

電気学会研究会資料目次

放電 開閉保護合同研究会 高電圧

放電技術委員会

- 〔委員長〕 中野俊樹 (防衛大学校)
- 〔副委員長〕 匹田政幸 (九州工業大学)
- 〔幹事〕 枡久保文嘉 (首都大学東京)、熊田亜紀子 (東京大学)
- 〔幹事補佐〕 安井祐之 (東芝)

開閉保護技術委員会

- 〔委員長〕 金子英治 (琉球大学)
- 〔幹事〕 佐藤 隆 (日立製作所)、森 正 (東芝)
- 〔幹事補佐〕 恩地俊行 (富士電機アドバンステクノロジー)、楫野宏樹 (三菱電機)

高電圧技術委員会

- 〔委員長〕 横山 茂 (電力中央研究所)
- 〔幹事〕 青野一朗 (三菱電機)、保科好一 (東芝)
- 〔幹事補佐〕 水谷嘉伸 (電力中央研究所)

日 時 2007年2月1日 (木) 9:30~17:30
2日 (金) 9:00~16:00

場 所 静岡大学 浜松キャンパス (静岡県浜松市城北 3-5-1)

テーマ「雷および高電圧、開閉保護、放電技術一般」

ED-07-25 Characteristics of High Current Lightning Discharges Around Coastline in Winter
SP-07-1
HV-07-25

Mikihisa Saito, Masaru Ishii (The University of Tokyo)

Akiko Sugita (Franklin Japan)

Naoki Itamoto (Hokuriku Electric Power) …… 1

ED-07-26 [欠番]
SP-07-2
HV-07-26

ED-07-27	An Investigation of Lightning Strikes in Portugal		
SP-07-3			
HV-07-27			
		Rafael Rodrigues (Institute of Engineering of Lisbon)	
		M. T. Correia de Barros (Electricity of Portugal)	
		A. Ametani (Doshisha University)	7
ED-07-28	[欠 番]		
SP-07-4			
HV-07-28			
ED-07-29	E-field Waveform Parameters Associated with Negative Return Strokes in Southern Kyushu		
SP-07-5			
HV-07-29			
		Koji Michishita, Nozomu Nagatsuna, Tomomasa Murakami (Shizuoka University)	
		Takashi Harada (Kyusyu Electric Power)	11
ED-07-30	A Study of Estimation of Lightning Striking Points through Measurements of Vertical E-Field		
SP-07-6			
HV-07-30			
		Koji Michishita, Takayuki Nishihira (Shizuoka University)	
		Yasuji Hongo (Tohoku Electric Power)	
		Shigeru Yokoyama (Central Research Institute of Electric Power Industry)	17
ED-07-31	Study of Lightning Electric Charge Amount Estimates Using Electric Field Measurements		
SP-07-7			
HV-07-31			
		Fukumune Suzuki (Sankosha)	
		Masahito Shimizu (Chubu Electric Power)	
		Shigeru Yokoyama (Central Research Institute of Electric Power Industry)	21
ED-07-32	Voltage-time characteristics and reliability evaluation method of oil-filled transformer		
SP-07-8	for non-effectively grounded voltage class		
HV-07-32			
		Jun Takami, Toshihiro Tsuboi, Shigemitsu Okabe (Tokyo Electric Power)	27
ED-07-33	Propagation Characteristics of Higher-order Mode Electromagnetic Waves in GIS Model		
SP-07-9	with Arch-shaped UHF sensor		
HV-07-33			
		Shuhei Kaneko, Shigemitsu Okabe (Tokyo Electric Power)	35
ED-07-34	Sound Wave Propagation Analysis Using FDTD for Contaminated Insulator Discharge		
SP-07-10	Noise		
HV-07-34			
		Takaie Matsumoto, Takeshi Shimoda (Shizuoka University)	43

ED-07-35 [欠 番]
SP-07-11
HV-07-35

ED-07-36 Improvement of Insulation Performance of A Porcelain Long-Rod Insulator under
SP-07-12 Contaminated Conditions
HV-07-36

Kazuma Yamada, Takeshi Yamazaki, Shota Matsushita, Takuma Hashimoto,
Shuhei Matsushita, Chiharu Saka, Basanta Kumar Gautam,
Kenji Sakanishi, Shin-ichui Sumi, Ryosuke Matsuoka (Chubu University) …… 49

