

2001 Summer Meeting Awards

The IEEE Power Engineering Society (PES) 2001 Summer Meeting Awards Luncheon was held 17 July at the Hyatt Regency Hotel, Vancouver, British Columbia, Canada. Welcoming remarks were given by Summer Meeting general chair Yakout Mansour. IEEE PES president Donald R. Volzka presided over the program, and Noel Schulz, PES Awards and Recognition chair, introduced the awards recipients. IEEE president-elect Ray Findlay attended and presented the IEEE Fellows certificates.

The following awards were presented during the Summer Meeting Awards Luncheon:

- Uno Lamm High Voltage Direct Current Award to Dusan Povh
- Outstanding Power Engineering Educator Award to Charles A. Gross
- Award for Excellence in Power Distribution Engineering to Ronald H. Stillman
- Walter Fee Outstanding Young Engineer Award to Michael R. Ingram
- FACTS Award to Einar Larsen
- PES Meritorious Service Award to Robert A. Dent
- Student Prize Paper Award in Honor of T. Burke Hayes to Henrik Jönsson
- Prize Paper Award for “Broken Conductors Protection System Using Carrier Communication” to E.C. Senger, W. Keiser, J.C. Santos, P.M.S. Burt, and C.V.S. Malagodi
- Working Group Recognition Awards for Outstanding Technical Reports, a tie between “Tutorial on Harmonics Modeling and Simulation,” W. Xu, chair, and “IEEE PSRC Working Group Report on Considerations in Setting Instantaneous Overcurrent Relays on Transmission Lines,” J.R. Boyle, chair
- Working Group Recognition Awards for Outstanding Standards or Guides, a tie between “IEEE Guide for Protective Relay Applications to Transmission Lines,” W.M. Carpenter, chair, and “IEEE Guide for Safety in AC Substation Grounding,” R.P. Keil, chair
- Outstanding Small Chapter Award to Western Australia, T. Law, chair
- Outstanding Large Chapter Award to Puerto Rico and Caribbean, J. Torres, chair
- IEEE Fellow Certificates to Asvini Kumar David and Paolo Marannino.

In addition, George Gela, Kenneth G. Sebra, Gerard L. Schmitt, Philip B. Winston, Thomas J. Overbye, Kristine K. Buchholtz, Laszlo Prikler, Roberto Ramos Lopez, and B. Prasad Singh received Regional Outstanding Engineer Awards during the PES Membership/Chapters Luncheon on 18 July. Awards were also presented to Yang Ye, Joseph T. Mossoba, Jesus

Calrino, and Jorge Hollman for student prize papers/posters at the Student/Faculty/Industry Luncheon on 18 July.

This article is a summary of the awards presented at all of these events.



Uno Lamm HVDC Award

Dusan Povh received the Uno Lamm High-Voltage Direct Current Award for “engineering accomplishment through imagination and truth.”

The award was established in 1980 by the IEEE Power Engineering Society on 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.



Dusan Povh, recipient of the Uno Lamm High-Voltage Direct Current Award

The award is named for the man most responsible, as an engineer and manager, 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 that 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 died in 1989 at the age of 85.

At the invitation of the subcommittee, ASEA of Sweden provided the initial funds that were used to underwrite this award. In order to sustain this important award and to permit selection of a medalist every year, the subcommittee solicited additional funds from selected manufacturers and electric utility companies.

The Uno Lamm HVDC Award consists of a bronze medal, an engraved certificate, and an honorarium of \$1,000.

Past recipients of the award include Erich Uhlmann (1981), John D. Ainsworth (1983), Narain G. Hingorani (1985), Karl-Werner Kanngiesser (1987), Aleska Gavrilovic (1989), Glenn D. Breuer (1990), Birger Funke (1991), Carlos A. De O. Peixoto (1992), Donald M. Demarest (1993), Thomas E. Calverley (1994), Åke Ekström (1995), John Reeve (1996), Jos Arrillaga (1997), Tadashi Senda (1998), and Chandra Krishnayya (1999).

Dusan Povh received his Dipl.-Ing. degree from the University of Ljubljana/Slovenia in 1969 in the field of power engineering and his Ph.D. from the Technische Hochschule Darmstadt, Germany in 1972. Since 1985 he has been a full professor at the University of Ljubljana and, since 1995, a guest professor at Tsinghua University in Beijing, China. He teaches in the fields of power systems, HVDC, FACTS, and power quality. During his career, he has published over 170 technical papers in international reviews and at conferences.

In 1962, he joined Siemens Company in Germany as the development engineer for system planning and system analysis. He was involved from the very beginning in the development of HVDC technology at Siemens and participated in the design of HVDC schemes, Cahora Bassa, the first large HVDC scheme using thyristor valves, and Nelson River II. Later he became responsible for the research and development group in the field of HVDC. In this position, he also started the development of FACTS technology. He was responsible for the design and delivery of Hingorani's NGH scheme for damping of subsynchronous oscillation, the first FACTS application world-wide. Later he became general manager of the Siemens HVDC and FACTS Sales division, responsible for a number of projects with advanced technology applications.

In 1987, he became the president of Siemens Planning division, responsible for studies, expert reports, research, and development of all fields of engineering for public and industrial power systems. In the division, the new generation of advanced hybrid and enhanced fully digital real-time simulators has been developed and applied to many large HVDC and FACTS projects. Under his responsibility, power electronics for improvement of power quality was developed. After retirement from

Siemens in 2000, he has remained active as a consultant in the field of power system analysis, HVDC, FACTS, and power quality development and projects.

He is very active in a number of international technical organizations. He is an IEEE Fellow and has served in the DC Transmission Subcommittee and many IEEE working groups. In the German Engineering Society, he is chair of the Transmission and Distribution Subcommittee. In Cigré, he has worked in a number of working groups as a convenor or member. He is also the chairman of Cigré Study Committee 14 on HVDC and FACTS.

