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IEEE POWER & ENERGY SOCIETY AWARDS 2023





Sustainable development requires human ingenuity. People are the most important resource."

-DAN SHECHTMAN





Power & Energy Society Awards and Recognition

Many of our recipients have donated their honoraria to the

IEEE PES Endowment Fund, IEEE PES Scholarship Plus Fund, or one of our many other funds solicited and managed by the IEEE Foundation

We Offer Our Profound Gratitude to These Award Recipients for Their Generosity and Support



If you are interested in contributing, please contact Daniel DeLiberato in the IEEE Foundation Development Office

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PES Awards & Recognition

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Chan Wong, PES V. P. of Strategic Communications & Partnerships Jaime Cepeda, PES Awards & Recognition Chair Shanon Nason, PES Awards Senior Administrator

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Jiyuan Fan, PES Rep. and Weijiang Chen, CSEE Rep. IEEE PES CSEE Yu-Hsiu Ku Electrical Engineering Award

Chris Brooks IEEE PES LAS A. P. Seethapathy Rural Electrification Excellence Award

Tom Short IEEE PES Award for Excellence in Power Distribution Engineering

Nicholas Miller IEEE PES Charles Concordia Power System Engineering Award

Oleg Wasynczuk IEEE PES Cyril Veinott Electromechanical Energy Conversion Award

Mohammad Shahidehpour IEEE PES Douglas M. Staszesky Distribution Automation Award

Veronika Rabl IEEE Power & Energy Society Leadership in Power Award

Mark Lauby IEEE Power & Energy Society Lifetime Achievement Award

John McDonald IEEE PES Patrick P. Ryan Meritorious Service Award

Rambabu Adapa IEEE PES Nari Hingorani Custom Power Award

Mojtaba Mohaddes IEEE PES Nari Hingorani FACTS Award Antonio Gomez-Exposito IEEE PES Outstanding Power Engineering Educator Award

Joydeep Mitra IEEE PES Outstanding Young Engineer Award

Nikos Hitziargyriou IEEE PES Prabha S. Kundur Power System Dynamics and Control Award

J. Charlie Smith IEEE Power & Energy Society Ramakumar Family Renewable Energy Excellence Award

Robert Dent IEEE PES Robert Noberini Distinguished Contributions to Power Engineering Professionalism Award

George J. Anders IEEE PES Roy Billinton Power System Reliability Award

Abhay Kumar IEEE PES Uno Lamm High Voltage Direct Current Award

Ruomie Li IEEE PES Wanda Reder Pioneer in Power Award

Joydeep Mitra Fellows Chair

Jeffrey Nelson IEEE PES Technical Committee and Technical Council Awards

Paul Pabst IEEE PES Chapter Awards

Sacha Fontaine & Jose Rueda Torres PES Awards & Recognition Administrative Assistants

PES Awards Program

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PES Awards Program

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PES Awards Program

- **IEEE PES Working Group Recognition Awards** pp. 50 & 51 **Outstanding Standard or Guide IEEE 2030.11, IEEE Guide for Distributed Energy Resources Management Systems (DERMS) Functional Specification** Prepared by the IEEE PES Transmission & Distribution Committee Chair: Geza Joos Vice Chair: Robert Cummings Vice Chair: Anthony Johnson Secretary: James T Reilly **Outstanding Technical Report** PES-TR88, Power System Dynamic State and Parameter **Estimation-Transition to Power Electronics-Dominated Clean Energy Systems** Prepared by the IEEE PES Power System Operation, Planning and Economics Committee Chair: Junbo Zhao Vice Chair: Alireza Rouhani Secretary: Shahrokh Akhlaghi **IEEE PES Outstanding Chapter Awards** pp. 52 & 53 ٠ Small Chapter - New Zealand Chapter (R10) ٠ Chapter Chair: Jianing Li
 - Large Chapter UK & Ireland Chapter (R8) Chapter Chair: Kate Murphy

Peer Recognition: Do you know someone deserving recognition?

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IEEE Herman Halperin Electric Transmission and Distribution Award



The IEEE Herman Halperin Electric Transmission and Distribution Award was established in 1986 through an agreement between Herman Halperin and the Board of Directors of the IEEE. Associated funding was contributed by Herman and Edna Halperin and is administered by the IEEE Foundation, Inc.

From 1959 through 1986, the award for outstanding contributions to the field of electric transmission and distribution was named the William M. Habirshaw Award. Herman Halperin was a recipient of the Habirshaw Award in 1962. Halperin had a distinguished career with the Commonwealth Edison Company over a period of 40 years. Subsequently, he spent 15

years as a consulting engineer. Over the course of his career, he was particularly noted for his pioneering contributions to the design and operation of electric plant facilities and power cable systems.

In the evaluation process, the following criteria are considered: technological importance, successful application, originality, leadership, publications, and the quality of the nomination.

This award recognizes outstanding contributions to electric transmission and distribution. The award consists of a bronze medal, cash prize, and certificate.

Supporters: Robert and Ruth Halperin Foundation, in memory of the late Herman and Edna Halperin, and the IEEE Power & Energy Society

Current Committee Members: *Based on available information*

Mariesa L Crow (Chair) Lina Margareta Bertling MariaPia Fanti D J Hill Innocent Kamwa Udaya Kumar Brian Stott

Past Recipients: *Complete listing is available on website*

2018 Jinliang He2019 Steven A. Boggs2020 Dusan Povh2021 Brian Stott2022 John Undrill

IEEE Herman Halperin Electric Transmission and Distribution Award

NIKOLAOS D. HATIZIARGYRIOU

2023 Recipient

For contributions to the development of microgrids and leadership in distributed and decentralized smart distribution networks

NIKOLAOS D. HATIZIARGYRIOU—Climate threats are leading to the increased deployment of renewable generation, mostly connected at the distribution level. His field of expertise is not constrained to the renewable energy area alone, he has made fundamental contributions by pioneering the concept of Microgrids and research in the dynamic analysis of power electronic interfaced DER and in decentralized control of power systems. Hatziargyriou's research in the dynamic analysis of power electronic-interfaced distributed energy resources (DER) and intelligent multi-agent systems have had a worldwide impact. He has been deeply involved in proving the feasibility of these concepts in laboratory environments and leading their installation in several real-world deployments in Europe.



An IEEE Life Fellow, Hatziargyriou is a professor at the National Technical University of Athens, Athens, Greece.

IEEE Nikola Tesla Award



The IEEE Nikola Tesla Award was established in 1975 through an agreement between the IEEE Power Engineering Society and the IEEE Board of Directors.

The Award is named in honor of Nikola Tesla, an electrical engineer, a distinguished Yugoslav-American inventor, and a pioneer in many fields, who is most renowned for the development of the coil that bears his name and the a-c induction motor.

This award was created to recognize outstanding contributions to the generation and utilization of electric power.

In the evaluation process, the following criteria are considered: impact on technology, inventive value, breadth of use,

leadership, and quality of the nomination.

"Generation" areas may include: automation, instrumentation, control, generation planning, alternative forms (e.g., wind, solar, fuel cells, and space power), conservation, safety, and reliability. "Utilization" areas may include: conservation, biomedical (e.g., MRI, focused ultrasound, etc.), life quality improvement for the handicapped, manufacturing systems, and robotronics.

This award consists of a bronze medal, a certificate and a cash prize.

Supporters: Wolong Electric Group Co., Ltd., IEEE Industry Applications Society and the IEEE Power & Energy Society

Current Committee Members:

Based on available information

Ambrish Chandra (Chair) Edson Da Costa Bortoni Mariesa L Crow Innocent Kamwa Yen-Shin Lai Marco Liserre Annette Muetze

Past Recipients:

- 2018 Longya Xu
- 2019 Tomy Sebastian
- 2020 Akira Chiba
- 2021 Zi-Qiang Zhu
- 2022 Peter W. Sauer

IEEE Nikola Tesla Award

KIRUBA S. HARAN

2023 Recipient

For contributions to advanced high-power density electrical machinery and high-temperature, superconducting technology applications

KIRUBA S. HARAN'S research has brought fundamental yet practical breakthroughs in high-performance electrical machines. Significantly, he helped build a collaborative effort to make lowcarbon propulsion for aviation a reality and has driven progress along this path with lightweight machines for electrified propulsion. He has also developed a high-speed superconducting generator for defense applications. He led a project that culminated in a successful load test by the US Air Force after three decades of effort in superconducting machines. Haran's work has brought the electrification of aircraft closer to practical application, which is revolutionary not only for transportation but for our climate as well.



