Scale Diesel Power Plant <i>Ginas Alvianingsih* and Iwa Garniwa</i> <i>Universitas Indonesia, Indonesia</i>

ORAL SESSION TS-5 : *Insulation Material and Diagnostics*

Date & Time : Tuesday, October 3rd, 2017, 16.30 – 18.30

Venue : Agung Room-1 (1st Floor)

Chair : Guan-Jun Zhang (*Xi'an Jiaotong Univ. – China*)

Co-chair : Waluyo (*ITENAS – Indonesia*)

No.	Paper Submission No.	Title & Authors
1	85	Comparative Phase-Resolved Analysis of AC Corona Discharges at Very Low (0.1 Hz) and Power Frequencies <i>S. Morsalin* and B. T. Phung</i> <i>University of New South Wales, Australia</i>
2	113	Simulation of Goubau PCB Antenna as Partial Discharge Detector <i>Abrar Hakim* and Umar Khayam</i> <i>Institut Teknologi Bandung, Indonesia</i>
3	41	Long Bowtie Antenna for Partial Discharge Sensor in Gas-Insulated Substation <i>Hanalde Andre^{1*}, Primas Emeraldi¹, Ariadi Hazmi¹, Eka Putra Waldi¹ and Umar Khayam²</i> ¹ <i>Universitas Andalas, Indonesia</i> ² <i>Institut Teknologi Bandung, Indonesia</i>

No.	Paper Submission No.	Title & Authors
4	137	Conductivity of transformer oil under high-frequency voltage <i>Yuli Rodiah^{1,2*}, T Haryono¹ and Suharyanto¹</i> ¹ <i>Universitas Gadjah Mada, Indonesia</i> ² <i>Universitas Bengkulu, Indonesia</i>
5	61	Ageing Effect of Vegetable Oils Impregnated Paper in Transformer Application <i>M. M. Ariffin¹, M. T. Ishak^{1*}, M. H. A. Hamid¹, N. I. A. Katim¹, A.M. Ishak¹, and N. Azis²</i> ¹ <i>Universiti Pertahanan Nasional Malaysia, Malaysia</i> ² <i>Universiti Putra Malaysia, Malaysia</i>
6	24	Statistical Analysis for Internal and Surface Discharges Identification in XLPE Insulation under AC Voltages <i>Revi Aldrian^{1*}, Gian Carlo Montanari², Andrea Cavallini², and Suwarno³</i> ¹ <i>PT. PLN (Persero), Indonesia</i> ² <i>University of Bologna, Italy</i> ³ <i>Institut Teknologi Bandung, Indonesia</i>
7	92	The Through Fault Current effect of 150/20 kV Transformers to Its Insulation Resistance and Tan Delta Test in PT. PLN (Persero) TJBB APP Durikosambi <i>Fajli Mustafa*, Shaga Shaulagara, and Muhammad Ihsan</i> <i>PT. PLN (Persero), Indonesia</i>
8	125	Comparison of CF ₃ CHCl ₂ gas with SF ₆ gas as an alternative substitute for Gas Insulated Switchgear equipment <i>Tedy Juliandhy*, T Haryono, Suharyanto, and Indra Perdana</i> <i>Universitas Gadjah Mada, Indonesia</i>

ORAL SESSION TS-6	: <i>Power System Operation</i>
Date & Time	: Tuesday, October 3 rd , 2017, 16.30 – 18.30
Venue	: Agung Room-2 (1 st Floor)
Chair	: <i>Sarjiya (IEEE PES / UGM – Indonesia)</i>
Co-chair	: <i>Anita Pharmatrisanti (PT. PLN (Persero) - Indonesia)</i>