ED-07-37 Application of Micro Discharge for Air Purification
SP-07-13
HV-07-37

Kazuo Shimizu, Takeki Sugiyama,
Manisha Nishamani L.S., Masaki Kanamori (Shizuoka University) …… 55

共 催 電気学会東海支部

協 賛 Japan Chapter of the IEEE Society on Power Engineering

Japan Chapter of the IEEE Society on Dielectrics and Electrical Insulation

電気学会研究会資料目次

放電 開閉保護合同研究会 高電圧

放電技術委員会

- 〔委員長〕 中野俊樹 (防衛大学校)
〔副委員長〕 匹田政幸 (九州工業大学)
〔幹事〕 枡久保文嘉 (首都大学東京)、熊田亜紀子 (東京大学)
〔幹事補佐〕 安井祐之 (東芝)

開閉保護技術委員会

- 〔委員長〕 金子英治 (琉球大学)
〔幹事〕 佐藤隆 (日立製作所)、森正 (東芝)
〔幹事補佐〕 恩地俊行 (富士電機アドバンステクノロジー)、楫野宏樹 (三菱電機)

高電圧技術委員会

- 〔委員長〕 横山茂 (電力中央研究所)
〔幹事〕 青野一朗 (三菱電機)、保科好一 (東芝)
〔幹事補佐〕 水谷嘉伸 (電力中央研究所)

日時 2007年2月1日(木) 9:30~17:30
2日(金) 9:00~16:00

場所 静岡大学 浜松キャンパス (静岡県浜松市城北 3-5-1)

テーマ「雷および高電圧、開閉保護、放電技術一般」

- ED-07-38 A Technique for Calculating the Skin and Proximity Effects of Arbitrary Cross-Section
SP-07-14 Conductors
HV-07-38
Toru Miki, Taku Noda (Central Research Institute of Electric Power Industry) 1
- ED-07-39 FDTD Analysis of Voltages Induced on an Overhead Wire Due to Surges Propagating
SP-07-15 Along a Grounding Mesh Conductor
HV-07-39
Hiroyuki Yamamoto, Yoshihiro Baba,
Naoto Nagaoka, Akihiro Ametani (Doshisha University) 7

ED-07-40	Modeling of Thin Wires for FDTD Simulations Implemented in Non-square Grids		
SP-07-16			
HV-07-40		Yohei Taniguchi, Yoshihiro Baba, Naoto Nagaoka, Akihiro Ametani (Doshisha University)	13
ED-07-41	Effects of Tall Building on Lightning Electromagnetic Fields		
SP-07-17			
HV-07-41		Yoshihiro Baba (Doshisha University) Vladimir A. Rakov (University of Florida)	19
ED-07-42	Electromagnetic Transients on an Underground Cable due to a Lightning Current Flowing into the Metallic Sheath		
SP-07-18			
HV-07-42		A. Ametani, N. Nagaoka, D. Miyazaki (Doshisha University) N. Taki (Ricoh)	25
ED-07-43	Numerical Simulation on Lightning Surge Response of Seismic Isolated Building		
SP-07-19	by FDTD and EMTP		
HV-07-43		Naoto Nagaoka (Doshisha University) Hiroshi Morita (Kinden) Yoshihiro Baba, Akihiro Ametani (Doshisha University)	33
ED-07-44	A Study on Lightning Surge Characteristics of a Transmission Tower Considering Overhead Wire Structure by the FDTD Method		
SP-07-20			
HV-07-44		Naoki Itamoto, Hironao Kawamura (Hokuriku Electric Power) Akiyoshi Tatematsu, Taku Noda, Hideki Motoyama (Central Research Institute of Electric Power Industry) Masaru Ishii (The University of Tokyo)	39
ED-07-45	[欠番]		
SP-07-21			
HV-07-45			
ED-07-46	Risk Evaluation of Lightning Damage to Wind Turbines with the Electro-Geometrical Method		
SP-07-22			
HV-07-46		T. Sakata (Kinden) K. Yamamoto (Kobe City College of Technology) S. Sekioka (Shonan Institute of Technology) S. Yokoyama (Central Research Institute of Electric Power Industry)	43