An IEEE Fellow, Haran is a professor at the University of Illinois

at Urbana-Champaign, Urbana, Illinois, USA, and serves as Director of the NSF Engineering Research Center on Power Optimization of Electro-Thermal Systems (POETS).

IEEE PES CSEE Yu-Hsiu Ku Electrical Engineering Award



The IEEE PES CSEE Yu-Hsiu Ku Electrical Engineering Award was initiated by the IEEE Power & Energy Society and Chinese Society for Electrical Engineering (CSEE) in 2009.

The award specifications include the recognition of a professional who has demonstrated excellent performance in the fields of electrical engineering, electrical machinery, and other related areas. The recipient's contributions in electrical engineering are evaluated based on technical innovations and well recognized contributions in electrical power engineering and associated fields.

The award was established to commemorate Dr. Yu-Hsiu KU

(1902-2002), who made great contributions in mathematics, electrical machinery, and modern control theory during his longstanding career in the USA and China.

Dr. Yu-Hsiu Ku was born in 1902; he entered Beijing Tsinghua School (the former Tsinghua University) at the age of 14. In 1923, he was sent to study at the Massachusetts Institute of Technology (MIT), USA. He was the first Chinese to obtain the doctor's degree at MIT. Dr. Ku was the recipient of the IEEE Lamme Medal (1972) and the IEEE Millennium Medal (1999). He was also the founding member of CSEE.

This award includes a plaque, a certificate, and a cash prize of \$2,000 USD.

Supporters: Beijing Sifang Automation Co., Ltd., Nari-Relays Electric Co., Ltd., and Shanghai Huaming Power Equipment CO., Ltd.

Current Committee Members:

Based on available information

Jiyuan Fan (Co-Chair) Weijiang Chen (Co-Chair) Yican Wu He Yaling Liuxi (Calvin) Zhang

Past Recipients:

Complete listing is available on website

2018 WEI Shirang2019 GE Yaozhong2020 CHEN Chen2021 HE Renmu2022 WU Weihan

IEEE PES CSEE Yu-Hsiu Ku Electrical Engineering Award

CIXUAN CHEN 2023 Recipient

For contributions to grounding technology and overvoltage protection for power systems, and the lifetime education in electrical engineering

CIXUAN CHEN born in Shanghai in March 1933, graduated from Tsinghua University with her BSEE in 1953 and from Harbin Institute of Technology with her MSEE in 1956. She is one of the pioneers of grounding technology and overvoltage protection for power systems in China and has made significant contributions to the basic theory of grounding technology for AC and DC power systems, the basic theory of overvoltage for power systems, numerical calculation methods for grounding systems, and the development of lightning arrester protection devices. In 1958, she presided over the construction of China's first high-voltage oscillation circuit device and helped develop China's first 30 kV magnetic blow-out valve-type arrester. From 1959 to 1960, she participated in the research of 330 kV transmission and substation



technology and designed the 330 kV magnetic blow-out valve type arrester. In 1978, she developed a new type of zinc oxide arrester for the protection of rotating motors at 10 kV. In the 1980s and later, she developed a series of surge protectors for low-voltage AC and DC systems. She also developed China's first general procedure for boundary element method-based grounding calculation and proposed a series of new formulas for power system tower and substation grounding resistance and step potential analysis.

In addition, Professor Chen has dedicated herself to higher education in electrical engineering. Her commitment to teaching has garnered praise from her students, and she has made significant contributions through her university textbooks and academic literature. Many of her publications were the first of their kind in Chinese educational literature and are considered classics, providing valuable reference material. Her exceptional work has earned recognition from government authorities and professional societies alike. Her passion for education and innovative research continue to inspire and influence generations of engineers in China and beyond.

IEEE PES IAS A. P. Seethapathy Rural Electrification Excellence Award



This award was created to recognize exceptional power engineers who have worked, implemented or innovated better and cheaper electrification technologies for the rural sector. Selection of candidates will be based on the evaluation of accomplishments as revealed by published works, documented testimonials from industry colleagues, or other objective demonstrations of accomplishments over an extended period of time. Of particular importance is evidence of the candidate's innovative content and societal impact; lower cost solution; originality and practicality; and evidence of implementation.

This award consists of \$500 USD, sculpture and a travel reimbursement of up to \$1,500 USD for the recipient to attend the presentation ceremony.

Supporters: A.P. Seethapathy's Family in partnership with IEEE Power & Energy Society and Industry Application Society

Current Committee Members:

Based on available information

Chris Brooks (Chair) Jodi Bullinger Wayne Carr Tom Castle Nikos Hatziargyriou Pankaj Sen

Past Recipients:

- 2015 Russ Dantzler
- 2016 Gerald E. Hagar
- 2020 Louis Toth
- 2021 Satish Chaparala
- 2022 Jeremy L. Johnson

IEEE PES IAS A. P. Seethapathy Rural Electrification Excellence Award

HUGO ALBERTO SULCA SULCA 2023 Recipient

For contributions to rural electrification in Peru

HUGO ALBERTO SULCA SULCA has dedicated his career to the advancement of rural electrification, playing a pivotal role in the development and implementation of various initiatives. As the responsible authority for the elaboration and continual updating of the National Rural Electrification Plan, his expertise and guidance have been instrumental in bringing electricity to remote areas that were once deprived of this essential resource.

But Hugo Sulca's contributions extend far beyond the realm of rural electrification. He has also served as the Deputy Coordinator for the Renewable Energy Master Plan, collaborating closely with the Japan International Cooperation Agency (JICA) to foster the integration of renewable energy sources into the national energy matrix. Through this esteemed role, he has been at the forefront



of promoting sustainable energy solutions and driving the transition towards a greener and more environmentally conscious future.

Mr. Sulca's educational background starts with a degree in Electrical Engineering from the prestigious National University of Engineering. Additionally, he holds a master's degree in engineering project management from the renowned National University Federico Villarreal, as well as a master's degree in Energy Sciences with an energy specialization from the National University of Engineering. To further enhance his knowledge, he has pursued a diploma in Financial Management of Companies.

Throughout his career, Hugo Sulca has held various key positions, including seventeen years as a Planning Specialist, overseeing the strategic development and execution of electrification projects. He has also served as the Director General of Rural Electrification within the Ministry of Energy and Mines, where he spearheaded initiatives aimed at improving access to electricity for rural communities.

IEEE PES Award for Excellence in Power Distribution Engineering

Distribution represents a major utility investment for the transportation of electrical power. It is critical to the quality, reliability, and economy of the product. This award was established to recognize those individuals who have contributed to the growth and value of the technology.

This award is was established to recognize individuals who have made remarkable engineering contributions to the field of distribution technology. The selection committee considers all candidates brought to its attention whose work has resulted in substantial improvements to the effectiveness and utilization of power distribution.

This award consists of a plaque, a cash prize of \$1,000 USD, and a travel subsidy to attend the PES Awards Ceremony.

Supporters: Donors to the PES Award Endowment Fund

Current Committee Members:

Based on available information

Tom Short (Chair) P. Barker R. C. Dugan D. Sabin L. Taylor D. Ward

Past Recipients:

- 2018 Daniel Sabin
- 2019 Charles DeNardo
- 2020 Thomas R. Beckwith
- 2021 Thomas E. McDermott
- 2022 Mark McGranaghan

IEEE PES Award for Excellence in Power Distribution Engineering

HEIDE CASWELL

2023 Recipient

For innovative contributions to distribution reliability analysis, standards development and energy distribution cost optimization

HEIDEMARIE (HEIDE) C. CASWELL P.E. is the Administrator-Safety, Reliability and Security at the Oregon Public Utilities Commission. She has been involved in the utility business during and after receiving her Bachelor of Science in Civil Engineering at the University of Washington and is licensed in the state of Washington. She's worked at Washington Natural Gas, Puget Sound Energy and then PacifiCorp, before transitioning to the OPUC in 2022. Her roles have been primarily utility planning, for gas and electric systems and then transitioning to reliability analysis, reporting, planning, technology and process development for reliability improvement, and then augmented with wildfire/risk quantification and mitigation and distribution system planning. She has been deeply involved in the Distribution Reliability Working Group over the last



20+ years, including facilitating the annual benchmark study the DRWG performs. She's led a number of task forces including Catastrophic Event Analysis and Data Analysis. She also has been a primary contributor to a number of standards related to reliability. She has authored a number of papers related to reliability analysis. She holds vice chair positions in IEEE PES' Distribution Reliability Working Group and also in NERC's Performance Analysis Subcommittee.