No.	Paper Submission No.	Title & Authors
1	97	Automatization of Palm Oil Mixture Heater System for Small Scale Diesel Power Plant <i>Muhammad Very Nugroho and Iwa Garniwa*</i> <i>Universitas Indonesia, Indonesia</i>
2	109	Distribution System Power Quality Improvement Using D-STATCOM <i>Agrani Sharma* and Anil S. Thosar</i> <i>K.J.Somaiya College of Engineering, India</i>
3	158	Greenhouse Gas Emission Analysis of Energy Efficiency Program at Gilimanuk Gas Power Plant, Bali <i>Naftalin Winanti^{1*}, Asep Dadan Hermawan¹, Ngapuli I.Sinisuka¹, Indra Surya Dinata¹, IGN Putra Subawa², Arry Pribadi², NGR Wiadnyana², and IGN Mahendra²</i> <i>¹Institut Teknologi Bandung, Indonesia</i> <i>²PT. Indonesia Power UP Bali, Indonesia</i>
4	170	Overview and Operational Challenges of Jawa Bali Power System <i>Ahmad Murdani* and Adi Purwanto</i> <i>PT. PLN (Persero), Indonesia</i>
5	81	Reactive Power Optimization of Distribution Network Including Photovoltaic Power and SVG Considering Harmonic Factors <i>Hucheng Li¹, Liang Chen¹, Xiaodong Yuan¹, Sai Liu^{2*}, Siyuan Lu², and Jian Huang³</i> <i>¹State Grid Jiangsu Electric Power Research Institute, China</i> <i>²Southeast University, China</i> <i>³Wiscom System Co., Ltd., China</i>

No.	Paper Submission No.	Title & Authors
6	159	<p>Analysis on the Implementation of Energy Management and Conservation Case Study: Pamaron Gas Power Plant</p> <p><i>P.Ramadhani¹, Hardiles^{1*}, N.I. Sinisuka¹, IGN Putra Subawa², IGN Mahendra², and I.N Sukma²</i></p> <p>¹<i>Institut Teknologi Bandung, Indonesia</i> ²<i>PT. Indonesia Power UPJP Bali, Indonesia</i></p>
7	160	<p>The Role of Energy Management on Reducing Emission in Pamaron's Gas Power Plant</p> <p><i>Nike Sartika^{1*}, M. Latieful Akbar¹, N.I. Sinisuka¹, Indra Surya Dinata¹, IGN Putra Subawa², IGN Mahendra², Purwakanta², and I.N Sukma²</i></p> <p>¹<i>Institut Teknologi Bandung, Indonesia</i> ²<i>PT. Indonesia Power UPJP Bali, Indonesia</i></p>
8	99	<p>Analysis of Power Angle Difference for Defining And Reducing Oscillation On Interconnected System A Study on 150 kV South Sulawesi Grid</p> <p><i>Jeremias Leda* and Ferdianto Tangdililing</i></p> <p><i>Universitas Atma Jaya Makassar, Indonesia</i></p>

ORAL SESSION TS-7 : *Power System Protection*

Date & Time : Tuesday, October 3rd, 2017, 16.30 – 18.30

Venue : Legong – Pendet Room (2nd Floor)

Chair : *Nurhidajat Sisworahardjo (Univ. of Tennessee – USA)*

Co-chair : *Syamsir Abduh (Trisakti Univ. – Indonesia)*

No.	Paper Submission No.	Title & Authors
1	38	<p>Investigation of Fuse Rail in Low Voltage Switchboard Burn Down in Indonesia Distribution System</p> <p><i>Aristo Adi Kusuma*, Putu Agus Aditya Pramana and Buyung Sofiarto Munir</i></p> <p><i>PT. PLN (Persero), Indonesia</i></p>

No.	Paper Submission No.	Title & Authors
2	51	<p>Through Fault Current Effects on Distribution Transformer and prevention actions using Backup Protection : Case study of Kelapa Gading Transformer</p> <p><i>Ira Mardya Sari*</i>, <i>Azzahraninna Tryollinna</i>, <i>Anna Dwita Paulus Sudin</i> and <i>Dahlia Deka Permata</i> <i>PT. PLN (Persero), Indonesia</i></p>
3	91	<p>Calculation Analysis of Relay Setting on Underfrequency Load Shedding (UFLS) Study When Occuring Fault in the System</p> <p><i>Irrene Budi S</i>, <i>Angga Budi Prastyo*</i>, and <i>Abraham Lomi</i> <i>Institut Teknologi Nasional Malang, Indonesia</i></p>
4	19	<p>Interturn Fault Detection of Power Transformer by Using Shutdown Measurement</p> <p><i>Muhammad Helmi Prakoso*</i> <i>PT. PLN (Persero), Indonesia</i></p>
5	21	<p>Direct impact from the Through Fault Current of 150/20 kV Transformer to its Dissolve Gas Analysis test in PT. PLN (Persero) TJBB APP Durikosambi</p> <p><i>Shaga Shaulagara*</i>, <i>Muhammad Ihsan</i>, and <i>Fajli Mustafa</i> <i>PT. PLN (Persero), Indonesia</i></p>
6	43	<p>Inrush Current Investigation of Capacitor Bank Switching for 150kV Electrical System in Indonesia</p> <p><i>Putu Agus Aditya Pramana*</i>, <i>Aristo Adi Kusuma</i> and <i>Buyung Sofiarto Munir</i> <i>PT. PLN (Persero), Indonesia</i></p>
7	118	<p>The effect of the placement of testing equipment on the measurement validity of radiated emission parameter</p> <p><i>Wisnu Ananda^{1*}</i>, <i>Seto Ayom Cahyadi¹</i>, <i>Deny Hamdani²</i>, and <i>Jumail Soba¹</i> ¹<i>B4T, Ministry of Industry, Indonesia</i> ²<i>Institut Teknologi Bandung, Indonesia</i></p>
8	54	<p>Post of Disturbance Analysis of Blackout in Bengkulu sub-System</p> <p><i>Hasna Satya Dini*</i>, <i>Nanang Hariyanto</i>, <i>Muhammad Nurdin</i> and <i>Rizky Rahmani</i> <i>Institut Teknologi Bandung, Indonesia</i></p>