ED-07-47	Lightning Striking Aspect for Wind Turbine in Winter Season	
SP-07-23	-Development of Low Frequency Rogowski Coil and Observation Results	
HV-07-47	at Nikaho Wind Park in Japan	
	A. Asakawa, J. Wada,	
	S. Yokoyama, T. Shindo (Central Research Institute of Electric Power Industry)	
	H. Hyodo, K. Hachiya (J-Power)	
	M. Chihara (Photonics)	49
ED-07-48	Observation of Current Characteristics of Winter Lightning at a 200m Chimney	
SP-07-24	on the Coastal Area of the Sea of Japan from 2003 to 2005	
HV-07-48		
	Megumu Miki, Atsushi Wada,	
	Akira Asakawa (Central Research Institute of Electric Power Industry)	55
ED-07-49	Research of damage with lightning for wind turbines	
SP-07-25		
HV-07-49		
	Masayuki Minowa (TOENEC)	
	Masayasu Minami (C-tech)	
	Masayuki Yoda (Aichi Institute of Technology)	61
ED-07-50	Investigation on the Efficiency of Various Lightning Protection Systems	
SP-07-26	for Wind Turbine Blades	
HV-07-50		
	Takehiro Naka, Shinji Arinaga, Kazuhisa Tsutsumi,	
	Naoto Murata, Takatoshi Matsushita, Masaaki Shibata,	
	Kosuke Inoue, Yasuhiro Korematsu (Mitsubishi Heavy Industries)	
	Shigeru Yokoyama (Central Research Institute of Electric Power Industry)	67
ED-07-51	Development of Lightning Damage Indicator for Overhead Ground Wire	
SP-07-27		
HV-07-51		
	Masahito Shimizu (Chubu Electric Power)	
	Masayoshi Arakane (Nichihoku)	
	Hiroaki Saito, Hiroshi Yonei(Nichiyu Giken Kogyo)	71
ED-07-52	Detection of characteristic LEMP waveforms by Tohoku IMPACT sensor network	
SP-07-28	in winter	
HV-07-52		
	Noriyasu Honma(Tohoku Electric Power)	77

共 催 電気学会東海支部
協 賛 Japan Chapter of the IEEE Society on Power Engineering
Japan Chapter of the IEEE Society on Dielectrics and Electrical Insulation

電気学会研究会資料目次

放電 開閉保護合同研究会 高電圧

放電技術委員会

- 〔委員長〕 中野俊樹 (防衛大学校)
〔副委員長〕 匹田政幸 (九州工業大学)
〔幹事〕 栃久保文嘉 (首都大学東京)、熊田亜紀子 (東京大学)
〔幹事補佐〕 安井祐之 (東芝)

開閉保護技術委員会

- 〔委員長〕 金子英治 (琉球大学)
〔幹事〕 佐藤 隆 (日立製作所)、森 正 (東芝)
〔幹事補佐〕 恩地俊行 (富士電機アドバンステクノロジー)、楫野宏樹 (三菱電機)

高電圧技術委員会

- 〔委員長〕 横山 茂 (電力中央研究所)
〔幹事〕 青野一朗 (三菱電機)、保科好一 (東芝)
〔幹事補佐〕 水谷嘉伸 (電力中央研究所)

日 時 2007年2月1日 (木) 9:30~17:30
2日 (金) 9:00~16:00

場 所 静岡大学 浜松キャンパス (静岡県浜松市城北 3-5-1)

テーマ「雷および高電圧、開閉保護、放電技術一般」

- ED-07-53 Estimation of Occurrence Probability of Lightning Damages on Railway Level crossing
SP-07-29
HV-07-53
Hideki Arai, Kazutoshi Sato (Railway Technical Research Institute) …… 1
- ED-07-54 Changes of the lightning damage aspect of electrical household appliances
SP-07-30 and electrical equipment
HV-07-54
Takeshi Hosokawa (Former EMAJ)
Shigeru Yokoyama,
Tutomu Yokota (Central Research Institute of Electric Power Industry)
Yudai Tsutsumiuchi (Kyushu University)
Masahiro Soeda, Kouichi Sakoda (Kyusyu Electric Power CO) …… 7