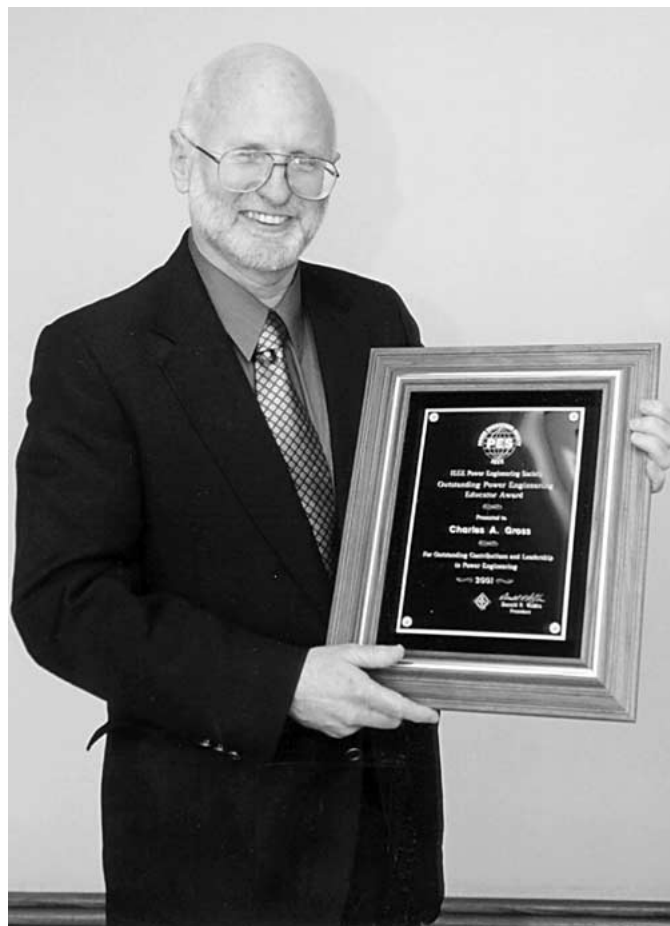


Outstanding Educator Award

Charles A. Gross received the Outstanding Power Engineering Educator Award "for outstanding contributions and leadership in power engineering education."

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

The award is given to individuals who have performed classroom instruction in electrical engineering at a college or university with an accredited electrical engineering program or equivalent and who have been a member of PES for at least one year. Candidates be nominated by any PES member and endorsed by the chapter or technical committee of which the individual is a member.



Charles A. Gross, recipient of the Outstanding Power Engineering Educator Award

The award consists of a plaque designating recipient, award, and honorarium.

Past recipients of the award include Hermann W. Dommel (1989), Herbert H. Woodson (1990), Arun G. Phadke (1991), Roy Billinton (1992), Abdel-Aziz A. Fouad (1993), Anjan Bose (1994), Gerald Heydt (1995), S.S. Venkata (1996), Peter W. Sauer (1997), Chanan Singh (1998), Mohamed E. El-Hawary (1999), and Vijay Vittal (2000).

Charles A. Gross received his B.S. in physics in 1960 and his B.S. in electrical engineering in 1961, both from the University of Alabama, and his M.S. and Ph.D. in electrical engineering from the University of Missouri at Rolla in 1966 and 1969, respectively.

He taught electrical engineering at the University of Missouri at Rolla from 1962 to 1972. In 1972, he joined the faculty at Auburn University in Auburn, Alabama, where he is currently Square D Power Professor of Electrical and Computer Engineering. In the summers and on leave from Auburn, he has worked with General Electric, TVA, Southern Company Services, ABB, Los Angeles Water and Power, the Naval Ordnance Test Station, and Alabama Electric Cooperative. During his career, his research interests have included many aspects of power system modeling and analysis, with special emphasis on the development of computer solutions to general power system problems and specifically to electromechanical devices. On the basis of this research, he has authored or coauthored with students and colleagues over 50 technical papers. He is well known in the power engineering community for his basic, carefully crafted textbook, *Power System Analysis*.



Ronald H. Stillman, recipient of the Award for Excellence in Power Distribution Engineering

During 1986-1988, while on leave at the U.S. Military Academy, he received the Outstanding Civilian Service Medal from the Department of the Army. His alma mater, the University of Alabama, selected him for a Department of Electrical Engineering Outstanding Fellow Award in 1991 and a College of Engineering Distinguished Fellow Award in 1996. In 1999, he was elected to the Academy of Electrical Engineering at the University of Missouri at Rolla. His students and peers, at both Auburn University and the University of Missouri at Rolla, have consistently cited him for outstanding teaching, resulting in ten awards for teaching excellence. These awards have spanned five decades.



Award for Excellence in Power Distribution Engineering

Ronald H. Stillman received the Award for Excellence in Power Distribution Engineering.

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

Since many people have contributed to the advancement of distribution technology, this award is not named in honor of one individual. It is awarded annually by the IEEE PES to recognize the individual who has made a remarkable engineering contribution to the field of distribution technology. The selection committee considers all candidates brought to its attention whose work will result in substantial improvements to the effectiveness and utilization of power distribution.

A bronze plaque is presented to the recipient. The recipient also designates, together with PES, a \$4,000 scholarship to an accredited degree program in a curriculum related to the power engineering field. Student selection will be mutually agreed upon by the award recipient and PES.

The award is funded by long-term grant commitments received from the Asplundh Co., Chance Co., Commonwealth Edison Co., Georgia Power Co., Kearney-National Inc., Pacific Gas & Electric Co., PECO Energy Co., and the S&C Electric Co.

Past recipients of the award include Sidney R. Gilligan (1989), Paul L. Pearson, Jr. (1990), Harvey W. Mikulecky (1991), Jack H. Lawson (1992), William E. Shula (1993), John R. Conrad (1994), Franco Reggiani (1995), James J. Burke (1996), Joseph L. Koepfinger (1998), John G. Anderson (1999), and Daniel J. Ward (2000).

Ronald H. Stillman is an adjunct professor with the School of Electrical Engineering at the University of New South Wales, Australia, and a partner in a consulting practice specializing in power system risk engineering, forensic investigation, and statistical analysis. He received his M.S. and Ph.D. degrees in electrical engineering from the University of Queensland, Australia, in 1997 and 1990, respectively. He is a Senior Member of IEEE and a Fellow of IE Australia.

He began as an apprentice with Associated Electrical Industries (BTH Co.) in switchgear and transformers, and then joined the State Electricity Commission of Victoria as a cadet engineer (for 2 years), followed by 8 years as an engineer in transmission and distribution design, operation, and construction. For 28 years, he was with Northern Rivers Electricity, a generation, transmission, and distribution utility servicing northern New South Wales, where he progressed from system maintenance engineer to chief engineer and assistant general manager. During this time, he was

involved with the development of wood pole 132 kV and 66 kV transmission lines utilizing insulation coordination and risk-based design methods, later the subject of his Masters research (“The Application of Lightning Research to Wood Pole Lines”). The basis of his doctorate research program (“Risk and Failure Analysis of Widespread Overhead Distribution Systems”) was enhanced lightning and coordinated protection for the distribution system, centralized load control, and supervisory and data acquisition for remote hydro generation and distribution system operation and the system failure analysis method.