ORAL SESSION TS-8	: <i>Photovoltaic Technology</i>
Date & Time	: Tuesday, October 3 rd , 2017, 16.30 – 18.30
Venue	: Joged – Kecak Room (2 nd Floor)
Chair	: <i>Pekik Argo Dahono (ITB – Indonesia)</i>
Co-chair	: <i>Ashok Kumar L. (PSG College of Tech – India)</i>

No.	Paper Submission No.	Title & Authors
1	75	Impact of Solar Irradiation on PV Cell Emulating System in Series Connection Mode <i>Vu Minh Phap^{1,2*}, Naoki Yamamura¹, Muneaki Ishida¹, and Nguyen Thuy Nga²</i> ¹ <i>Mie University, Japan</i> ² <i>Vietnam Academy of Science and Technology, Vietnam</i>
2	148	A Method to Generate the Reactive Power on Single-phase PV-Inverter <i>Muhammad Imran Hamid*, Adrianti, and Aulia Rahman</i> <i>Universitas Andalas, Indonesia</i>
3	29	A 31-Level Asymmetrical Cascaded Multilevel Inverter with DC-DC Flyback Converter for Photovoltaic System <i>J. Gowri Shankar, J. Belwin Edward, K. Sathish Kumar* and I. Jacob Raglend</i> <i>VIT University, India</i>
4	111	A Novel Approach to Install Rooftop Solar Photovoltaic in Cote D'Azur, France <i>M M Shourov Akter^{1*} and Sajidur Rahman²</i> ¹ <i>Ecole Polytechnique, France</i> ² <i>Chittagong University of Engineering & Technology, Bangladesh</i>
5	117	A Propose of Optimizing Power Generated by Photovoltaic Power Generation <i>Syafrudin Masri*, Norizah Mohamad, Muhammad Hafeez M.H. and M.Nazir Abdullah</i> <i>Universiti Sains Malaysia, Malaysia</i>
6	126	Optimized Operation Scheme of On-Grid PV Farm to Grid case Lombok Island <i>Alyssa Diva Mustika*, Muhammad Nurdin, and Nanang Hariyanto</i> <i>Institut Teknologi Bandung, Indonesia</i>

No.	Paper Submission No.	Title & Authors
7	151	Comparison of Datasheets for Solar PV module <i>Shantanu Deshmukh* and Mahesh Wagh</i> <i>Shivaji University, India</i>
8	36	Droop Control Implementation on Hybrid Microgrid PV-Diesel-Battery <i>Mochammad Erwin Susetyo*, Nanang Hariyanto, Arwindra Rizqiawan, and Sandro Agassi Sitompul</i> <i>Institut Teknologi Bandung, Indonesia</i>

ORAL SESSION TS-9 : *Insulation Material and Diagnostics*

Date & Time : Wednesday, October 4th, 2017, 14.00 – 16.00

Venue : Legong Room (2nd Floor)