IEEE PES Cyril Veinott Electromechanical Energy Conversion Award



This award recognizes outstanding contributions in the field of electromechanical energy conversion. Research and developments on electric motors continued throughout the 20th century and into the 21st to the point that such devices have now become an integral part of our lives. The current ubiquitous presence of the electric motor in everything we do has resulted from the work of dedicated engineers throughout the world.

The award is named for the man responsible for numerous practical improvements in the design and application of electric motors over 50 years: Dr. Cyril Veinott.

Veinott made seminal contributions to the development of polyphase induction motors, 400 Hz aircraft motors, and was a pioneer in the application of digital computers to the design of electric

motors; was responsible for the early measurements and mitigation of electric motor noise; helped write many IEEE and NEMA standards for electric motors; and was the first person to be inducted into the Hall of Fame created by the Small Motor Manufacturers Association in 1985.

This award consists of a plaque and a cash prize of \$5,000 USD.

Supporter: Dr. Cyril Veinott

Current Committee Members:

Based on available information

Oleg Wasynczuk, (Chair) Kay Chen Jim Michalec Bulent Sarlioglu Kiruba Sivasubramaniam Haran

Past Recipients:

- 2018 Steve Pekarek
- 2019 Kiruba Sivasubramaniam Haran
- 2020 Dan M. Ionel
- 2021 Bulent Sarlioglu
- 2022 Juri Jatskevich

IEEE PES Cyril Veinott Electromechanical Energy Conversion Award

AKIRA CHIBA

2023 Recipient

For contributions to bearingless motors and reluctance motors

AKIRA CHIBA (IEEE Fellow 2007, S'82- M'88- SM'97) received the Ph.D. degree in Electrical Engineering from the Tokyo Institute of Technology, Tokyo, Japan, in 1988. In 1988, he joined the Tokyo University of Science as a Research Associate with the Department of Electrical Engineering, Faculty of Science and Technology. Since 2010, he has been a Professor with the School of Engineering, Tokyo Institute of Technology, Tokyo, Japan.

He has been studying magnetically suspended bearingless ac motors, super high-speed motor drives, and rare-earth-free-motors for automotive traction applications. He has so far authored or coauthored more than 1170 papers including the first book on "Magnetic Bearings and Bearingless Drives" in 2005.

He was the recipient of the Best Paper Awards in IEEE

Transactions on Energy Conversion in 2016 and 2017. He was awarded the 2020 Nikola Tesla Award, that is one of IEEE Technical Field Awards. He served as Secretary, Vice-Chair, Vice-Chair-Chair-Elect, Chair, and Past-Chair in the Motor Sub-Committee in the IEEE PES during 2007–2016. He has organized the Panel sessions, the combo sessions to activate the motor sub-committee. He received the distinguished service award from the Electric Machinery committee. He was Technical Chair in IEEE IEMDC 2017 held in Miami, FL, USA, that was mainly hosted by IEEE PES. He has served as an Editor in IEEE Transactions on Energy Conversion since 2013.

He has served as Secretary, Vice Chair, Chair, and Past-Chair in IEEE-IAS Electric Machine Committee since 2016. He has improved the relationship between PES and IAS in electric machines.

He was the Department Head of Electrical and Electronics Department during 2014 and 2016 and led MOOC project of the introduction of Electrical and Electronics Engineering, released in May 2017 through EDX.



IEEE Power & Energy Society Leadership in Power Award

The IEEE PES Leadership in Power Award was established in 2007 to recognize industry leaders for exceptional contributions to the promotion of the electric power engineering profession. The award is particularly intended to highlight actions that have encouraged the development and growth of electric power engineering practitioners and the recognition of the contributions electric power engineers have made to society. In this era, electric utility leaders who recognize the crucial importance of power engineering in the safe, reliable, and economical generation. Transmission and distribution of electricity are rare, and this award is to recognize them for their insight and wisdom.

Recipients must be active in the electric power industry, but do not need to be IEEE members. Selection is based on evaluations of accomplishments as revealed by documented testimonials from industry members. Of particular importance is evidence of the candidate's promotion of the importance of the power engineering profession and the people practicing it. Work in encouraging industry involvement with university power engineering programs, encouraging young engineers through mentoring and career development programs. Recognition programs for power engineers, encouragement of professional activities by practitioners, etc., are also considered.

The award consists of a sculpture, \$2,000 USD cash prize, and a travel stipend of up to \$2,000 USD.

Supporters: Donors to the PES Award Endowment Fund

Current Committee Members:

Based on available information

Veronika Rabl (Chair) Babu Chalamala Lalit Goel David Roop Joseph Svachula

Past Recipients:

- 2016 Gordon van Welie
- 2017 Joseph E. Svachula
- 2019 Maureen A. Borkowski
- 2020 M. Michelle Blaise
- 2021 Mark Carpenter
- 2022 Christopher Root

IEEE Power & Energy Society Leadership in Power Award

DAMIR NOVOSEL

2023 Recipient

For promoting and mentoring electric power and energy engineers while creating bridges between the electric power industry and different stakeholders, including government, regulatory bodies, companies, universities, and industry groups

DAMIR NOVOSEL is the President and founder of Quanta Technology. Previously, he was the Vice President of ABB Automation Products and the President of KEMA T&D Consulting US. Dr. Novosel is an adjunct professor at North Carolina State University.

He served as the President of the IEEE Power & Energy Society and continued the work of his predecessors to exceed 40,000 members. As the Vice President of Technical Activities, he saw the need for reorganizing technical committees to better serve the changing industry landscape. Dr. Novosel also formed the IEEE PES Industry Technical Leadership Committee which has published numerous, well-received publications on 'fast-track" and expanded outreach to global industry, government, and regulatory



organizations. He provided leadership in the formation of the Executive Advisory Council and the Corporate Engagement Program. Damir has been a champion of global diversity, cooperation between academia and industry, and the active engagement and growth of industry membership.

He served on the IEEE Standards Association Standards Board as well as on its committees. He is a member of the CIGRE US Executive Committee and chaired the North American Synchro-Phasor Initiative Performance Requirement Task Team.

Dr. Novosel has served on various boards and is presently a member of the Sandia National Laboratories Energy and Homeland Security External Advisory Board and the Mississippi State University Industry Advisory Board. Damir is regularly invited to be a keynote speaker and panelist at global industry conferences. He published numerous papers and was awarded 18 patents.

Damir was elected to the U.S. National Academy of Engineers and is an IEEE Fellow. Mississippi State University granted him a Distinguished Engineering Fellow and the ECE Alumni award. Throughout his career, he has mentored technical experts and business leaders. His company promotes active IEEE and industry participation to support career development and enhance leadership skills.

IEEE PES Nari Hingorani Custom Power Award



The award has been named by PES to honor Dr. Narain Hingorani. Power electronics and other static controllers are making a major impact on future power systems through application in transmission, distribution, and small generation. Applications in transmission and distribution include high voltage direct current (HVDC), the Flexible AC transmission System (FACTS), and Custom Power. Since the introduction of FACTS and Custom Power concepts, the technology has been moving ahead at an increasing pace. Very significant near- tolong-term benefits of FACTS and Custom Power technologies are now recognized in the industry. The FACTS and Custom Power Awards are given to individuals who have made a major contribution to FACTS and Custom Power technologies and their applications.

The IEEE definition of Custom Power is:

"The concept of employing power electronic (static) controllers in 1 kV through 38 kV distribution systems for supplying a compatible level of power quality necessary for adequate performance of selected facilities and processes."

This award consists of a plaque, engraved medal, and a cash prize of \$2,000 USD.

Supporters: ABB, S&C Electric Company, Siemens AG, Silicone Power Corporation, The National Grid Company and Narain G. Hingorani

Current Committee Members:

Based on available information

Rambabu Adapa (Chair) Hirofumi Akagi Ani Gole David Langner Mojtaba Mhades Guang Fu Tang Edson Watanabe

Past Recipients:

- 2014 Harshad Mehta
- 2016 Rambabu Adapa
- 2017 Bhim Singh
- 2021 Ambrish Chandra
- 2022 Mojtaba Mohaddes

IEEE PES Nari Hingorani Custom Power Award

DEEPAKRAJ DIVAN

2023 Recipient

For contributions to distributed and decentralized dynamic control of transmission and distribution systems

DEEPAKRAJ DIVAN does research in the areas of power electronics, power systems, smart grids, and distributed control of power systems. He works closely with utilities and industry and is actively involved in research, teaching and entrepreneurship. He has over 250 published refereed papers and over 85 issued and pending patents. Dr. Divan has started several companies, including Varentec in Santa Clara, CA, which was funded by leading green-tech Venture Capital firm Khosla Ventures and renowned investor Bill Gates. He has founded or seeded several new ventures including GridBlock, GigaGrid, Soft Switching Technologies, Innovolt, Varentec and Smart Wires, which together have raised >\$160M in venture funding.