He has served on the Cigré and Australian Standards committees for lightning arresters and insulators, and on government regulatory bodies concerned with overhead line construction and maintenance. His consulting and research work has been in the areas of probabilistic risk design of line structures, wood pole population life studies, optimal maintenance modeling, forensic reporting (electrical accidents), probability applied to causation in law, evaluation of bush fires due to power line failure, and modeling end user price-cost relationships by time of day. He has given seminars at industry workshops and universities in Australia and overseas on these subjects. He has published 16 papers, five monographs, and a text with Professor Carolyn Sappideen, *Liability for Electrical Accidents: Risk, Negligence, and Tort*.



Walter Fee Outstanding Young Engineer Award

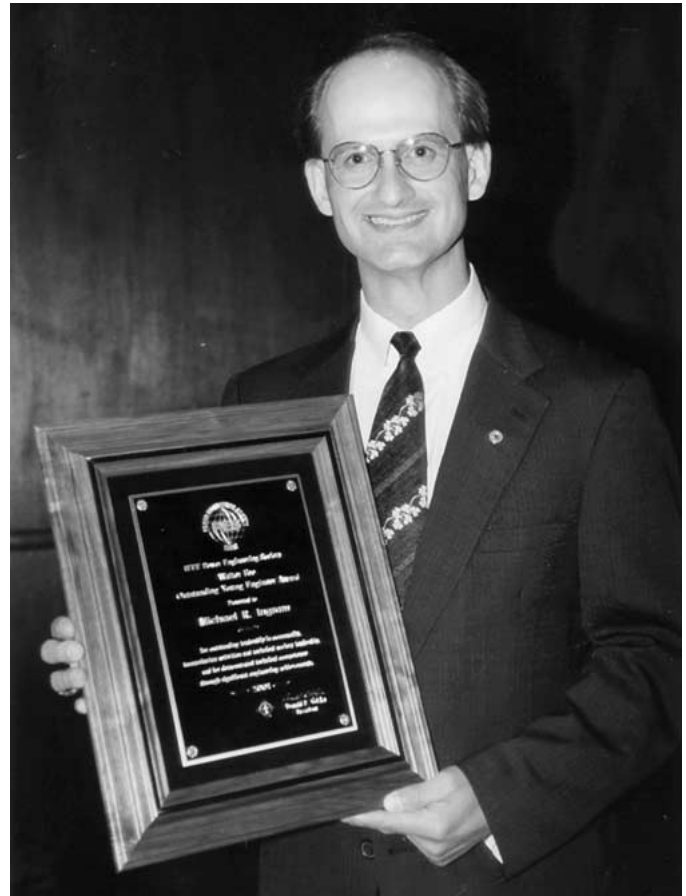
Michael R. Ingram received the Walter Fee Outstanding Young Engineer Award.

The award is for outstanding contributions in the leadership of technical society activities including local and/or transactional PES and other technical societies, leadership in community and humanitarian activities, and evidence of technical competence through significant engineering achievements. Candidates for this award must be 35 years of age or under on 1 January of the year the award is presented. Candidates must be nominated by any PES member and endorsed by the chapter or technical committee of which the individual is a member. One must be 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.

This award consists of a plaque designating recipient and award. The recipient will designate a college or university with an accredited program in electrical engineering or equivalent to receive a \$5,000 scholarship for an electrical engineering undergraduate.

Past recipients of the award include Pierre Bornard (1988), Ali Nourai (1989), John G. Kappenman (1990), Kwa-Sur Tam (1991), Mark Lauby (1992), Tom Overbye (1993), Lei Wang (1994), Mariesa L. Crow (1997), Craig Joseph Olejniczak (1998), Miguel Velez-Reyes (1999), and Christopher Wayne Hickman (2000).

Michael R. Ingram is the manager of Transmission Performance and Asset Utilization Technologies with the Tennessee Valley Authority (TVA) in Chattanooga, Tennessee. He is responsible for research, development, and demonstration of new technologies that improve electrical quality and reliability, increase power flow, and reduce operating expenses of the TVA transmission system. In his research projects, his developments have netted TVA and its customers an estimated \$100 million in avoided costs. He has been with TVA for 14 years, working in technical project management, protection and control engineering, and substation design.



Michael R. Ingram received the Walter Fee Outstanding Young Engineer Award

He is a senior member of the Power Engineering Society and participates in the Standards Coordinating Committee 22 on Power Quality, the working group on “Economic and Technical Analysis Methods for Transmission-Only Entities,” and the P1409 working group on “Distribution Custom Power Task Force.” He has written several technical papers and articles within his area, including “Correlating Voltage Sags with Line Faults and Lightning,” which appeared in the April 2001 issue of *IEEE Computer Applications in Power* magazine. Michael is also a participant in the Cigré SC 12.23 TF3 “Transformer Lifetime Data Management.”

His involvement in community and humanitarian activities includes being the Region 3 representative to the IEEE Pre-College Education Committee, a member of advisory boards to the local university and technical college, a Boy Scout and Girl Scout volunteer, and 12 years of experience as a state and national quality examiner. In addition, he has taught “English as a Second Language” (ESL) and led Royal Ambassadors at his local church.

He served as chair of the Electric Power Research Institute (EPRI) International Power Quality Application Conference, held in Memphis, Tennessee in 2000. He now chairs the EPRI targets “Customer Power Conditioning Solutions” and “Substation Asset Utilization.”

He received the B.S. degree in electrical engineering, with honors, from Auburn University and the M.S. degree in engineering management from the University of Tennessee at Chattanooga. Selected this year as the TVA “Engineer of the Year,” Ingram was a 2001 top-ten finalist for “Federal Engineer of the Year.” A Millennium Medal recipient, he was recognized as the

“1997 Outstanding Power Engineer of the Year” by the Chattanooga Section Power Engineering Society chapter. In 1996, he was selected “Chattanooga-Area Young Engineer of the Year.” Michael resides in Harrison, TN with his wife Lorie and daughter Breanna.



FACTS Award

Einar Larsen received the Flexible AC Transmission System (FACTS) Award.

The award is granted for major contributions to the state of the art of Flexible AC Transmission System (FACTS) Technology and its applications.

Power electronics is making a major impact on future power systems through application in transmission, distribution, and small generation. Applications in transmission include HVDC and FACTS. Since the introduction of the FACTS concept (the IEEE definition of FACTS is “alternating current transmission systems incorporating power-electronics-based and other static controllers to enhance controllability and power transfer capability”), the technology has been moving ahead at an increasing pace. Very significant near- to long-term benefits are now recognized on a worldwide basis. The Uno Lamm Award is well established for HVDC. The FACTS Award is for individuals who have made a major contribution to the state of the art of FACTS technology and its applications.