Chair : *R. Sarathi (Indian Institute of Tech. Madras – India)*

Co-chair : *Mohamad Kamarol (Univ. Sains Malaysia – Malaysia)*

No.	Paper Submission No.	Title & Authors
1	22	Synthesis of γ -Alumina Nanoparticles by Wire-Explosion Process: Characterisation and Formation Mechanism <i>Prem Ranjan^{1*}, Esun Selvam², R. Jayaganthan¹, H. Suematsu³, P. Selvam¹, and R. Sarathi¹</i> ¹ <i>Indian Institute of Technology Madras, India</i> ² <i>NIT-Trichy, India</i> ³ <i>Nagaoka University of Technology, Japan</i>
2	8	Lifetime estimation of Cellulose Paper in Natural Ester Dielectric Fluid <i>Cahyo Subroto*, Abi Munajad and Suwarno</i> <i>Institut Teknologi Bandung, Indonesia</i>
3	62	Investigation on AC Breakdown Performance of Vegetable Oils with Insulated Electrodes <i>N. I. A. Katim¹, M. T. Ishak^{1*}, S. Razali¹, M. H. A. Hamid¹, M. M. Ariffin¹, and N. Azis²</i> ¹ <i>Universiti Pertahanan Nasional Malaysia, Malaysia</i> ² <i>University Putra Malaysia, Malaysia</i>

No.	Paper Submission No.	Title & Authors
4	48	Degradation Mechanism of Power Transformer's Insulation System in PLN Indonesia <i>Harry Gumilang* and Fakhrol Risal</i> ¹ PT. PLN (Persero), Indonesia
5	146	Diagnosis of Withstand Test Power Transformer Based on Through Fault Current Disturbance <i>Eki Farlen*, Devy Martoni, and Leo Agung</i> ¹ PT. PLN (Persero), Indonesia
6	83	Influence of ZnO And Al ₂ O ₃ Nanofillers on Electrical Treeing in XLPE Insulation <i>Noor Syazwani Mansor^{1*}, Juita Abdul Wahab¹, M. Fairus¹, D Ishak¹, M.Mariatti¹, Mohamad Kamarol¹, A. B. A. Ghani², and H. S. Halim²</i> ¹ Universiti Sains Malaysia, Malaysia ² TNB Research, Malaysia
7	167	Effect of the Presence of Metal Box on Partial Discharge Waveform and Pattern Detected by High Frequency Current Transformer <i>Dedi Tri Laksono* and Umar Khayam</i> Institut Teknologi Bandung, Indonesia
8	7	Effects of Loading Factor in Operating Time on Dielectric Characteristics of Transformer Oil <i>Karunika Diwyacitta^{1*}, Rahman Azis Prasajo¹, Suwarno¹ and Harry Gumilang²</i> ¹ Institut Teknologi Bandung, Indonesia ² PT. PLN (Persero), Indonesia

ORAL SESSION TS-10	: <i>Transient Phenomena and Protection</i>
Date & Time	: Wednesday, October 4 th , 2017, 14.00 – 16.00
Venue	: Pendet Room (2 nd Floor)
Chair	: <i>Reynaldo Zoro (ITB – Indonesia)</i>
Co-chair	: <i>Abdul Syakur (UNDIP – Indonesia)</i>

No.	Paper Submission No.	Title & Authors
1	52	Evolution of thunderstorm electrification before first lightning strike <i>Ariadi Hazmi^{1*}, Primas Emeraldi¹, Muhammad Imran Hamid¹, Fadjrin Anugrah Utama¹, and Nobuyuki Takagi²</i> ¹ <i>Universitas Andalas, Indonesia</i> ² <i>Gifu University, Japan</i>
2	162	The upshot of hybrid defects in coaxial gas insulated switchgear <i>Ibrahim Musa Visa¹, Zulkurnain Abdul-Malek^{1*}, Mohammed Imran Mousa¹, Nor Asiah Muhamad², Zainuddin Nawawi³, Muhammad Abu Bakar Sidik³ and Muhammad Irfan Jambak³</i> ¹ <i>Universiti Teknologi Malaysia, Malaysia</i> ² <i>Universiti Sains Malaysia, Malaysia</i> ³ <i>Universitas Sriwijaya, Indonesia</i>
3	66	Lightning Protection System For High Voltage Transmission Line In Area With High Grounding Resistance <i>Monalisa A. Malelak* and Reynaldo Zoro</i> <i>Institut Teknologi Bandung, Indonesia</i>
4	138	The Effect of Mesh Size, Number of Rod, & Length of Rod Towards Touch Voltage, Step Voltage, and Ground Resistance in Grounding System <i>Ishak Kasim, Syamsir Abduh, Sabrina and Nur Fitryah*</i> <i>Universitas Trisakti, Indonesia</i>
5	152	Ground Resistance Measurement near a Ring Main Unit in Brunei Darussalam <i>M.A. Salam¹, Fushuan Wen¹, Ismit^{1*}, Quazi M. Rahman² and Syeed Hasan²</i> ¹ <i>Universiti Teknologi Brunei, Brunei Darussalam</i> ² <i>The University of Western Ontario, Canada</i>