Dr. Divan is an elected Member of the US National Academy of Engineering, member of the National Academies Board on Energy and Environmental Systems and a member of the National Academies (NASEM) Committee on The Future of Electric Power in the United States. He a Fellow of the IEEE, past President of the IEEE Power Electronics Society, is a recipient of the IEEE William E Newell Field Medal and is International Chair of the IEEE Empower a Billion Lives (EBL) recurring global competition to develop scalable energy access solutions. He was an invitee to the White House Electrification Summit in 2022 and has presented on the subject of electric grids around the world including at the COP-22 meeting in Morocco in 2016 and the United Nations Global Solutions Summit in 2023. He received his B.Tech in Electrical Engineering from IIT Kanpur in India, and his MS and PhD degrees from the University of Calgary, Canada.



Bilal Akin

for contributions to control, diagnosis and condition monitoring of AC drives

Nima Amjady

for contributions to uncertainty modeling and forecasting for power systems





Hassan Bevrani

for contributions to microgrid control

Yonghong Chen

for contributions in wholesale electricity market design and operations





Song Ci for contributions to reconfigurable electric vehicle batteries

Ali Davoudi

for contributions to power-electronic dominant microgrid control



Paul Denholm

for contributions to energy storage in renewable-energy systems

Alejandro Dominguez-Garcia

for contributions to distributed control and uncertainty analysis of electrical energy systems





Fei Gao for contributions to real-time simulation

for contributions to real-time simulation and control techniques for fuel cells and power converters





Zhiwei Gao

for contributions to real-time diagnosis and control of wind turbine systems

> Hoay Beng Gooi for contributions to energy storage in microgrids





Javad Lavaei

for contributions to nonlinear optimization in power system



Bernard Lesieutre

for contributions to electric power system dynamic modeling, simulation and power engineering education

Zhigang Liu

for contributions to fault detection and protection in high-speed railway power systems





Chengxiong Mao

for leadership in active control of power systems and its industrial applications

Marta Molinas

for contributions to modeling and stability of power electronics





Kashem Muttaqi

for contribution to modeling and control of renewable and distributed energy resources

Michael Negnevitsky

for contributions to application of AI techniques for control of isolated hybrid power systems



Christian Rehtanz

for contributions to wide area monitoring, protection and control systems for electrical power grids





Howard Sedding

for contributions to practical partial discharge testing of electrical equipment

Tomonobu Senjyu

for contributions to wind-power generator automation and control





Konstantin Staschus

for the institutionalization of Europe-wide joint transmission grid planning

Stefan Tenbohlen

for contributions to leadership in power transformer reliability





Subramanian Vadari

for leadership in electric power system planning and markets



Pierre Verlinden

for leadership in high performance silicon solar cell and photovoltaics technology and commercialization

> **Xiongfei Wang** for contributions to power-electronic-based power systems



Zhaohong Bie*

for contributions to power system reliability and resilience

David Hart*

for contribution to the development of the smart grid

Richard Lanza*

for developing novel imagers and radiation detectors applied to medicine and security problems

Pierluigi Mancarella*

for contribution to power system resilience and multi-energy systems

Toshiaki Rokunohe*

for contributions to eco-friendly compact and reliable high-voltage equipment

Wanxing Sheng*

for contributions to safe operation and coordinated control of smart power distribution systems

Eiichi Zaima*

for leadership in ultra-high voltage transmission technology and international standards

*pictures not provided

Thank You 2023 PES Fellow Committee Members:

Joydeep Mitra (Chair, Region 4) Richard Brown (Vice Chair, Region 5) Aniruddha Gole (Vice Chair, Region 7) Mark Lauby (Vice Chair, Region 3) Eric Udren (Vice Chair, Region 2)

Members:

Anastasios Bakirtzis, Region 8 Kankar Bhattacharya, Region 7 Alberto Borghetti, Region 8 Karen Butler-Purry, Region 5 Joe Chow, Region 1 Johan Enslin, Region 3 Ian Hiskens, Region 4 Gary Hoffman, Region 1 Hulya Kirkici, Region 3 Hideki Motoyama, Region 10 Mario Paolone, Region 8 Paulo Ribeiro, Region 9 Noel Schulz, Region 6 Dipti Srinivasan, Region 10 Hongbin Sun, Region 10 Kevin Tomsovic, Region 3

For more information on the IEEE Fellows process and to get help preparing a Fellows Nomination **New Nomination Deadline: February 7th**



Email: Fellow_Nomination@ieee.org https://ieee-pes.org/membership-chapters/fellow-nomination/

IEEE PES Outstanding Power Engineering Educator Award

This award recognizes excellence in classroom teaching, course development and the promotion of student, local, transnational and technical activities.

The recipient must provide classroom instruction in electrical engineering at a college or university with an accredited electrical engineering program or equivalent, be a member of PES for at least one year, and be nominated by any PES member and endorsed by the chapter or technical committee of which the individual is a member.

The award consists of a plaque and cash prize of \$1,000 USD.

Supporters: Donors to the PES Award Endowment Fund

Current Committee Members:

Based on available information

Antonio Conejo (Chair Ross Baldick Joe H. Chow Maria Ilic Ming Ni Shmuel Oren Mohammad Shahidehpour

Past Recipients:

- 2018 Antonio J. Conejo
- 2019 Antonio Gómez-Expósito
- 2020 Marija Ilić
- 2021 Shmuel Oren
- 2022 Joe Hong Chow

IEEE PES Outstanding Power Engineering Educator Award

ATHANASIOS P. MELIOPOULOS 2023 Recipient

For contributions to power system education in protection, control and operation

ATHANASIOS P. MELIOPOULOS received the Diploma in Electrical and Mechanical Engineering from the National Technical University in Athens, Greece, (1972), Master in EE (1974) and PhD (1976) at the Georgia Institute of Technology, Atlanta, Georgia. He joined the Georgia Tech ECE faculty in 1976 where he is presently the Georgia Power Distinguished professor.

He is actively involved in education and research in power systems with emphasis on protection and control, safety and electromagnetic compatibility of electric power installations, cyber security and the application of new technologies in these areas. Since 1999 he is the Georgia Tech Site Director of PSERC, an NSF I/URC, associate director of the Georgia Tech Institute for Information Security and Privacy (2016-2019).



He holds 3 patents. He has published three books, contributed chapters in three books and published 120 journal papers and 323 refereed conference papers. Twelve of his papers received best paper award designation. Many of his research products have been commercialized and extensively used by the industry.

He has contributed to many IEEE Standards, served the Atlanta PES chapter as treasurer, secretary, vice chair and chair, the IEEE-PES substation committee as treasurer, secretary and chairman, delivered numerous IEEE distinguished lectures, participated in numerous meetings contributing as an author, panelist or chairing the activities. He leads two conferences offered annually at Georgia Tech and taught numerous short courses to thousands of practicing engineers.

Elevated to IEEE Fellow (1993). Received the Sigma Xi Young Faculty award (1981), the outstanding Continuing Education Award, Georgia Tech (twice 2002 and 2014), the 2017 D. Scott Wills, ECE Distinguished Mentor Award. He received the 2005 IEEE Richard Kaufman Award and the 2010 George Montefiore international award. In 2019 he was awarded the title of Doctor Honoris Causa by his alma matter, the National Technical University of Athens, Greece.

IEEE PES Outstanding Young Engineer Award

This award recognizes outstanding contributions in the leadership of technical society activities including local and/or transnational PES and other technical societies, leadership in community and humanitarian activities, and evidence of technical competence through significant engineering achievements.

The recipient of the IEEE PES Outstanding Young Engineer Award must be 35 years of age or under on January 1 of the year the award is presented, be a member of PES for at least one year, and have a minimum of a B.S. in Electrical Engineering from an accredited electrical engineering program or equivalent. He or she can be nominated by any PES member and must be endorsed by the chapter or technical committee of which the individual is a member.

This award consists of a plaque and the recipient will designate a college or university with an accredited program in electrical engineering or equivalent to receive a \$2,000 USD scholarship for an electrical engineering undergraduate.