The FACTS Award consists of a commemorative plaque and \$1,000. The award is funded by contributions from the following



Einar Larsen recipient of the FACTS Award

companies: Hingorani Power Electronics, EPRI, Westinghouse, GEC-UK, Siemens-Germany, GE Power Systems, and ABB.

Previous recipients are Laszlo Gyugyi (1999) and David John Young (2000).

Einar Larsen is a principal consultant with GE Power Systems in Schenectady, New York. He has been with GE since 1974, mostly with their system engineering group.

He gained electric utility experience by participating in the Pacific Gas and Electric Company’s summer engineering program in 1972 and 1973. A native of California, he graduated from Cal Poly State University, San Luis Obispo in 1974. He obtained his M.S. in power from Rensselaer Polytechnic Institute in 1974.

His early responsibilities with GE focused on generator excitation systems, where he developed concepts subsequently used for power system stabilizer applications around the world. He also made contributions to subsynchronous resonance analysis and developed several new digital computer tools for analyzing power system performance in the frequency domain. He was the primary contributor to developing a solution for interaction between HVDC systems and turbine-generator torsional vibrations, beginning with Square Butte in 1977.

He spent four years with GE’s HVDC Projects Operation in Philadelphia, Pennsylvania, where his responsibilities included analytical support for HVDC and static var control applications. After returning to Schenectady in 1984 he contributed to a wide variety of system engineering problems, often as a consultant to utility companies. Highlights include evaluation of multiple SVC installations on the Hydro-Quebec system and consulting on special problems with the Quebec-New England multi-terminal HVDC system.

During the 1990s, he was active in the industry thrust to apply power electronics to the transmission grid in new ways, termed “FACTS.” He led much of GE’s design effort for the large thyristor-controlled series capacitor project in Oregon, as well as leading the IEEE working group that created a framework for the industry to deal with FACTS concepts.

Larsen is a Fellow of IEEE, is active in Cigré, has authored many papers, and holds several patents.



PES Meritorious Service Award

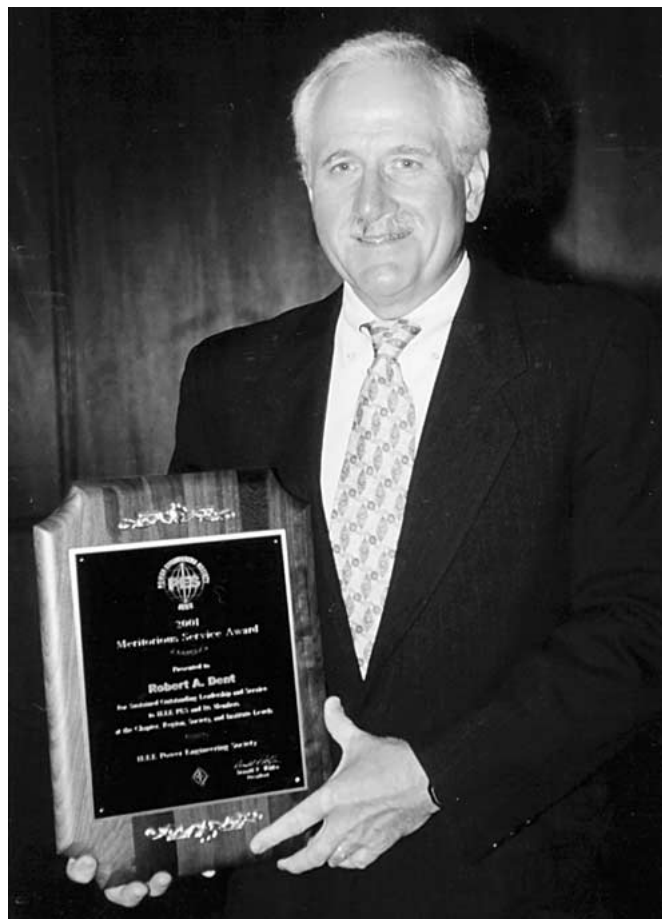
Robert A. Dent, past vice president of IEEE Technical Activities (2000) and past president of PES (1996-1997), received the PES Meritorious Service Award. In presenting the award, Don Russell, PES Nominations and Appointments chair, stated that he counted over 75 different offices and positions that had been held by Bob Dent over a period of 30 years. This most impressive number is probably not exceeded by any previous officer or volunteer of the Power Engineering Society. Some of the most significant positions Bob has held are as follows:

- Vice president of IEEE Technical Activities (2000)
- Member of IEEE Board of Directors (1992-1993 and 2000)
- Division VII director of IEEE (1992-1993)
- president of the Power Engineering Society (1996-1997)
- Chair, IEEE New York Section (1989-1990)
- Chair, New York/Long Island PES/IAS Chapter (1983-1984).

A complete list of Bob’s IEEE activities appears as follows. *Membership:* S’65-M’66-SM’78. *Offices:* Board of Directors,

1992-1993, 2000; Division VII director, 1992-1993; vice president, Technical Activities; IEEE Executive Committee, 2000. *Committees/Boards:* Technical Activities Board, 1992-1997, 1999-2001; chair, 2000, vice chair, 1994-1995; TAB liaison, 1992-1995; TAB Periodicals Council, 1990-1991, 1993-1997, chair, 1994-1995; TAB SPARC, 1999-2001; TAB Administration Council, 1992-1994; TAB Management, 1994-1995, 1997, 1999-2001; chair, 2000; TAB Finance, 1990-1991, 1994-1995; TAB Nominations & Appointments, 1993-1995, 1998-1999, 2001; chair, 2001; TAB Colloquia Steering, 1992, 1996-1997; Publications Board, 1990-1991, 1994-1995, vice chair, 1994-1995; PUB Finance, 1994-1995; PUB Strategic Planning, 1994-1995; Panel of Technical Editors, chair, 1994-1995; United States Activities Board, 1992-1993; IEEE Nominations & Appointments, 1994-1995; IEEE Tellers, 1990, 1994; RAB Section/Chapter Support, 1994-1995; RAB/TAB Section/Chapter Support Committee, 1997; Sections Congress 1993, Program Track chair; Sections Congress '96, facilitator/presenter; Awards Board, 1998; IEEE Medal for Engineering Excellence Committee, 1995-1998, chair, 1998. *Regions:* Region 1: Committee, 1989-1990; METSAC, 1989-1991, treasurer, 1990-1991. *Sections:* New York: chair, 1989-1990; vice chair, 1987-1989; treasurer, 1986-1987; secretary, 1985-1986; Publication Committee, chair, 1984-1985; Power Engineering Society/Industry Applications Society Chapter: chair, 1983-1984; vice chair, 1982-1983; secretary, 1981-1982; treasurer, 1980-1981; Program Committee, 1970-1982; chair, 1976-1977; Related Activities Committee, 1977-1989; chair, 1977-1978. *Societies:* Power Engineering: president, 1996-1997; vice president, 1994-1995; Chapters Program & Resources, 1985-1997; chair, 1990-1991; vice chair, 1988-1989; New Chapters Development Subcommittee, chair, 1985-1989; Region 1 South Chapters representative, 1985-1988; Publications Department, chair, 1990-1991, 1998-1999; PES Editorial Board, 1990-1997; chair, 1990-1991; CAP Editorial Board, 1990-1997; chair, 1990-1991; Society on Social Implications of Technology: Division VII member on SSIT AdCom, 1997-2001. *Conferences:* IEEE PES Winter Meeting, Facilities Committee, 1982-1983; vice chair, 1985-1986; cochair, 1988-1989, 1991-1992; ELECTRO, Registration Committee, 1987, 1989.