No.	Paper Submission No.	Title & Authors
6	67	Induced Voltage on Medium Overhead Line Caused by Nearby Strike from Rocket Triggered Lightning <i>Krismanto Eka Widodo* and Reynaldo Zoro</i> <i>Institut Teknologi Bandung, Indonesia</i>
7	31	Damper Winding Analysis on Synchronous Generator 10625 KVA in Short Circuit Condition <i>Andri Setiyoso*, Agus Purwadi and Yanuarsyah Haroen</i> <i>Institut Teknologi Bandung, Indonesia</i>
8	147	Lightning Performance Analysis Of Extra High Voltage 500 Kv 2 Circuits And 4 Circuits In Sumatera <i>Andi Junaidi* and Reynaldo Zoro</i> <i>Institut Teknologi Bandung, Indonesia</i>

ORAL SESSION TS-11 : *Power System Computation*

Date & Time : Wednesday, October 4th, 2017, 14.00 – 16.00

Venue : Joked Room (2nd Floor)

Chair : *Deny Hamdani (ITB – Indonesia)*

Co-chair : *Kuo Lung Lian (NTUST – Taiwan)*

No.	Paper Submission No.	Title & Authors
1	16	Reconfiguration of Distribution System for Loss Reduction Using Improved Harmony Search Algorithm <i>K.Rajalakshmi, Sathish Kumar Kannaiah*, S. Venkatesh and J. Belwin Edward</i> <i>VIT University, India</i>
2	128	Determination of Optimal Power Capacity for Run of River Hydro Power Plant Based on Flow Duration Curve Using Newton's Interpolation Method <i>Hidayat^{1*}, Arnita¹, Cahayahati¹, Mirza Zoni¹, and Saiful Jamaan²</i> <i>¹Universitas Bung Hatta, Indonesia</i> <i>²PT. Multi Sukses Energy, Indonesia</i>

No.	Paper Submission No.	Title & Authors
3	20	<p>A New MPPT Method for Partially Shaded PV System by Combining Modified INC and Simulated Annealing Algorithm</p> <p><i>Victor Andrian, Kuo Lung Lian*</i></p> <p><i>National Taiwan University of Science and Technology, Taiwan</i></p>
4	25	<p>Transmission Line Performance Improvement by Combine Method of Traveling Wave Systems</p> <p><i>Reza Widya Hutama*, Dewi Juwita Niyati and Reza Aulia Ibrahim</i></p> <p><i>PT. PLN (Persero), Indonesia</i></p>
5	59	<p>Application of Wavelet Cumulative Energy and Artificial Neural Network For Classification of Ferroresonance Signal During Symmetrical and Unsymmetrical Switching of Three-Phases Distribution Transformer</p> <p><i>Mochammad Wahyudi¹*, I Made Yulistya Negara¹, Dimas Anton Asfani^{1,2}, I Gusti Ngurah Satriyadi Hernanda¹ and Daniar Fahmi¹</i></p> <p><i>¹Institut Teknologi Sepuluh Nopember, Indonesia</i></p> <p><i>²Center of Excellence for Automotive Control & System ITS, Indonesia</i></p>
6	17	<p>Development Model of Extra High Voltage Hybrid Transmission System in Jawa-Bali</p> <p><i>Justinus Alwie Chandra* and Nanang Hariyanto</i></p> <p><i>Institut Teknologi Bandung, Indonesia</i></p>
7	18	<p>Optimal Deployment of Distributed Generators using Ant Colony Optimization to minimize Line Losses and improve Voltage Profiles on Distribution Network</p> <p><i>M.N. Nwohu*, Lanre Olatomiwa, Sadiq Ahmad, James Ambafi and Abdullahi Mogaji, And A Usman</i></p> <p><i>Federal University of Technology, Nigeria</i></p>
8	57	<p>An Approach of Genetic Algorithm to Optimize Capacity and Location of Short Circuit Current Limiter in Jawa Bali Power System</p> <p><i>Chaidir Agam Ubaidillah*, Muhammad Nurdin, Nanang Hariyanto, and Rizky Rahmani</i></p> <p><i>Institut Teknologi Bandung, Indonesia</i></p>