(Through 2007, the recipient received the Walter Fee Outstanding Young Engineer Award)

Supporters: Donors to the PES Award Endowment Fund

Current Committee Members:

Based on available information

Joydeep Mitra (Chair) Ali Chowdhury Alejandro Dominguez-Garcia Wenzhong (David) Gao Dagmar Neibur Mario Paolone

Past Recipients:

- 2018 Ali Mehrizi-Sani
- 2019 Sairaj Dhople
- 2020 Zhaoyu Wang
- 2021 Daniel Kenneth Molzahn
- 2022 Junbo Zhao

IEEE PES Outstanding Young Engineer Award

ANAMIKA DUBEY

2023 Recipient

For contributions to optimization and control of electric power distribution systems

ANAMIKA DUBEY is Huie-Rogers Endowed Chair Associate Professor of Electrical Engineering in the School of EECS at Washington State University (WSU), Pullman. She also holds a joint appointment as a Research Scientist at the Pacific Northwest National Laboratory (PNNL). She was an Assistant Professor in the same department from 2016-2022. She received her MSE and Ph.D. in Electrical and Computer Engineering from the University of Texas at Austin in 2012 and 2015, respectively. She completed her bachelor's degree (B.Tech) in Electrical Engineering from the Indian Institute of Technology, Roorkee, in 2010.

Anamika's research is at the forefront of addressing the new requirements for improved efficiency, operational flexibility, and resilience in response to the grid's changing nature and extreme



weather events. Her innovative and unique ideas are directed toward solving an ever-growing problem of providing a resilient, adaptable, and economically viable power supply with distributed generation resources. Her research focuses on developing novel algorithms for the control and optimization of active power distribution systems with controllable grid-edge resources. Her contributions are situated at the intersection of mathematical optimization techniques and cyber-physical electric power distribution systems. She also provides strong technical leadership in the field and is influencing a new generation of researchers in power systems.

Anamika is a recipient of the National Science Foundation (NSF) CAREER Award (2019), WSU EECS Early Career Award (2020), WSU Voiland College of Engineering and Architecture (VCEA) Jr. Faculty Research Award (2021), WSU Pacesetter Award in Physical Sciences & Engineering (2021). She serves as the Associate Editor for IEEE Transactions on Power Systems and IEEE Power Engineering Letters. She is the vice-chair of the IEEE PES Distribution Systems Analysis Subcommittee and IEEE PES University Education Subcommittee and serves as PES Chapter Chair for the IEEE Palouse Section.

IEEE PES Prabha S. Kundur Power System Dynamics and Control Award



As the development of the complex system known as the interconnected bulk power system unfolded around the world, it became critical to understand its nonlinear behavior as well as develop and deploy system controls vital to manage dynamic system behavior to ensure reliability. Even today, as the bulk power system evolves to accommodate an unprecedented change in resource mix and technology innovation, it is critical to manage integration of new and emergent technologies. Without this ability to model the general dynamic behavior of the bulk power system and devise suitable coordinated systems controls, the modernization of the bulk power system would be inhibited. These developments come from the work of dedicated engineers who devote their careers to the deep understanding of bulk power system dynamic behavior, including transient, small-signal, voltage, and frequency stability, along with the development of controls vital to support bulk power system

security and quality of power supply.

Recipients must have been an IEEE PES member for at least 10 years with tangible and visible achievements in this area.

This award consists of a plaque and a cash prize of \$3,000 USD.

Supporters: Friends and colleagues of Prabha S. Kundur

Current Committee Members:

Based on available information

Nikos Hatziargyriou(Chair) Göran Andersson Federico Milano Costas Vournas

Past Recipients:

- 2018 Vijay Vittal
- 2019 Constantine Vournas
- 2020 Michael J. Gibbard
- 2021 David J. Hill
- 2022 Thierry Van Cutsem

IEEE PES Prabha S. Kundur Power System Dynamics and Control Award

MANI V. VENKATASUBRAMANIAN

2023 Recipient

For the development of synchrophasor based monitoring of power system oscillations that are used in grid control centers all over the world

MANI V. VENKATASUBRAMANIAN is a Boeing Distinguished Professor in Electrical Engineering at Washington State University (WSU), Pullman, WA. He also serves as the Director of the Energy Systems Innovation Center (ESIC) at WSU and holds a joint appointment as a Chief Scientist at Pacific Northwest National Lab. He received his M.S. and D.Sc. in Systems Science and Mathematics from Washington University, St.Louis, MO, and his B.E. (Hons). In Electrical and Electronics Engineering from Birla Institute of Technology and Science, Pilani, India. He was an invited member of the working groups that studied the 1996 Western interconnection blackouts and the 2003 Northeastern blackout. He serves as the Chair of the IEEE PES Working Group on Power System Dynamic Measurements. He is a Fellow of IEEE and is an elected member of the Washington State Academy of Sciences.



IEEE Power & Energy Society Ramakumar Family Renewable Energy Excellence Award



This award, established in 2011, recognizes outstanding contributions in the field of developing, utilizing and integrating renewable energy resources, particularly those that have minimal carbon footprints, in the national and global energy scenarios. Feeding the electrical energy generated from innovative conversion technologies into conventional utility grids and operating the combined system satisfactorily, plus the effective use of locally available renewable energy resources in remote and rural areas to improve the human living environment are major components in this mix. The need to stimulate and encourage activity towards these goals is the primary objective of this award.

Recipients must be members of IEEE and PES with clearly

identifiable and valuable contributions in the field of renewable energy.

This award consists of a plaque and cash prize of \$2,500 USD.

Supporter: The Ramakumar Family

Current Committee Members:

Based on available information

Charles Smith (Chair) Hannele Holttinen Ben Kroposki Nick Miller Antje Orths Mohammad Shahidehpour

Past Recipients:

- 2018 Nicholas W. Miller
- 2019 Mohammad Shahidehpour
- 2020 Benjamin Kroposki
- 2021 Mukesh Nagpal
- 2022 Miroslav M. Begovic

IEEE Power & Energy Society Ramakumar Family Renewable Energy Excellence Award

SUDIP K. MAZUMDER

2023 Recipient

For contributions to high frequency link power conversion and control technologies for renewable energy

SUDIP K. MAZUMDER received his Ph.D. degree from Virginia Tech in 2001. Since 2001, he has served as a Professor at the University of Illinois Chicago (UIC) and the Director of the Laboratory for Energy and Switching-Electronic Systems (LESES). He also serves as the President of NextWatt LLC since 2008. He has around 30 years of professional experience encompassing academia and leading industries.

He is a Fellow of IEEE (2016), Fellow of AAAS (2020), and Fellow of AAIA (2022). He has developed new high-frequencylink (HFL) power conversion and multi-scale control technologies that make renewable-energy systems more reliable, efficient, compact, lightweight, and economical. The applications of such technologies encompass but are not limited to renewable



and alternative energy, electric vehicles, solid-state transformers, energy storage, and offshore wind.

He served as a Distinguished Lecturer for the IEEE Power Electronics Society (PELS) between 2016-2019. He is the current Editor-at-Large for IEEE Transactions on Power Electronics, the leading journal in power electronics. He serves as an Administrative Committee Member and a Member at Large for the IEEE Power Electronics Society (PELS) since 2015 and 2020, respectively. He also serves as the General Chair for the 2023 IEEE 14th International Symposium on Power Electronics for Distributed Generation Systems (PEDG 2023) and served as a Chair for the PELS' Technical Committee on Sustainable Energy Systems between 2015-2020.

He is also the recipient of several IEEE awards including 2023 IEEE Power & Energy Society's Ramakumar Family Renewable Energy Excellence Award, IEEE Transactions on Power Electronics Prize -Paper Awards (2022, 2002), and IEEE International Future Energy Challenge Award (2005). He is the recipient of UIC's highest awards: Distinguished Researcher of the Year (2020), Inventor of the Year (2014), University Scholar (2013). He is also the recipient of U.S. ONR Young Investigator Award (2005) and U.S. NSF CAREER Award (2003).

IEEE PES Robert P. Noberini Distinguished Contributions to Engineering Professionalism Award



The IEEE PES Robert P. Noberini Distinguished Contributions to Power Engineering Professionalism Award was established in 2006 to honor members of the power engineering profession for long term dedicated effort and outstanding accomplishments in advancing the aims of IEEE professional activities in the IEEE Power & Energy Society (PES). The award is named for Robert Noberini in recognition of his many years of service to IEEE and PES.

To be eligible, recipients should be at least IEEE Senior Members and professionals of engineering. Selection for the award is based on the dedication, effort, quality and most particularly on clearly successful accomplishment and achievement in advancing the social, economic, legal and ethical aims of the IEEE professional activities. In particular,

factors to be considered include time as IEEE volunteer, contributions to Power Engineering activities, contributions to IEEE activities, IEEE member grade and PES membership.