Dent began his engineering career in 1966, working in the relay protection area at the United Illuminating Company, an electric utility in Connecticut. In 1969, he joined Gibbs & Hill, Inc., an engineering/design firm in New York City, working on the analysis, design, and construction of projects in the transportation and transmission area. Since 1977, he has served the New York Power Authority in many engineering and engineering management positions, including senior engineer, supervisory engineer, director of electrical application engineering, and director of electrical systems studies. He received his B.E. from Stevens Institute of Technology, M.S. in computer science from Pratt Institute, and M.S. in electrical engineering and M.S. in management from Polytechnic University, where he was awarded the Dow Jones-Wall Street Journal Student Achievement Award. He is a doctoral candidate in management at Pace University. He is a registered professional engineer in New York and New Jersey. He received the PES Chapters Council Award (1994), Outstanding Engineer Award (1997) from the NY/LI PES Chapter, and two Region 1 Awards (1986, 1994). He is a member of the Power Engineering, Industry Applications,



Robert A. Dent, recipient of the PES Meritorious Service Award

Engineering Management, Computer, and Social Implications of Technology Societies.



Student Prize Paper Award in Honor of T. Burke Hayes

Henrik Jönsson received the Student Prize Paper Award in Honor of T. Burke Hayes for his paper, "A Branch-and-Bound Algorithm for Solution of the Unit Commitment Problem." Erik Dotzauer served as his advisor.

The award was established in 1988 by the CH2M HILL company to foster advancement in the science and practice of electric power engineering and to recognize the professional contributions of Thomas Burke Hayes as founder of the company.

A basic tenet of the engineering profession is that engineering activities should make the world a better place. Hayes, an IEEE Fellow (1971) and the coinventor of the FLOmatcher scheme for controlling the discharge of electrically driven pumps, has worked toward that goal as an engineer, scholar, and corporate citizen. He graduated from Oregon State University (OSU) in 1938 and Massachusetts Institute of Technology in 1940 with undergraduate and graduate degrees in electrical engineering. After serving in the U.S. Navy as an instructor at the MIT Radar School, he started a consulting firm in Corvallis, Oregon. In 1971, it merged with Clair A. Hill & Associates of Redding, California, forming what is now known as CH2M HILL. Hayes led the firm's diversification into hydro-



Henrik Jönsson, recipient of the Student Prize Paper Award

electric and electric power generation, transmission, and distribution. Hayes is a positivist who encourages and bolsters the spirit and performance of others. He served as adjunct professor at the OSU School of Engineering in the 1950s and was a member of the Engineer's Council for Professional Development, which accredited university engineering curricula. As a member of the OSU foundation board, he continues to foster the growth of the university.

Past recipients of the award include Ajit Y. Kulkarni (1988), Keven Groenwold (1989), Janet Goldwasser (1990), Daniel J. Leonard (1991), Shayne X. Short (1992), Alexander V. Mamishev (1993), Robert W. Dahlgren (1994), Kenneth W. Adams (1995), Elizabeth Marie Waldrep (1996), Reuben J. Nugent, Travis Turner and Brent Wilkins (1997), Michael D. Lynch (1998), and Michael J. Hamilton (1999).

Henrik Jönsson was born in 1973 in Västerås, Sweden. He received his M.Sc. degree in mathematics/applied mathematics from Mälardalen University in 2000. He is currently a Ph.D. student in financial mathematics/mathematical statistics at Mälardalen University. His research interests are models and methods for option pricing. He plans to continue his research in optimization.

Erik Dotzauer was born in 1970 in Sandviken, Sweden. He received his B.Sc. degree in mathematics/applied mathematics from Mälardalen University in 1995 and his Ph.Lic. in optimization from Linköping University in 1999. He is currently a Ph.D. student in optimization at Mälardalen University/Linköping University. His research interests are modeling and algorithm development for optimal operation of energy systems.



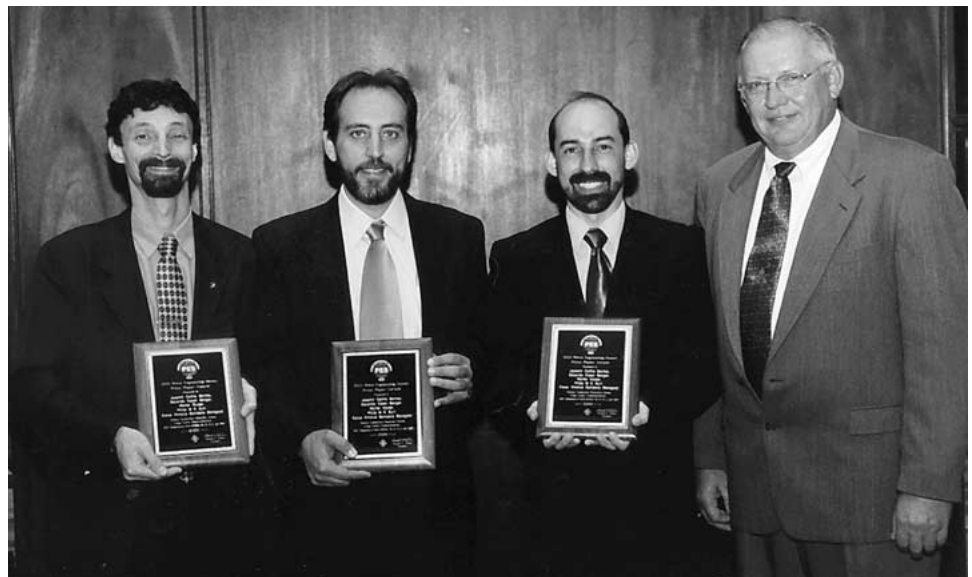
Prize Paper Award

E.C. Senger, W. Kaiser, J.C. Santos, P.M.S. Burt, and C.V.S. Malagodi received the Prize Paper Award for their paper, "Broken Conductors Protection System Using Carrier Communication."