ORAL SESSION TS-12 : *Smartgrid Technology*Date & Time : Wednesday, October 4th, 2017, 14.00 – 16.00Venue : Kecak Room (2nd Floor)Chair : *Muhammad Nurdin (ITB – Indonesia)*Co-chair : *Tumiran (UGM – Indonesia)*

No.	Paper Submission No.	Title & Authors
1	173	Damping Improvement by Using Virtual Resistance Controller for DC-DC Boost Converter Dahono-1 <i>Arwindra Rizqiawan*, Ramaga Nasution, Pekik Argo Dahono and Tri D. Rachmildha</i> <i>Institut Teknologi Bandung, Indonesia</i>
2	86	Power Quality Monitoring of Single-Wire-Earth-Return Distribution Feeders <i>Ruihao Song*, Shibo Lu, Tharmakulasingam Sirojan, B. T. Phung, and Eliathamby Ambikairajah</i> <i>University of New South Wales, Australia</i>
3	149	Implementation of Wireless Temperature, Humidity, Lighting and Active Power Online Monitoring Using PLC for Early Stage of Miniature Energy Savings <i>Waluyo*, Nandang Taryana, Arsyad Ramadhan D., Hendi Handian R., and Andre Widura</i> <i>Institut Teknologi Nasional, Indonesia</i>
4	58	Wide-Area Frequency Security Event Detection <i>Chao-Yuan Lai^{1*}, Chih-Wen Liu¹ and Chia-Cheng Cao²</i> <i>¹National Taiwan University, Taiwan</i> <i>²National Taipei University of Education, Taiwan</i>
5	63	Requirement Framework of Smart Grid Software Architecture <i>Ramesh Ananthavijayan¹, S.Prabhakar Karthikeyan², I.Jacob Raglend², J.Belwin Edward², K.Sathish Kumar²</i> <i>¹Robert BOSCH Engg & Business Solutions Ltd., India</i> <i>²VIT University, India</i>

No.	Paper Submission No.	Title & Authors
6	177	Electric Field Analysis of 150 kV Compact Transmission Line <i>Umar Khayam*</i> , <i>Reynaldi Prasetyo</i> , <i>Syarif Hidayat</i> <i>Institut Teknologi Bandung, Indonesia</i>
7	172	Dynamic System Monitoring and Control of Sumatera Power System Using PMU based on DFR <i>Dhany Harmeidy Barus and Eko Yudo Pramono*</i> <i>PT. PLN (Persero), Indonesia</i>
8	163	POME to Biogas – Study of Potency of POME in Nangroe Aceh Darusallam (NAD) Province <i>Fandy Marpaung*</i> , <i>Qamaruzzaman and Atmonobudi Soebagio</i> <i>Universitas Kristen Indonesia, Indonesia</i>

ORAL SESSION TS-13 : *Insulation Material and Diagnostics*

Date & Time : Wednesday, October 4th, 2017, 16.30 – 18.00

Venue : Legong Room (2nd Floor)

Chair : *Salama Manjang (UNHAS – Indonesia)*

Co-chair : *Zulkurnain Abdul-Malek (Univ. Teknologi Malaysia)*

No.	Paper Submission No.	Title & Authors
1	74	Partial Discharge Investigation on Palm Oil Using Needle – Plane Electrode Configuration and Electric Field Distribution Using ANSYS Maxwell <i>N. A. M. Amin¹, M. T. Ishak^{1*}, and M. S. Abd Rahman²</i> <i>¹Universiti Pertahanan Nasional Malaysia, Malaysia</i> <i>²Universiti Putra Malaysia, Malaysia</i>
2	9	Structural Changes Analysis of Transformer Insulation Paper in Natural Ester with Fourier Transform Infrared Spectroscopy (FTIR) and Energy Dispersive X-ray Spectroscopy (EDS) <i>Abi Munajad*</i> , <i>Cahyo Subroto and Suwarno</i> <i>Institut Teknologi Bandung, Indonesia</i>