This award consists of a plaque, and a travel stipend of up to \$1,500 USD.

Supporters: Donors to the PES Award Endowment Fund

Current Committee Members:

Based on available information

Robert Dent (Chair) John Paserba Roger Sullivan

Past Recipients:

Complete listing is available on website

2015 John J. Paserba2018 Elizabeth T. B. Johnston2022 Simay Akar

IEEE PES Robert P. Noberini Distinguished Contributions to Engineering Professionalism Award

MARKO DELIMAR

2023 Recipient

For contributions and leadership to IEEE and PES professional activities in support of Student Members and Public Policy

MARKO DELIMAR is an electrical engineer, educator and researcher. He holds BSc, MSc and PhD degrees in Electrical Engineering and a Diploma in Management. He is a Full Professor at the University of Zagreb Faculty of Electrical Engineering and Computing, where he's been with the Department of Energy and Power Systems since 1997. He served as a Vice Dean of Education at the University of Zagreb Faculty of Electrical Engineering and Computing and the Head-of-Studies at the University of Zagreb Study Programme of Energy Efficiency and Renewable Energy Sources. He received multiple awards as a researcher, educator, and volunteer. He led and participated in a significant number of R&D projects, ranging from automatic power system topology recognition to substation design, he also participated in the



development of several high-level technology policy and strategy documents, including the National Energy Strategy and National Development Strategy for Croatia. He served as a member of the Steering Committee of the European Technology Platform for Electricity Networks of the Future (ETP SmartGrids). His interests include electric power and energy systems, simulations and modelling, intelligent systems, and engineering education. His current research focuses on analysis and design of smart grid architectures and large-scale integration of renewable energy sources.

Delimar served IEEE, PES, and the technology community in a variety of roles since 1994 and is perhaps best known as a co-creator of IEEEXtreme and IEEE European Public Policy Committee. He served on the IEEE Board of Directors as IEEE Secretary and Region 8 Director. Delimar also served on ten IEEE -level ad-hoc committees bringing innovation and modernization to the organization and technology community, most recently in areas of public policy. He currently serves as a Director (Member of the Board) and Vice President – Programs of the IEEE Foundation.

IEEE PES Roy Billinton Power System Reliability Award



This award was created in honor of Roy Billinton, professor emeritus at the University of Saskatchewan, Canada. Billinton is an IEEE Life Fellow, foreign associate of the U.S. National Academy of Engineering, fellow of the Royal Society of Canada, and fellow of the Canadian Academy of Engineering. He has published over 850 papers and eight books; has given tutorials, presentations, and seminars in over thirty countries; delivered over 100 short courses on system reliability; and served on IEEE PES committees and other industry committees. He has also supervised more than 120 Ph.D. and master's degree candidates who are spread throughout the United States, Canada, and other countries.

Areas covered by the award include modeling, analysis, and data

development to quantify power system reliability, and assessments to plan and operate reliable electric utility generation, transmission, distribution systems, or interconnected power system grids.

The recipient of the IEEE PES Roy Billinton Power System Reliability Award receives a plaque and a cash prize of \$3,000 USD.

Supporter: Past students, other associates of Dr. Roy Billinton and selected organizations

Current Committee Members:

Based on available information

George J. Anders (Chair) Ali Chowdhury Albert C. Gerber de Melo Mark Gerald Lauby Peng Wang

Past Recipients:

- 2018 George J. Anders
- 2019 Joydeep Mitra
- 2020 Milorad Papic
- 2021 Chongqing Kang
- 2022 Ali Asraf Chowdhury

IEEE PES Roy Billinton Power System Reliability Award

ALEXANDER W. SCHNEIDER, JR.

2023 Recipient

For development of methodology and implementation of IEEE Standards on transmission and generation failure reporting and analysis

ALEXANDER W. SCHNEIDER, JR. received bachelors and master's degrees in electrical engineering from Northwestern University and an MBA from the University of Chicago. He was licensed as a Professional Engineer in 1972. He was employed by Commonwealth Edison Company from 1968 to 1998, Mid-America Interconnected Network from 1998 to 2005, Reliability First in 2006, TRC from 2006 to 2012 and Quanta Technologies from 2012 to 2016, when he retired. He has also consulted for various clients.

IEEE roles included chairing the Reliability, Risk and Probability Applications Subcommittee from 2006 to 2009 and the Analytic Methods in Power Systems Committee from 2017 to 2018. He is a Life Fellow of IEEE and has published about 20 technical papers in IEEE and other journals.



Mr. Schneider's contributions to power system reliability included participation in EPRI RP-1468-2 "Investigation of models forecasting frequency and duration of multiple outages on the EHV network"; leadership in the development and updating of IEEE Standards 859 and 762 in that area; and negotiating regional efforts in collecting and analyzing data on EHV outages to assess the likelihood of coinciding outages leading to blackout. He has also worked in impact studies, dynamic simulations and thermal ratings of substation equipment, and conducted training classes in his fields of interest.

IEEE PES Uno Lamm High Voltage Direct Current Award



The IEEE PES Uno Lamm High Voltage Direct Current Award was established in 1980 by the recommendation of the DC Transmission Subcommittee. It provides a means for special recognition of those outstanding engineers and scientists who have contributed to the advancement of high voltage direct current (HVDC) technology.

The award is named for the man most responsible for the research and development that led to the first practical application of an HVDC connection between AC systems. The keys to the solution of this problem were the development of an electric valve which could be used in high capacity, high voltage converters, and a fundamental system technology. This

outstanding engineer and scientist was Dr. Uno Lamm, an IEEE Fellow and the 1965 recipient of the Benjamin Lamme Medal.

Dr. Lamm graduated from the Royal Institute of Technology, Stockholm, in 1927 and acquired his Doctorate of Technology in 1943. He joined ASEA in 1928 with the task of developing mercury arc rectifiers as an early assignment. During his career with ASEA, he received progressively more responsible appointments: head of the Rectifier Department; head of ASEA's Nuclear Department; Electrotechnical Director; and Consultant to the President of ASEA. Dr. Lamm passed away in 1989 at the age of 85.

The IEEE PES Uno Lamm HVDC Award consists of a bronze medal, a plaque and cash prize of \$1,000 USD.

Supporters: IEEE Power & Energy Society, Hydro-Quebec, ABB Power Systems and General Electric

Current Committee Members:	Past Rec	Past Recipients:	
Based on available information	Complete la	isting is available on website	
Abhay Kumar (Chair)	2018 H	ong Rao	
Carl Barker	2019 A	bhay Kumar (Jain)	
Mike Barnes	2020 H	artmut Huang	
Marcus Haeusler	2021 H	ans Bjorklund	
Rao Hong	2022 C	olin Davidson	
Vajira Pathirana			
Mohamed Rashwan			
Maryam Salimi			

IEEE PES Uno Lamm High Voltage Direct Current Award

RAMBABU ADAPA

2023 Recipient

For advancing DC system representation in transient stability and electromagnetic transient programs, forwarding research in conversion of AC lines to DC lines, and for advancing HVDC related education globally

RAMBABU ADAPA is a Technical Executive in the Power Delivery and Utilization Sector at EPRI. His research activities focus on High Voltage Direct Current (HVDC) transmission, Flexible AC Transmission Systems (FACTS), Custom Power, and Fault Current Limiters.

Dr. Adapa joined EPRI in 1989 as a Project Manager in the Power System Planning and Operations program. Later he became Product Line Leader for Transmission, Substations, and Grid Operations where he developed the research portfolio and business execution plans for the Grid Operations and Planning areas. Some of the tools in this portfolio included market restructuring, transmission pricing, ancillary services, and security tools to maintain the reliability of the grid.



Before joining EPRI, Dr. Adapa worked at McGraw-Edison Power Systems (presently known as Eaton's Cooper Power Systems) as a Staff Engineer in the Systems Engineering Department.

Dr. Adapa received a BS degree in electrical engineering from Jawaharlal Nehru Technological University, India, an MS degree in electrical engineering from the Indian Institute of Technology, Kanpur, India, and a PhD in electrical engineering from the University of Waterloo, Ontario, Canada.

Dr. Adapa is an IEEE Fellow and has been honored several times by IEEE for his outstanding contributions to the profession. He received the 2016 IEEE PES Nari Hingorani Custom Power Award. He has authored or coauthored more than 125 technical papers and is an IEEE Distinguished Lecturer. He is an individual member of CIGRE and a Registered Professional Engineer.