Eduardo Cesar Senger was born in Brazil in 1954. He received B.Sc., M.S., and Ph. D. degrees from the University of São Paulo in 1977, 1983, and 1990, respectively. He joined the University of São Paulo in 1978, where he is presently an assistant professor in the Department of Electrical Energy and Automation Engineering. His research fields are protection, monitoring, and control of power systems.

Walter Kaiser received B.S., M.S., and Ph.D. degrees in electrical engineering from the Escola Politécnica of the University of São Paulo in 1980, 1983, and 1989, respectively. From 1983 to 1989, he was a development engineer at a Foundation of Engineering and Technology at the University of São Paulo and surveyor for naval electrical equipment at the American Bureau of Shipping. He joined the Escola Politécnica in 1990, where he is an assistant professor of power electronics. His research focus is static converters applied to discharge lamps.

Josemir Coelho Santos received B.S. and M.S. degrees from the Escola Politécnica of the University of São Paulo, Brazil, in 1988 and 1993, respectively. In 1997, he received his Ph.D. from the University of Tokyo, Japan. He joined to the Electrical Energy and Automation Engineering department of the Escola Politécnica in 1990, where he is an assistant professor. His major research fields are related to the applications of optical fibers in electric power systems and optical sensors to voltage and current measurement in high-voltage systems.



The PES Prize Paper Award was given for "Broken Conductors Protection System Using Carrier Communication," which was written by E.C. Senger (second from left), W. Kaiser, J.C. Santos (left), P.M.S. Burt, and C.V.S. Malagodi (third from left). D. Volzka (right), PES president, presented the award.

Phillip M.S. Burt was born in 1961 in São Paulo, Brazil. He received his Ph.D. in electrical engineering from the University of São Paulo (Escola Politécnica), where he is currently an assistant professor in the department of Telecommunications and Control Engineering. His research interests are in the area of digital signal processing and its applications in telecommunications.

Caius Vinicius Sampaio Malagodi received his B.Sc. from the Faculty of Engineering of Guaratingueta of Estadual Paulista University in 1991. In 1992, he joined the Electrotechnical and Energy Institute, University of São Paulo, where he was involved in research relating to high impedance fault protection, surge voltages transferred to the low-voltage side of distribution transformers due to lightning discharges and monitoring substations. He received his M.S. degree in 1997 from São Paulo University. Currently, he works for Bandeirante Energia S.A., a large electric distribution company in Brazil.



Working Group Recognition Awards

Outstanding Technical Reports

- “Tutorial on Harmonics Modeling and Simulation,” W. Xu, chair. Other members of the working group are R. Burch, G. Chang, R. Dwyer, M. Grady, M. Halpin, C. Hatziaodniu, Y. Liu, M. Marz, A. Medina, S. Middlekauff, R. Natarajan, H. Nguyen, T. Ortmeier, S. Ranade, P. Ribeiro, D. Ruthman, N. Watson, and J. Wikston.
- “IEEE PSRC Working Group Report on Considerations in Setting Instantaneous Overcurrent Relays on Transmission Lines,” J.R. Boyle, chair. Other members of the working group are A.P. Apostolov, K. Behrendt, S.R. Chano, A.N. Darlington, T. Damin, P. Engel, W.A. Elmore, L. Gray, R.W. Haas, I. Hasenwinkle, R. Hedding, B. Jackson, E. Krizauskas, W.G. Lowe, M.J. McDonald, H.M. Shuh, W.M. Strang, J.D. Wardlow, J.E. Stephens, and S. Zocholl.



W. Xu, chair

Outstanding Standards or Guides

- “IEEE Guide for Protective Relay Applications to Transmission Lines,” W.M. Carpenter, chair. Other members of the working group are G.E. Alexander, J. Andrichak, A.P. Apostolov, K. Behrendt, G. Benmouyal, J. Berger, J.R. Boyle, L. Budler, P. Carroll, S.P. Conrad, A.N. Darlington, P.R. Drum, W.A. Elmore, K. Friedrich, J. Gosalia, R.A. Hedding, C.F. Henville,



W.M. Carpenter, chair

S.H. Horowitz, B. Jackson, C.A. Jacobson, D.A. Jamison, P.R. Leblanc, M.J. Lefrancois, R. Madge, M. Meisiner, G.L. Michel, K.K. Mustaphi, P.G. Mysore, G.R. Nail, D. J. Novosel, G.C. Parr, M.P. Sanders, G.L. Schmitt, T. Seegers, D. Shroff, T. Sidhu, F. Soudi, W.M. Strang, C.R. Sufana, R.P. Taylor, D.A. Tziouvaras, J.E. Waldron, B. Warwick, R.M. Westfall, T.E. Wiedman, J.B. Williams, P.B. Winston, K. Zimmerman, and J.A. Zipp.

- “IEEE Guide for Safety in AC Substation Grounding,” R.P. Keil, chair. Other members of the working group are H.E. Abdallah, A. Alexander, S.J. Arnot, N. Barbeito, T.M. Barnes, C.J. Blattner, E.F. Counsel, F.A. Denbrock, W.K. Dick, G.W. DiTroia, V.L. Dixon, S.L. Duong, J. Fortin, D.L. Garrett, R. Heinrichs, D.T. Jones, G.A. Klein, A.E. Kollar, D.N. Laird, M.P. Ly, W.M. Malone, A. Mannarino, A.P.S. Meliopoulos, G. Menechella, J.D. Merryman, J.M. Nahman, B.P. Ng, J.T. Orrell, S.G. Patel, R.M. Portale, F. Shainauskas, Y. Shertok, G. Simms, R. Singer, G. Steinman, C. Stidham, B. Story, J.G. Sverak, W.K. Switzer, B. Thapar, M. Vainberg, and R.J. Wehling.



R.P. Keil, chair

Outstanding Chapter Award

Outstanding Small Chapter

The Outstanding Small Chapter Award was given to the Western Australia Chapter, Terence Law, chair. The crowning achievement to an outstanding year is, ultimately, winning the PES Outstanding Chapter Award. The IEEE Power Engineering Society very proudly salutes the Western Australia Chapter and its officers for their truly outstanding performance in the small chapter category.

The Western Australia Chapter organized four technical meetings with an average attendance of 20 persons. Topics included Visualizing Genetic Algorithm, An Insight into the Modeling World of Asset Management, Electricity Industry Restructuring in the USA, and HVDC: Current Developments-New Opportunities.

The Chapter also organized the 2000 IEEE International Conference on Power Technology (PowerCon 2000). The conference was highly successful and was attended by approximately 350 delegates. One half-day tutorial and four full-day tutorials were offered during PowerCon 2000.