No.	Paper Submission No.	Title & Authors
3	84	<p>Modelling partial discharges in an insulation material at very low frequency <i>H.V.P. Nguyen, B.T. Phung and S. Morsalin*</i> <i>University of New South Wales, Australia</i></p>
4	10	<p>Leakage Current Characteristics Study on Electrical Equivalent Circuit of Field-Aged RTV Silicone Rubber Coated and Noncoated Insulators in a Coastal Area <i>Rachmawati, Dini Fauziah*, Heldi Alfiadi and Suwarno</i> <i>Institut Teknologi Bandung, Indonesia</i></p>
5	55	<p>Partial Discharge Measurements in XLPE Cables with Misplaced Grading System Under Different Applied Voltage Frequencies <i>Arief Setyowibowo^{1*}, Suwarno², Andrea Cavallini³ and Gian Carlo Montanari³</i> ¹<i>PT. PLN (Persero), Indonesia</i> ²<i>Institut Teknologi Bandung, Indonesia</i> ³<i>University of Bologna, Italy</i></p>
6	168	<p>Comparison of Peak to Peak Voltage and Number of Partial Discharge Detected by HFCT and Loop Antenna in Metal Enclosed High Voltage Equipment <i>Deni Tri Laksono* and Umar Khayam</i> <i>Institut Teknologi Bandung, Indonesia</i></p>
7	76	<p>Justification for Circuit Breaker Refreshment in PLN Trans-JBTB based on Technical Condition and Impact Criteria <i>M. R. Pahlevi*, W. F. Praditama, and Daniel B. L.</i> <i>PT. PLN (Persero), Indonesia</i></p>

ORAL SESSION TS-14	: <i>Transient Phenomena and Protection</i>
Date & Time	: Wednesday, October 4 th , 2017, 16.30 – 18.15
Venue	: Pendet Room (2 nd Floor)
Chair	: <i>Bambang Anggoro (ITB – Indonesia)</i>
Co-chair	: <i>Ariadi Hazmi (UNAND – Indonesia)</i>

No.	Paper Submission No.	Title & Authors
1	175	Lightning Protection for Electric Railway in Indonesia Telecommunication and Signalling System <i>Reynaldo Zoro*, Ruslam R. Pakki, and Roni Komar</i> <i>Institut Teknologi Bandung, Indonesia</i>
2	69	The Ground Potential Profile on the Earth Surface of 3 Vertical Rods of Grounding Systems <i>Bambang Anggoro*</i> <i>Institut Teknologi Bandung, Indonesia</i>
3	96	Simulating Calculations of Transient Voltages and Insulation Coordination on 500 kV AC XLPE Submarine Cable Line <i>Shijin Tian^{1*}, Xuezhong Liu¹, Hao Liu¹, Shaohua Wang² and Dahong Fu³</i> <i>¹Xi'an Jiaotong University, China</i> <i>²State Grid Zhejiang Electric Power Research Institute, China</i> <i>³State Grid Zhejiang Electric Power Corporation, China</i>
4	98	Observed Preliminary Breakdown Pulses of Intracloud Discharges <i>Primas Emeraldi* and Ariadi Hazmi</i> <i>Universitas Andalas, Indonesia</i>
5	154	Design and Testing PCB Rogowski-coil Current Sensor For High Current Application <i>Ary P. Nurmansah* and Syarif Hidayat</i> <i>Institut Teknologi Bandung, Indonesia</i>
6	145	Investigation of Magnetic Field inside Universiti Teknologi Brunei Campus <i>M.A. Salam^{1*}, Fushuan Wen¹, M. Dinie Farihanali¹, Quazi M. Rahman² and Syeed Hasan²</i> <i>¹Universiti Teknologi Brunei, Brunei Darussalam</i> <i>²The University of Western Ontario, Canada</i>

No.	Paper Submission No.	Title & Authors
7	119	<p>The effect of the grounding condition of line impedance stabilization network on the measurement validity of conducted emission parameter</p> <p><i>Wisnu Ananda^{1*}, Seto Ayom Cahyadi¹, Irwan Inayaturohman¹ and Deny Hamdani²</i></p> <p>¹<i>B4T, Ministry of Industry, Indonesia</i></p> <p>²<i>Institut Teknologi Bandung, Indonesia</i></p>

ORAL SESSION TS-15	: <i>Insulation Material and Diagnostics</i>
Date & Time	: Wednesday, October 4 th , 2017, 16.30 – 18.00
Venue	: Joged Room (2 nd Floor)
Chair	: <i>Umar Khayam (ITB – Indonesia)</i>
Co-chair	: <i>Buyung Sofiarto Munir (PT. PLN (Persero) – Indonesia)</i>