ED-07-55	Experimental examination of the freezing phenomena of the electric device		
SP-07-31	by lightning surge		
HV-07-55		Yudai Tsutsumiuchi (Kyushu University) Takeshi Hosokawa (Former EMAJ) Masahiro Soeda (Kyusyu Electric Power CO)	
		Masateru Ikuta, Shigeru Yokoyama (Central Research Institute of Electric Power Industry) Kazushi Otuki (OTOWA Electric CO)	13
ED-07-56	Induced Surge Characteristics on a Control Cable in a Gas-Insulated Substation		
SP-07-32	due to Switching Operation		
HV-07-56		A. Ametani, T. Goto, N. Nagaoka (Doshisha University) H. Omura (Kansai Electric Power CO)	17
ED-07-57	Phenomena of Low Voltage Distribution System in Common Residences due to Turning		
SP-07-33	on and off the Circuit Breaker		
HV-07-57		Satoshi Mashimo (Kanto Electrical Safety Inspection Association) Takumi Ogawa, Haruki Nozawa (Tokyo Electric Power) Fumio Ushigome, Akira Hayashi, Keisuke Oka (Kanto Electrical Safety Inspection Association)	23
ED-07-58	An Example of Investigation in Lightning Damage on micro-radio steel tower		
SP-07-34	and Proposal of Countermeasures		
HV-07-58		Tomoya Sato, Shunichi Yanagawa, Hiroshi Kurita (Shoden)	29
ED-07-59	Energy Coordination between Surge Protective Devices Using Rectification Type		
SP-07-35	Decoupling Element		
HV-07-59		Hiroataka Shimizu, Nobuhiro Watanabe (Polytechnic University)	35
ED-07-60	Broken Mechanism of Straight Copper Wires due to Lightning High Impulse Current		
SP-07-36			
HV-07-60		Xiaobo Hu (Chuo University) Takahiro Otsuka (Tokyo Electric) Tsuginori Inaba (Chuo University) Toru Iwao (Musashi Institute of Technology)	41
ED-07-61	Moving range and current density of breaking arc in DC 42 Volt resistive circuit		
SP-07-37			
HV-07-61		Junya Sekikawa, Takayoshi Kubono (Shizuoka University)	47
ED-07-62	Time-resolved Spectroscopic Temperature Measurement of Breaking Arcs in D.C.42V		
SP-07-38	circuit		
HV-07-62		Naoki Moriyama, Junya Sekikawa, Takayoshi Kubono (Shizuoka University)	53

ED-07-63 The moving characteristic of the breaking arc spots depending on the separating speed
SP-07-39 of Ag electrical contacts
HV-07-63
Yoshinobu Nakamura, Junya Sekikawa, Takayoshi Kubono (Shizuoka University) 59

ED-07-64 Breaking Characteristics of the High Voltage Etching Fuse
SP-07-40
HV-07-64
Mitsuo Asayama, Yuhzoh Ishikawa,
Kengo Hirose, Yashushi Yamano, Shinichi Kobayashi (Saitama University) 65

ED-07-65 Numerical Calculations of Current Density in Vacuum Arcs and Measurements
SP-07-41 of Related Phenomena
HV-07-65
Masakazu Nagashima, Kohei Arakaki,
Kiyomaro Toyama, Eiji Kaneko (University of the Ryukyus)
Naotaka Ide, Satoru Yanabu (Tokyo Denki University) 71

ED-07-66 [欠 番]
SP-07-42
HV-07-66

共 催 電気学会東海支部
協 賛 Japan Chapter of the IEEE Society on Power Engineering
Japan Chapter of the IEEE Society on Dielectrics and Electrical Insulation

電気学会研究会資料目次

放 電 開閉保護合同研究会 高 電 圧

放電技術委員会

- 〔委員長〕 中野俊樹 (防衛大学校)
〔副委員長〕 匹田政幸 (九州工業大学)
〔幹 事〕 栃久保文嘉 (首都大学東京)、熊田亜紀子 (東京大学)
〔幹事補佐〕 安井祐之 (東 芝)

開閉保護技術委員会

- 〔委員長〕 金子英治 (琉球大学)
〔幹 事〕 佐藤 隆 (日立製作所)、森 正 (東 芝)
〔幹事補佐〕 恩地俊行 (富士電機アドバンステクノロジー)、楫野宏樹 (三菱電機)