IEEE PES Wanda Reder Pioneer in Power Award



The IEEE PES Women in Power Committee was created to foster a more diverse leadership by supporting career advancement, networking, and education of women in the electric power and energy industry. One important way this mission is supported is through the formal recognition of a worthy female member of this community.

The IEEE PES Wanda Reder Pioneer in Power Award seeks to recognize a deserving female in the field of power engineering. The award is intended to provide visibility to the awardee's efforts, accomplishments, and future potential while empowering her to be an inspiration and role model for other women in the industry. The award is in honor of the first female president of IEEE PES, Ms. Wanda Reder.

In addition to recognizing the recipient, the award brings attention to

the value of fostering a diverse talent pool. It further empowers the recipient to have a greater influence on the growth and development of others in the industry.

The recipient of this award must be female and at least senior members of the IEEE PES with tangible and visible achievements in one or more of the following:

- Innovation and technology development
- Entrepreneurship and innovative business models
- Education and mentorship
- Related achievements

The awardee will receive a plaque and cash prize of \$1,500 USD.

Supporter: S&C Electric Company

Current Committee Members:

Based on available information

Ruomei Li (Chair) Liisa Haarla Lisien Leon Quillas Meliha B. Selak Jennifer T. Sterling Zhongdong Wang

Past Recipients:

- 2018 Bhuvaneswari Gurumoorthy and Marina Modello
- 2019 Ruomei Li
- 2020 Yilu Liu
- 2021 Marianela Herrera Guerrero
- 2022 Dipti Srinivasan

IEEE PES Wanda Reder Pioneer in Power Award

JOHANNA L. MATHIEU 2023 Recipient

For her innovations in technologies and strategies for integrating distributed energy resources, and her successful mentoring of diverse students in the energy field

JOHANNA L. MATHIEU is a associate professor of Electrical Engineering and Computer Science at the University of Michigan, Ann Arbor. Prior to joining Michigan, she was a postdoctoral researcher at ETH Zurich, Switzerland. She received her PhD and MS from the University of California at Berkeley and her SB in Ocean Engineering from MIT. She is the recipient of an NSF CAREER Award, the Ernest and Bettine Kuh Distinguished Faculty Award, and the UM Henry Russel Award. Her research focuses on ways to reduce the environmental impact, cost, and inefficiency of electric power systems via new operational and control strategies. She is particularly interested in developing new methods to actively engage distributed flexible resources such as energy storage, electric loads, and distributed renewable resources



in power system operation, which are especially important in power systems with high penetrations of intermittent renewable energy resources such as wind and solar. She serves as Chair of the IEEE PES Technical Committee on Smart Buildings, Loads, and Customer Systems.

IEEE Power & Energy Society Outstanding Student Scholarship

This scholarship recognizes PES student members from around the world who have chosen an academic path leading to an electric power and energy engineering career. Recipients were chosen based on their academic achievements, contributions to meeting community and humanitarian needs, and leadership in advancing student engagement within PES. All recipients will receive \$10,000 USD cash prize, as well as complimentary housing and conference registration at a corresponding PES Regional Conference.

Supporter: IEEE Power & Energy Society

AUGUSTO ZANIN BERTOLETTI, (Region 6) has received the M.S. degree in electrical engineering from Washington State University Vancouver and is enthusiastic about power systems and their role in shaping energy's future. His research interests include power system protection, resilience, and planning, as well as grid integration of renewable energy and energy storage systems. He has extensive volunteering experience with IEEE PES, serving in various leadership and organizational roles. He has conducted research on distributed energy resource planning and resilient operation of electrical systems during wildfires, contributing to the modeling, simulation, and optimization of power grids under different scenarios and challenges.





MISWAR SYED, (Region 7) is a first-year master's student in the Department of Electrical & Computer Engineering at the University of Waterloo, Canada. He is an IEEE member, Student Energy Fellow, member of the Waterloo Institute for Sustainable Energy (WISE), and a TEDx Speaker. Miswar has received multiple awards and is a passionate researcher interested in renewable energy, energy storage, green hydrogen, and ammonia. He is a published author and has presented at international IEEE conferences in Australia, Switzerland, Spain, Finland, Saudi Arabia, and India. Furthermore, Miswar has experience working in Fortune 500 and startups in the clean energy space. As an inventor and co-founder of a cleantech startup, Miswar strongly believes that startups will play a crucial role in achieving a successful clean energy transition.

YITONG LIU, (Region 10) is currently working toward her master's degree in electrical engineering with the School of Electrical Engineering, Shandong University, Jinan, China. She has a strong background in power engineering and her research topics include power flow analysis and optimal operation of microgrids. With advancing her research, she has published four papers in high-quality journals, including two in IEEE Transactions on Power Systems, one in IEEE Transactions on Smart Grid, and one in IEEE Transactions on Industry Applications. She actively participates in the activities held by IEEE PES and its Jinan and other branches. She delivered her oral at many international conferences related to electric power engineering.



Current Committee Members: *Based on available information* Lalit Goel Karanjit Kalsi Dafang Zhao Yi Wang Junbo Zhao Pannala Sanjeev Riu Fan Yan Li

IEEE Power & Energy Society Outstanding Student Scholarship



XUANMAN RONG, (Region 10) a M.Eng student from Xi'an Jiaotong University, China, majors in Electrical Engineering, high resilience power & energy system. Her research interests cover the resilient high-renewable power system against the extreme event, focusing the reliability and resilience assessment. She proposed a resilience evaluation of active distribution systems considering microgrid formation based on the grid-edge DERs, and reliability evaluation of distribution system based on the graph theory.

She is very enthusiastic in PES activities with great accomplishment in promoting student engagement, as a key volunteer of PES Xi'an Chapter and PES China Chapter Council. She would set a good example to young women students in terms of IEEE, IEEE PES and WIP spirits.

SIENNA SHI, (Region 5) is a Master's student in Electrical Engineering at Texas A&M University, supervised by Dr. Le Xie. She holds a B. Sc degree in Electrical and Computer Engineering from Oregon State University, obtained in 2021. Sienna's research focuses on using machine learning techniques to model flexible load behaviors, such as residential demand response and large flexible loads. Alongside her studies, she works as an associate engineer at ERCOT in the resource forecasting and analysis team. Sienna interned with ERCOT in the Summer of 2022 and was awarded the ERCOT Joe Weatherly Scholarship in the same year. She also gained internship experience at RRC Power and Energy from March 2020 to June 2021 and Clean Water Services from June 2021 to December 2021.





NAVEED UNAR, (Region 6) is a young engineering professional with diversified experience in the electrical power industry. His leadership endeavors and research contributions have given him a strong foundation for developing solutions that work at the intersection of research, policy, and strategy. He has performed in Pakistan's premier federally regulated power transmission and dispatch and as a Fulbright Scholar in California. He authors seven research papers and has completed multiple academic and professional projects.

Naveed is an experienced power system planning and development professional. He is currently working on electricity policy and planning reforms in South Asian countries addressing long-term energy crises.

JÁNOS GIANONE, (Region 8) (born in 1999, Hungary) is a graduate student in energy engineering at Budapest University of Technology and Economics. His scientific work focuses on thermal power technologies, particularly geothermal power plants. In addition to his studies, he also tutors and conducts research at the Department of Energy Engineering. He has presented his papers at various national and international conferences.

Since 2019, Janos has been a member of the local IEEE Jt. IAS/PES Student Branch Chapter, and he has served as a board member for three terms. He has organized numerous lectures, site visits, technical days, and social events. Janos is also actively involved in leading youth communities and participating in the activities of several voluntary organizations.



IEEE PES Prize Paper Award

Each year, every Technical Committee of the Technical Council is encouraged to nominate one Transactions paper for the Society-Level PES Prize Paper Award. In addition, each Editor-in-Chief (EIC) of a PES Journal can nominate one Transactions paper for the Society-Level PES Prize Paper Award.

Typically, two PES prize papers are awarded each year. Only transactions papers published in one of the seven PES journals are eligible to be nominated.

The IEEE PES Prize Paper Award consists of a plaque for each author and \$200 USD cash prize for a single author; \$100 USD cash prize each for two (2) or more authors.

Supporters: Donors to the PES Award Endowment Fund

Current Committee Members:

Based on available information

Jeffrey Nelson (Chair)

The committee members for this award are made up of the Technical Committee Awards Representatives, Technical Council officers, and PES Journal Editors-in-Chief.