No.	Paper Submission No.	Title & Authors
1	161	<p>Study on Tracking Time of Epoxy Resin Insulating Material under Artificial Acceleratde Aging</p> <p><i>Abdul Syakur*, Hermawan and Heri Sutanto</i></p> <p><i>Universitas Diponegoro, Indonesia</i></p>
2	169	<p>Leakage Current and Partial Discharge Characteristics of Epoxy Resin Material of Distribution Current Transformer in Salt Fog Pollutant Condition</p> <p><i>Satia Zaputra*</i></p> <p><i>Universitas Kebangsaan, Indonesia</i></p>
3	166	<p>Background Noise Level in High Voltage Laboratory Measured by using Partial Discharge Current Sensors</p> <p><i>Muhammad Sukri Habibi Daulay* and Umar Khayam</i></p> <p><i>Institut Teknologi Bandung, Indonesia</i></p>
4	65	<p>Comparison of Partial Discharge Behavior in Mineral Oil and PFAE Under Influence of Spherical Metal Particle</p> <p><i>Kiasatina Azmi*, Ahmad Zuhairi, Dahaman Ishak, and Mohamad Kamarol</i></p> <p><i>Universiti Sains Malaysia, Malaysia</i></p>

No.	Paper Submission No.	Title & Authors
5	134	Derating Electromechanical Failing Load of Insulator Type U 120 B and Type U 120 BP Experience in Subsystem Bali <i>Adiyatma G. Pratama*, Senna Puger and Mhd A. Baiquni</i> <i>PT. PLN (Persero), Indonesia</i>
6	176	Magnetic Field Analysis of 150 kV Compact Transmission Line <i>Umar Khayam*, Reynaldi Prasetyo, Syarif Hidayat</i> <i>Institut Teknologi Bandung, Indonesia</i>
7	70	Designing of Characteristic Test Equipment for Over Current Relays with Current Capacity of 30 Amperes <i>Naufal Murda Hag yana, Chairul Gagarin Irianto*, Maula Sukmawidjaja</i> <i>Universitas Trisakti, Indonesia</i>

ORAL SESSION TS-16 : *Power System Reliability*

Date & Time : Wednesday, October 4th, 2017, 16.30 – 18.15

Venue : Kecak Room (2nd Floor)

Chair : *Nanang Hariyanto (ITB – Indonesia)*

Co-chair : *Belwin Edward (VIT Univ. - India)*

No.	Paper Submission No.	Title & Authors
1	142	Composite Reliability Evaluation of Existing 500 kV Jawa Bali Power System <i>Sarjiya*, Sasongko Pramono Hadi, Tumiran, and Ahmad Adhiim Muthahhari</i> <i>Universitas Gadjah Mada, Indonesia</i>
2	39	Condition Assessment Model for GIS Operating under Tropical Conditions <i>A.P. Purnomoadi¹*, A. Rodrigo Mor² and J.J. Smit²</i> <i>¹PT. PLN (Persero), Indonesia</i> <i>²Delft University of Technology, Netherlands</i>
3	144	Reliability Improvement Analysis on 20 kV Distribution System using Distributed Generation Injection Based on Renewable Energy <i>Lunnetta Safura* and Nanang Hariyanto</i> <i>Institut Teknologi Bandung, Indonesia</i>

No.	Paper Submission No.	Title & Authors
4	141	Composite Reliability Analysis of 500 kV Jawa-Bali System Related to the Northern Jawa Generation and Transmission Expansion Plan <i>Tumiran, Sarjiya*, Sasongko Pramono Hadi, and Syaifullah Rangga Haryo Nugroho</i> <i>Universitas Gadjah Mada, Indonesia</i>
5	171	The Implementation of Probabilistic Reliability Assessment in order to get mapping of load point index in Java Bali 500 kV Substation <i>Suroso Isnandar, Marwah, Fajar Ari K. *, Prastio</i> <i>PT. PLN (Persero), Indonesia</i>
6	34	Enhancement of Electric Distribution Reliability Through Implementation of Distributed Generation <i>Amellia Yuniarma*, Rizky Rahmani, Muhammad Nurdin and Nanang Hariyanto</i> <i>Institut Teknologi Bandung, Indonesia</i>
7	78	FMECA Development in PLN Trans-JBTB <i>R. Y. Trianto*, M. R. Pahlevi, B. Z. Bardani</i> <i>PT. PLN (Persero), Indonesia</i>

**Schedules are subject to change without prior notice*