高電圧技術委員会

- 〔委員長〕 横山 茂 (電力中央研究所)
〔幹 事〕 青野一朗 (三菱電機)、保科好一 (東 芝)
〔幹事補佐〕 水谷嘉伸 (電力中央研究所)

日 時 2007年2月1日 (木) 9:30~17:30
2日 (金) 9:00~16:00

場 所 静岡大学 浜松キャンパス (静岡県浜松市城北 3-5-1)

テーマ「雷および高電圧、開閉保護、放電技術一般」

- ED-07-67 An Investigation on Overhead Distribution-Line Modeling for Lightning
SP-07-43 Overvoltage Simulations
HV-07-67
Susumu Matsuura, Taku Noda, Akira Asakawa,
Shigeru Yokoyama (Central Research Institute of Electric Power Industry) 1
- ED-07-68 Sparkover rates of Medium-Voltage Line Due to Indirect and Direct Lightning
SP-07-44 Hits Dependent on Correlation between Peak Value and Front Duration of Return-Stroke
HV-07-68 Current Waveform
Yasuji Hongo (Tohoku Electric Power)
Koji Michishita (Shizuoka University) 7

ED-07-69	Observation results of Lightning Performance in Distribution Lines	
SP-07-45		
HV-07-69		Teru Miyazaki, Shigemitsu Okabe, Kiyoshi Aiba, Takao Hirai (Tokyo Electric Power) ······ 13
ED-07-70	Response of Pole-Type Distribution Transformers Dependent on Rated Power	
SP-07-46		
HV-07-70		Koji Michishita, Hideo Hiraiwa (Shizuoka University) Yasuji Hongo (Tohoku Electric Power) ······ 19
ED-07-71	Research on Identification of single-Phase earth Faults in Electrical Distribution Networks	
SP-07-47		
HV-07-71		Li Xuewen, Sun Keping (Shanghai Maritime University) ······ 25
ED-07-72	Approximate Formula of Peak Lightning-Induced Voltages on a Long Overhead	
SP-07-48	Distribution Line	
HV-07-72		Shozo Sekioka (Shonan Institute of Technology) ······ 31
ED-07-73	Lightning Protection For Pole Mounted Switches	
SP-07-49		
HV-07-73		Minoru Tsukazaki, Yoji Sasano (Otowa Electric) ······ 37
ED-07-74	Measurement of Arc Time Constant under External Magnetic Field	
SP-07-50		
HV-07-74		Kazuhiro Oinuma, Toru Iwao, Motoshige Yumoto (Musashi Institute of Technology) ······ 41
ED-07-75	[欠 番]	
SP-07-51		
HV-07-75		
ED-07-76	Transferred Pip Formed on Ag Contacts Mounted on Relays in a DC42C Resistive Circuit	
SP-07-52		
HV-07-76		Junpei Watanabe, Junya Sekikawa, Takayoshi Kubono (Shizuoka University) ······ 45
ED-07-77	Non-Equilibrium Modeling of High Power-Density Induction Plasma at Reduced Pressure	
SP-07-53		
HV-07-77		Yasunori Tanaka (Kanazawa University) ······ 51
ED-07-78	Particle composition of CO ₂ -CF ₃ I mixture at temperatures of 300-30,000 K	
SP-07-54		
HV-07-78		Y. Yokomizu, R. Ochiai, T. Matsumura (Nagoya University) ······ 57

ED-07-79	Evaluation of thermal interrupting performance of SF ₆ gas circuit breaker	
SP-07-55	with classical arc models	
HV-07-79		Sadayuki Kinoshita, Kenji Kamei, Hiroki Ito (Mitsubishi Electric) …… 63
ED-07-80	Development of Large Current Making Switch	
SP-07-56		
HV-07-80		Hiromichi Kawano, Kietsu Kudo, Kensaku Miyazaki, Nobuyuki Miyake, Hisatoshi Ikeda (Toshiba) …… 67
ED-07-81	Current Status of High Voltage Engineering in Indonesia	
SP-07-57		
HV-07-81		Syarif Hidayat, Suwarno, Reynaldo Zoro (Bandung Institute of Technology) …… 73

共 催 電気学会東海支部
協 賛 Japan Chapter of the IEEE Society on Power Engineering,
Japan Chapter of the IEEE Society on Dielectrics and Electrical Insulation