



VIRGINIA MOUNTAIN SECTION NEWSLETTER

IEEE Region 3, Council 09, Section 65

November 2004

Wednesday, November 17, Clarion Hotel Roanoke Airport
Joint Section Meeting and Meeting of the
Computers, Controls, and Industrial Electronics Chapter

Wind Power & Renewable Energy Technologies

Dr. James P. Lyons

**Advanced Technology Leader, GE Wind Energy
Chief Engineer – EE Systems, GE Global Research**

Abstract

Development of renewable energy sources will be a significant economic driver in the 21st century. Market success of wind power technology can serve as a blueprint for the industry. This talk will address market drivers, government policies/incentives, and technologies driving the rapid evolution of wind power markets. Practical clean energy technologies/sources – solar, geothermal, biogas, and hydro will be discussed as well as prospects for renewable hydrogen production.

Speaker Bio

Dr. Lyons joined GE in 1970 after receiving a BSEE from Rensselaer Polytechnic Institute. His initial field assignments were in industrial control automation, and power systems. Graduate academic studies concentrated

in control systems and computer science. Dr. Lyons received an MSEE from Virginia Tech in 1981, and a PhD from Cornell in 1984 with a thesis on Variable Speed Induction Wind Turbine Generators.

Dr. Lyons joined GE Research in 1989, leading electrical power conversion development programs. In 1999 he was appointed Chief Engineer for EE System Technologies with responsibilities for product applications across all GE businesses. He has been the corporate champion for wind energy within GE and is currently serving as Advanced Technology leader for the new GE Wind Energy business.

Dr. Lyons is a member of the IEEE Industry Application, Computer, Power Electronics, Power Engineering, and Automatic Control Societies. He has authored more than 20 technical papers and has been awarded over 25 patents.

Date: Wednesday, Nov. 17, 2004

(Please note change from normal meeting day)

Social: 6:30 PM

Dinner: 7:00 PM

Talk: 8:00 PM

Cost:

Member/ Guest \$15.00

Student \$ 8.00

Reserve by **5 PM Monday Nov. 15**

Cy Harbourt (540) 387-8941

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Please specify number of attendees.

Directions to Clarion Hotel

2727 Ferndale Drive NW

1581 Exit 3 Hershberger Rd West

1st Rt. onto Ordway Drive,

¼ mile, Rt. Into Parking Lot.

**MICHAEL R. LIGHTNER 2005
IEEE PRESIDENT-ELECT**

**RALPH WYNDRUM 2005
IEEE-USA PRESIDENT ELECT**

Michael R. Lightner, professor of Electrical and Computer Engineering, and Computer Science at the College of Engineering and Applied Science at University of Colorado at Boulder, has been selected 2005 IEEE president-elect. Pending acceptance of the Teller's Committee report by the IEEE Board of Directors, Lightner will begin serving as IEEE president on 1 Jan. 2006. He will succeed 2005 IEEE President W. Cleon Anderson, chief project engineer at L-3 Communication Systems-West in Salt Lake City, Utah.

U.S. IEEE members have elected Ralph W. Wyndrum, Jr., to serve as IEEE-USA President in 2006. Wyndrum, who enjoyed a successful 36-year career at AT&T and Bell Labs, currently leads Wyndrum Associates-Executive Consultants, consulting in the areas of R&D resource allocation and decision science targeted at new product service development. He also serves as business development director for SmartOrg, Inc., a start-up firm based in Menlo Park, Calif.; and he teaches a seminar on leadership, decision quality and strategic planning at Rutgers University. Wyndrum is a long-time IEEE volunteer and has held numerous IEEE-USA offices. For the past two years he has served as IEEE-USA's vice president for Technology Policy Activities.

**IEEE Virtual Museum Named
Top Engineering and Technology
Web Site by *Scientific American***

Scientific American has named the [IEEE Virtual Museum](#) as recipient of one of its 2004 Science & Technology Web Awards in the Engineering & Technology category. The article said the Web site was beautifully designed "featuring a cornucopia of exhibits encompassing topics as wide-ranging as microelectronics, women and technology, and microwaves."

**IEEE UPGRADES E-MAIL ALIAS
SPAM FILTER**

Members who use the IEEE's personal e-mail alias service now have a tighter filter against spam. The filter allows users to create lists of e-mail addresses and domains from which they never want to receive mail (the black list), and addresses from friends and business associates (the whitelist) whose mail will always come through. Read more at <http://www.theinstitute.ieee.org/portal/pages/tionline/legacy/inst2004/nov04/11w.prodspam.html>

**MARKETPLACE OF IDEAS: A
TECHNOLOGY CRYSTAL BALL**

For its 40th-anniversary issue in November, IEEE Spectrum editors looked at 10 soon-to-be-hot start-ups, analyzed electrical engineering's identity crisis, and sized up the magazine's past technology predictions to see which hit the bull's-eye and which missed the mark. In addition, a host of engineering pioneers, executives, and other luminaries were asked what new technologies they expected to see play important roles in the next 40 years. What important innovations do you think we'll see in the next four decades? Weigh in at <mailto:institute@ieee.org>
Read the luminaries' answers at <http://www.spectrum.ieee.org/WEBONLY/publicfeature/nov04/1104lumi.html>

LET'S HEAR FROM YOU

And while you're thinking about new technologies, why not also provide the Virginia Mountain Section with your inputs concerning future programs and activities. Inputs may be sent to the Newsletter Editor or to any of the Section officers.

Elections for 2005 Section officers will take place during November. You should receive ballots by e-mail. Members who do not have e-mail and are not on our postal mailing list, should contact the Newsletter Editor

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