IEEE PES Prize Paper Award

"Energy-Storage Modeling: State-of-the-Art and Future Research Directions"

IEEE Transactions on Power Systems Vol. 37, no. 2, pp. 860-875, March 2022

Authors: R. Sioshansi, P. Denholm, J. Arteaga, S. Awara, S.
Bhattacharjee, A. Botterud, W. Cole, A. Cortés, A. de Queiroz, J.
DeCarolis, Z. Ding, N. DiOrio, Y. Dvorkin, U. Helman, J. Johnson, I.
Konstantelos, T. Mai, H. Pandzic, D. Sodano, G. Stephen, A. Svoboda, H. Zareipour and Z. Zhang

"Multi-Scale Modeling and Simulation of DFIG-Based Wind Energy Conversion System" IEEE Transactions on Energy Conversion Vol. 35, no. 1, pp. 560-572, March 2020

Authors: Yue Xia, Ying Chen, Yankan Song and Kai Strunz

IEEE PES Working Group Recognition Awards

Each Technical Committee of the PES Technical Council can nominate one Working Group to be recognized for outstanding performance in the development of a Standard, Guide or Recommended Practice for the Society Level PES Working Group Recognition Award for Standard or Guide. The award consists of plaques for the chair and other officers, and a mounted certificate for each Working Group member.

Each Technical Committee of the PES Technical Council can nominate one Working Group to be recognized for outstanding performance in the development of a Technical Report for the Society-Level PES Working Group Recognition Award for Technical Report. The report must be published on the PES Resource Center in the Technical Report template format. The award consists of plaques for the chair and other officers, and a mounted certificate for each Working Group member.

Supporters: Donors to the PES Award Endowment Fund

Current Committee Members:

Based on available information

Jeffrey Nelson (Chair)

The committee members for this award are made up of the Technical Committee Awards Representatives and the Technical Council officers.

IEEE PES Working Group Recognition Awards

Outstanding Standard or Guide

IEEE 2030.11, IEEE Guide for Distributed Energy Resources Management Systems (DERMS) Functional Specification

Prepared by the IEEE PES Transmission & Distribution Committee Published April 2021

> Chair: Geza Joos Vice Chair: Robert Cummings Vice Chair: Anthony Johnson Secretary: James T. Reilly

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Outstanding Technical Report

PES-TR88, Power System Dynamic State and Parameter Estimation-Transition to Power Electronics-Dominated Clean Energy Systems

Prepared by the IEEE PES Power System Operation, Planning and Economics Committee Published July 2021

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IEEE PES Outstanding Chapter Award

This award was created to recognize PES Chapters for achieving excellence in providing the best set of overall programs and activities for its members. The award consists of a chapter banner, plaques for the winning chapter officers and \$1,000 USD for the chapter's future activity. The runner-up chapters receive \$250 USD.

Supporters: Donors to the PES Award Endowment Fund

Small Chapter Category—New ZEALAND NORTH CHAPTER (R10) KATE MURPHY, CHAIR

Overall, PES New Zealand North's activities demonstrate a commitment to promoting the Power & Energy Society's mission and objectives, supporting students and young professionals, promoting women in engineering, and engaging with the community.

PES New Zealand North (NZN) has a strong affiliation with students and young professionals, as evidenced by the fact that IEEE Young Professionals and New Zealand's local Young Energy Professionals network were invited to attend the opening panel at EGRID 2022 free of charge. PES NZN also promotes women in engineering across all activities, ensuring that every single activity in 2022 had at least one female presenting or chairing the activity.

The main highlights for 2022 included:

- Organized a total of 11 technical activities, including hosting EGRID 2022 and through hosting a DLP webinar. EGRID 2022 hosted over 150 delegates from 15 countries, representing 21 organizations and over 25 activities
- Sponsored student STEM outreach in conjunction with Wonder Project NZ, by inviting PES student members & Young Professionals to attend an ambassador training, recruitment and networking event
- Continued to promote Women in Engineering (WIE) through ensuring every activity hosted in 2022 had a female participating as a chair or speaker. PES NZN Chapter also hosted a dedicated panel session at EGRID 2022 for women to share their experiences across working in the industry
- Maintained engagement with members, promoting events, volunteers and outreaching broader professional associations through LinkedIn Pages
- Year over year membership growth of 8%

RUNNER-UP Miami Chapter (R3) and Lebanon Chapter (R8)

IEEE PES Outstanding Chapter Award

Large Chapter Category—UK & IRELAND CHAPTER (R8) JIANING LI, CHAIR

The year 2022 was very successful for the UK and Ireland PES Chapter, supported by a dynamic and active committee consisting of 13 people. Overall, the chapter organized 43 activities including 15 technical events, 11 regular monthly administrative meetings and 1 annual general meeting. As part of the Distinguished Lecturer Program, the UK and Ireland PES Chapter organized 6 events with attendees spread in various locations with the following speakers: Prof Joydeep Mitra (Use of Energy Storage for Reliability Improvement of Renewable Generation), Dr Siri Varadan (The Power of Data Analytics in Electric Utilities - An Industry Perspective), Dr. Kalyan Sen (SMART Power Flow Controllers - A Necessity for Future Power Grid, 3 talks at University College Dublin, University of Birmingham and Brunel University, London) and Prof. Jihong Wang (Longer Duration Energy Storage for Decarbonising Future Grid and Overview of Compressed air Energy Storage).

The chapter continuously worked with PES student branches in arranging and hosting events. The PES Chapter has an active programme in Student Branch PES Chapter retention and growth. Currently the Chapter has 6 active Student Branch Chapters and the creation of the SBC Technological University Dublin has started with the appointment of Dr. Arash Beiranvand as its Counsellor.

The Student Branch PES Chapters have become the engine of the Chapter. SB Chapter Chairs are invited to the Monthly Committee meetings to ensure total coordination of activities. In this way, the Chapter ensures that the required technical, logistical and financial support is provided. The Chapter is committed to continue working alongside the Student Branch Chapters and replicating this model within the whole Section geography.

In addition, the chapter has supported a number of initiatives, e.g., Women in Power Committee, Career Networking from Academia to Industry, and etc, promoting affinity groups and PES in general. In June they supported the 17th International Conference on Probabilistic Methods Applied to Power Systems, PMAPS 2022 and in November the Manchester Energy and Electrical Power System (MEEPS) Symposium 2022.

RUNNER-UP IN New Orleans Chapter (R5)





Some members of the community



Water storage facility under construction at a residence



Solar panels at a residential building

Monte Adentro Argentina—The Project provides electricity and water access from solar energy sources to address serious challenges now impacting impoverished communities in one of the most deforested areas on the planet. The project will provide water services for 100 households, of which 34 households will receive electricity services, directly serving an estimated 500 people. The main outcomes are improvement of household living conditions, strengthening food security, agriculture, and creating small-scale enterprise opportunities through Productive Uses of the new utility services. Photo Credits: Juan Chalaba



Women selling processed rice in the open market

Shaybis Nigeria Ltd - Omupo Rice Solar Project—Solar energy powered rice milling factory to assist the women rice processors to produce high quality rice.

The project funds: (1) Hardware, including solar panels, batteries, inverters and a Pickman EV mini truck. (2) Rice color sorter & air compressor. (3) related infrastructure necessary to install and power this equipment.

The project will employ 10 members of the Omupo community in its operation, provide the EV transportation of raw and refined rice from fields to the processing plant for refinement & packaging and then to nearby community markets. It will also provide free water to those living around the factory. **Photo Credits: Tunde Salihu**



Measurements being taken for the construction of trusses



Rice color sorter and

compressor

Battery bank



Paras Loomba and technicians at the rooftop solar installation

Commissioning of the completed project

Global Himalayan Expedition (GHE) Nepal—The Project deploys a 10.8KW of a Solar Rooftop Power plant and a 200-liter Solar Water Heater for the school's student dormitory hostel at the Shree Batase Secondary School, Nepal.

Established in 1968, the school is recognized for its high performance with the "School Pass Percentage" at 82% for the year 2021.

The school currently houses a total of 19 working computers for the students in the computer lab.

The 10.8kWp Solar PV system comprising twenty 550Wp Solar modules would be the primary source of energy to power the loads in the school along with charging the energy storage in the form of sixteen 200Ah maintenance free batteries equivalent to 38.4kWh battery bank. The 3 units of 5kVA Hybrid Inverter allows for the conversion of DC electricity to the usable AC electricity to power the loads in the school facility. These 3 units of inverters would be stacked together for a total power output of 15kVA. The system can also be remotely monitored using the GPRS module which would allow for data logging and monitoring of the system using a mobile application. **Photo Credits: Paras Loomba**

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