The Chapter presented a one-day workshop on “Power System Simulation Analysis” during October. The workshop was well received by the 18 participants.

In conjunction with the Western Australia IEEE Section, the Western Australia PES Chapter participated in organizing the Australia National Engineers Week.

Jointly with the Western Australia IEEE Section, the PES Chapter also organized two student evenings in two local universities that offer power engineering courses. The meetings were attended both by students from the universities and IEEE members, offering opportunities for students to meet practicing engineers and discuss various aspects of power en-



The Western Australia Chapter received the PES Outstanding Small Chapter award: (left to right) Kit Po Wong; N. Schulz; D. Volzka; Terrence Law, Chapter chair.

ineering as well as careers as power engineers. The Chapter organized an undergraduate student paper competition. With financial support from the industry, the competition was highly successful.

The Chapter commenced a program of encouraging members to upgrade to senior member. The Chapter vice-chair had been appointed to lead a subcommittee to identify suitable candidates and coordinate references. The Chapter supported an IEEE Fellow nomination and nominated members for IEEE awards.



The Puerto Rico and Caribbean Chapter received the PES Large Chapter Award: (left to right) N. Schulz; Jeffrey Torres, Chapter chair; D. Volzka, Enrique Tejera

Outstanding Large Chapter Award

The Outstanding Large Chapter Award was given to the Puerto Rico and Caribbean Chapter, Jeffrey Torres, chair. The crowning achievement to an outstanding year is, ultimately, winning the PES Outstanding Chapter Award. The IEEE Power Engineering Society very proudly salutes the Puerto Rico and Caribbean Chapter and its officers for their truly outstanding performance in the large chapter category.

This large chapter advanced the IEEE activities in the region by increasing the membership and organizing six well-attended technical meetings. The topics included Small Power Transformer Design, Testing and Commissioning, Subcycle Technologies, High-Voltage Insulators, New Protection Relay Technologies, Power Quality, and SCADA.

The Chapter contributed to the technical education in the region by organizing of a full-day short course on "Fundamentals of Power Quality." The 25 attendees ranged from utility and industry engineers through students. The course was so well received that it will be held again in the near future.

The Chapter actively participates in joint efforts with the other engineering societies to seek legislation and offer expert advice towards the advancement of the engineering profession in Puerto Rico.

The Puerto Rico and Caribbean Chapter co-sponsored an all-day educational seminar on "Substation Integration & Automation, SCADA and Communications" with the Polytechnic University of Puerto Rico Student Chapter in the month of October. The Chapter made use of the Distinguished Lecturer Program to increase the technical level. The course was well received and 31 participants received certificates upon completion of the course. This course proved to be a successful fund-raiser and recruiting event.

A meeting was held with the Polytechnic University of Puerto Rico Student Chapter Board to train and develop students on leadership topics such as meetings, recruiting, fund raising, and professional ethics. The Student Chapter Chairs hold seats in Chapter meetings.

The membership increased significantly in 2000, and several members have been elevated to senior member. The Chapter recognized one of its founding member's contribution to IEEE.

2000 Regional Outstanding Engineer Awards

Regional Outstanding Engineer Awards were presented for the first time at a PES General Meeting during the 2001 Summer Meeting in Vancouver. Recipients were recognized at the Awards Luncheon and presented with their plaques at the Membership/Chapters Luncheon on 18 July. PES President-Elect John Estey made the presentations.

PES members and Chapters world-wide are fortunate that such knowledgeable and personable members volunteer their time and talents to our chapter activities, thereby providing significant benefits to our local members. The citations on each award are provided here.

2000 Region 1

George Gela received his award “for outstanding contribution to the power engineering profession and to the IEEE Power Engineering Society activities in Region 1.”

Gela worked for both industry and academia in the area of high voltage engineering. From Ohio State University he joined the staff of GE’s High Voltage Transmission Research Center (now EPRI solutions-Lenox) where he is involved in a broad range of power studies dealing with fields and corona, insulation, and live-line maintenance of transmission lines. He has been chair of his local PES Chapter, chair of the IEEE-PES Working Group on Design and Environmental Considerations, chair of the IEEE PES Subcommittee on Corona and Field Effects, and chair of IEC TC-78 on Live Working. Through his ongoing efforts, he has helped keep his local PES Chapter alive.



George Gela

1999 Region 2

Kenneth G. Sebra received his award “for outstanding contribution to the power engineering profession and to the IEEE Power Engineering Society activities in Region 2.”

In his 45-year career with the Baltimore Gas and Electric Company, Sebra has been responsible for numerous electrical engineering projects. He has recently taught automatic generation control, symmetrical components, and system fault analysis. He received the 1994 PES Working Group Award for the outstanding standard “Design Guide for Electric Power Service Systems for Generating Stations.” In 1997 he became chair of the PES Energy Development and Power Generation Technical Committee. He was also the chair of the Baltimore Chapter and Section.



Kenneth G. Sebra

2000 Region 2

Gerard L. Schmitt received his award “for outstanding contribution to the power engineering profession and to the IEEE Power Engineering Society activities in Region 2.”

Schmitt has over 20 years of experience in the systems protection area at the Baltimore Gas & Electric Company. He has designed and implemented various relay schemes and has coauthored several technical papers including an award-winning paper on protection aspects of voltage stability. He has

served on IEEE committees that have published ANSI standards. He was a member of the Baltimore Chapter PES Executive Committee and has taught a well-received Power Systems Engineering course at Loyola College and for the Baltimore Chapter of PES.

2000 Region 3

Philip B. Winston received his award “for outstanding contribution to the power engineering profession and to the IEEE Power Engineering Society activities in Region 3.”

Winston’s contributions span from the walls of his current employer, Georgia Power Company, to the national offices of NEFC and the Power Systems Relay Committee. He has 28 years of work experience in test and system protection engineering. He has influenced policy and procedure development within the Georgia Integrated Transmission System and contributed to the work of EERC. He served as chairman and secretary of the IEEE-PES System Protection Committee. Currently, he is the chair of the IEEE Relaying Practice and Consumer Interface Subcommittee.



Philip B. Winston

2000 Region 4

Thomas J. Overbye received his award “for outstanding contribution to the power engineering profession and to the IEEE Power Engineering Society activities in Region 4.”

Overbye is a university professor who developed an innovative power system visualization software program known as PowerWorld Simulator. The program allows economists, lawyers, policymakers, and planners to see exactly how proposed business decisions and regulatory rules interact with the technical/physical constraints of the power system imposed by the laws of physics. He is author of 12 IEEE Transaction papers including one Best Paper Award. He received the IEEE-PES Walter Fee Outstanding Young Engineer Award (1993) and the IEEE Third Millennium Medal (2000).



Thomas J. Overbye

2000 Region 6

Kristine K. Buchholtz received her award “for outstanding contribution to the power engineering profession and to the IEEE Power Engineering Society activities in Region 6.”

Buchholtz has worked for Pacific Gas and Electric Company for 20 years on transmission and distribution engineering as well as opera-



Kristine K. Buchholtz

tions and customer services. She has supervised approximately 200 employees in various departments and has managed over US\$15 million of annual capital and expense budgets. She has chaired the IEEE Engineering in the Safety, Maintenance and Operation of Lines Subcommittee (ESMOL), and she was the vice-chair of the 1994 Summer Power Meeting in San Francisco. She also served as chair of the IEEE PES San Francisco Chapter.

2000 Region 8

Laszlo Prikler received his award “for outstanding contribution to the power engineering profession and to the IEEE Power Engineering Society activities in Region 8.”



Laszlo Prikler

Prikler is working for the Budapest University of Technology and Economics. In addition to his university profession, he is the managing director of his own enterprise, Systran Engineering Ltd. He is the author of many papers and conference reports dealing with power system transients. His is the deputy chairman of the, European EMTP-ATP Users Group Association, and he was the chair of the IEEE-sponsored International Conference on Power System Transients in 1999. He is the secretary and treasurer of the Hungarian IEEE PES Chapter.

2000 Region 9

Roberto Ramos Lopez received his award “for outstanding contribution to the power engineering profession and to the IEEE Power Engineering Society activities in Region 9.”

Ramos Lopez is a professor at the Universidad de El Salvador and director of the Electrical Engineering School. He worked in Instrumentation Software Designer of Elcontrol Inc. in Bologna, Italy. He has several publications dealing with harmonics analysis and power quality. He participated in the working group of the IEEE standard “Recommended Practice on Monitoring Electrical Power Quality” and served on the IEEE Standards Board and NesCom. He received the Distinguished Engineer of IEEE El Salvador Section award and served as president of the IEEE El Salvador Section in 1997.

2000 Region 10

B. Prasad Singh received his award “for Outstanding Contribution to the Power Engineering Profession and to the IEEE Power Engineering Society Activities in Region 10.”



B. Prasad Singh

Singh has over 30 years of teaching and research experience, has supervised several Ph.D. and M.Tech. students, and has published more than 30 papers. As a Fellow of the Institution of Engineers (India), he served on the Executive Committee of its Delhi State

Center and was the chair of the Editorial Committee of the *Proceedings of the Stil Indian Engineering Congress*. He served in the IEEE Delhi Section as vice-chair in 1994 and as a member of EXECOM from 1991 to 1998. He was chair of the IEEE PES India Chapter in 1995 and 1996.

IEEE Fellows

Fellows elected in 2001 who chose to receive their certificates at the PES Summer Meeting 2001 are **Asvini Kumar David**, Hong Kong Polytechnic University, Kowloon, Hong Kong, for contributions to the restructuring of the electricity supply industry and transmission access development, and **Paolo Marannino**, University of Pavia, Pavia, Italy, for contributions to power system scheduling and dispatch.



A.K. David



P. Marannino

Student Poster Contest Winners

At the 2001 Summer Meeting in Vancouver, 41 posters were presented during the student poster contest held 16 July. The student contest was part of the general poster session and was quite well received. The prizes were awarded at the Student/Faculty/Industry luncheon on Wednesday 18 July. Monetary awards were presented to the authors of the best posters. Graduate students from universities in several countries participated. Mani Venkata, chair of the PES Power Engineering Education Committee (PEEC), moderated the awards presentations. Richard MacKeller, CEO of NxtPhase Corporation, addressed the luncheon attendees with his presentation titled “The Future: Power Technology.”

The winners of the 2001 Summer Student Paper Awards are:



Mani Venkata (left) presented the first-place award to Yang Ye (right)



Joseph T. Mossoba (right) received the second-place award



Jorge Hollman (right) received the third-place award

- First place: **Yang Ye**, University of Waterloo, for “A Current-Source Converter Based STATCOM”
- Second place: **Joseph T. Mossoba**, University of Toronto, for “High Bandwidth Active Power Filter”
- Third place: **Jesus Calrino** and **Jorge Hollman**, University of British Columbia, for “Extensible PC-Cluster Based Workbench for Testing of Protective and Controlling Equipment.”

Founding Benefactors

IEEE Power Engineering Society Award Endowment Fund Founding Benefactors are: S&C Electric Company, Siemens, Commonwealth Edison Company, Wisconsin Electric Com-

pany, Tokyo Electric Power Company, TXU Electric and Gas Company, Alstom ESCA Corporation, Dr. Narain & Joyce Hingorani, and ABB Power T&D Company.

The endowments of the Founding Benefactors help provide permanent funding for IEEE Power Engineering Society awards. If your corporation is interested in finding out more about this worthy cause, please contact Melvin I. Olken, PES executive director, 445 Hoes Lane, Piscataway, NJ 08855-1331 USA, +1 732 562 3864, fax +1 732 562 3881, e-mail m.olken@ieee.org.



Trends in Power Quality Monitoring

(continued from page 9)

AEP and Commonwealth Edison (as well as many other utilities) are also implementing distributed web-based monitoring systems. AEP will be using the system to track performance of Custom Power devices in demonstration projects. Commonwealth Edison is demonstrating the PQ monitoring as part of an overall substation information system.

The future of these systems involves integration with other data collection devices in the substation and the facility. Standard interfaces like the power quality data interchange format (PQDIF) and COMTRADE are used to share the information and standard protocols like UCA are used for the communications.

Benefits from PQ Information

PQ monitoring is fast becoming an integral component of a general distribution system monitoring, as well as an important customer service. Power producers are integrating PQ monitoring with monitoring for energy management, evaluation of protective device operation, and distribution automation functions.

The PQ information should be available throughout the company via an intranet and should be made available to customers for evaluation of facility power conditioning requirements.

The PQ information should be analyzed and summarized in a form that can be used to prioritize system expenditures and to help customers understand the system performance. Therefore, PQ indexes should be based on customer equipment sensitivity. The SARFI indexes for voltage sags are excellent examples of this concept.

PQ encompasses a wide range of conditions and disturbances. Therefore, the requirements for the monitoring system can be quite substantial. Table 2 summarizes the basic requirements as a function of the different types of PQ variations.

The information from PQ monitoring systems can help improve the efficiency of operating the system and the reliability of customer operations. These are benefits that cannot be ignored. A useful site for more information is <http://www.powermonitoring.com>.